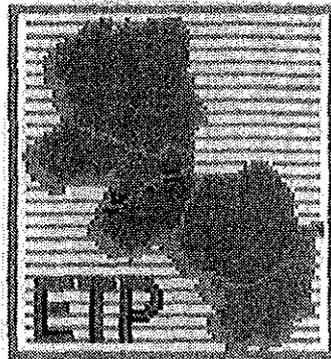


PD-ABU-771

113205

Building Sustainable Societies in Central and Eastern Europe



FINAL REPORT OF THE ENVIRONMENTAL TRAINING PROJECT

U.S. Agency for International Development Cooperative Agreement EUR-0041-A-00-2020

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on behalf of a Consortium of

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September 2001

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Key Abbreviations

CEA	Center for Environmental Analyses, Děčín
CES	Center for Environmental Studies, Budapest
CHMR	Center for Hazardous Materials Research, Pittsburgh, Penn.
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
ETP	Environmental Training Project
/EUR	Europe
GAMA	Action Group for the Argeş River Basin
GIS	Geographic Information System
ICC	In-Country Coordinator
ICAP	Information Center for Air Protection of PKE
IEP	Institute for Environmental Policy, Prague
ISC	Institute for Sustainable Communities, Vermont
IWM	Integrated Waste Management
OAR	Office of the USAID Representative
NGO	Non-Governmental Organization
PDS	Post-Diploma Studies
PIP	Project Implementation Plan
PKE	Polish Ecological Club
REC	Regional Environmental Center
RFP	Request for Proposal
SME	Small and Medium Enterprises
STU	Silesian Technical University
SUT	Silesian University of Technology
TRI	Toxic Release Inventory
TUK	Technical University of Košice
TUCN	Technical University of Cluj-Napoca
USAID	United States Agency for International Development
WRI	World Resources Institute
WWF	World Wildlife Fund
YRBC	Yantra River Basin Council

Executive Summary

The Environmental Training Project (ETP) was a collaborative agreement signed in February 1992 between a Consortium led by the Hubert H. Humphrey Institute of Public Affairs at the University of Minnesota and the United States Agency for International Development (USAID). The Consortium was composed of the Center for Hazardous Materials Research (CHMR) from Pittsburgh (Pennsylvania), Institute for Sustainable Communities (ISC) from Montpelier (Vermont), the World Wildlife Fund–U.S. from Washington, D.C., and the University of Minnesota as the lead partner with several of its academic units participating. According to the original agreement, ETP was scheduled to be closed after five years of operations in February 1997. Due to its performance and changes in USAID strategic objectives, however, ETP officially finished its U.S.–government supported activities at the end of July 2000. The end of USAID financing did not stop activities initiated by ETP. Due to careful project design and effective implementation by In-Country Coordinators (ICCs) and the Management Team at the Center for Nations in Transition (CNT) at the Humphrey Institute, successor organizations were established in all six Central and Eastern European countries: Bulgaria, Czech Republic, Hungary, Poland, Romania, and Slovakia. These organizations, designed by ETP graduates, took the ETP mission and training activities as their task. Thus, ETP sustainability was secured and the investment in the ETP successors is being paid back.

This final report reveals how ETP sustainability was secured how the major goals and strategic objectives were met during the period of eight and half years.

The simplest illustrations of project performance are its outcomes and among them the most important is the numbers of participants. During USAID funding, the total number of participants reached 12,552 in six Central and Eastern European countries, exceeding the proposed target by 2,552 participants or 25.5 percent. After the end of USAID funding an additional 3,192 participants were trained (through September 2001), for a total of 15,752 participants—almost 58 percent over the proposed target (Table 1) of 10,000. The almost 16,000 participants attended 506 trainings of which 371 were funded by USAID (73 percent) through ETP (Table 2). During the whole period of training activities, the ICCs worked hard to encourage the participation of women. The average level of women's participation reached 40 percent for the whole region with the highest participation in the Czech Republic (46 percent) and the lowest (33 percent) in Hungary (see Table 3).

These quantitative data tell only part of the story. Based on preliminary information (reported mostly from Poland, Bulgaria, and Hungary), capital investment inspired by ETP graduates reached over \$1.5 billion during the nine years of the project. (See Chapter 9 and Appendix 12.4.) This impressive amount included over \$300 million invested in ecologically friendly infrastructure in the public sector. Considering these numbers, it would be hard to question ETP's significant contribution to the sustainable restructuring of Central and Eastern European economies that was the project's major goal. These investments not only led to the creation of new jobs and the founding of new

businesses but also contributed to an improved quality of life in many local Central and Eastern European communities (see Appendix 12.5).

Among four project components, the business sector (Environmental Business Management and Administration) experienced the greatest impact. ETP contributed new knowledge and skills in environmental management and economics. More important, however, it changed people's way of thinking. The most profound evidence of this change was found among Post-Diploma Studies (PDS) graduates. These top- or mid-level managers understood and accepted that environmental protection and efficient use of natural resources makes good business sense for their companies and is good for their societies as well. ETP offered the business community two types of curricula. The first, critical to establishing environmental businesses, focused on general management for small- and medium-sized enterprises (SMEs) and resembled a simplified MBA program. Simultaneously, environmental-management curricula was introduced with over ten different courses that included Environmental Impact Assessment, Environmental and Energy Auditing, Environmental Management Systems, Clean Technologies and Best Practices, Pollution Control and Prevention, and Energy Conservation and Efficiency.

The most enthusiastic response to ETP came from the NGO sector, covered by ETP in the Public Participation and Outreach component. Alongside the impressive size of ecologically friendly investments inspired by ETP graduates in the business and public sectors, ETP-trained NGOs initiated and institutionalized countless changes at national, regional, or local levels that affected significant parts of society. One example was the establishment of the Yantra River Basin Council NGO in Bulgaria that served as role model for other regions and inspired Bulgarian members of parliament to institutionalize ETP teachings in a new environmental law. In general, ETP contributed to strengthening of strategic management and operational skills of Central and Eastern European NGOs and made them better prepared to be equal partners in negotiations with business, government, or other civic organizations. The increased professionalism of NGOs helped them to be more effective participants in policy making and in influencing the political process in non-confrontational ways.

As expected, the most sophisticated and demanding audience was the academic community (University Strengthening and Institutional Capacity Building). It also presented the highest entry barriers as this constituency was full of skepticism and mistrust. After careful preparation, however, ETP's offer of collaboration met with enthusiasm and support of both academic leaders and faculty. This began with curriculum development workshops on Environmental and Resource Economics. This icebreaker led to introduction and institutionalization of not only new environmental economics courses but also many other courses developed by ETP. Simultaneously, ETP introduced new, interactive methods of teaching. Due to this effective approach, ETP was able to recruit many young, talented scholars, who proved that they not only learned new subjects quickly but also embraced new interactive teaching methods. Besides training trainers during regular ETP courses, twelve talented young scholars selected after a competitive process received ETP Ph.D. Fellowships and spent ten months taking advanced courses and preparing their Ph.D. dissertations at the University of Minnesota. Six of them

successfully completed their Ph.D. studies with a public defense of their dissertation and five continue their academic careers. Three others fellows are in the final stage of the Ph.D. process, and only three resigned from completion of their studies for a while but still are involved in academic and professional education and training. (See Chapter 10.) An additional contribution was the internship program for young faculty involved either in designing and delivery ETP courses inside and outside of their universities or those who were selected to design and deliver PDS programs at their universities. Over 20 faculty members visited as ETP interns at the University of Minnesota, developing new courses and gaining experience from American colleagues. This was a crucial factor in designing and delivering the most effective ETP program, PDS. (See Chapter 9.) This made a tremendous contribution to environmentally friendly economic restructuring. The internal impact was also great because through the design of the PDS program ETP introduced an institutional innovation to Central and Eastern European universities: the environmental extension service. Besides these external and internal impacts, the Central and Eastern European universities served ETP as the most important source for ETP trainers.

The fourth component of ETP training activities focused on local and regional governments (Environmental Policy and Management). The project assisted local and regional communities to build their institutional base for designing, implementing, and enforcing effective and sustainable environmental and economic policies as well as addressing the new situation created by the transition process. In addition to policy aspects, local government participants learned many skills from ETP training in the area of environmental management, communications and public relations, and, perhaps most important for the sustainability of local and regional communities, the participatory process of decision making and decentralization of responsibilities. Thus, ETP contributed not only to sustainable restructuring but to building the foundations of civic societies.

One of the most important successes of ETP is its sustainability after USAID funding. There are many types of sustainability. In this report, we focused on four of them:

- Human Resources;
- Programs;
- Institutionalization;
- Finances.

Providing training for over 15,000 participants during almost ten years created a large pool of expertise in environmental management in all four sectors targeted by ETP educational activities. It is impossible to trace all of them but many continue to maintain good relations with ETP offices, reporting on their successes and problems and inspiring the ICCs to develop or request new courses from University of Minnesota and other consortium partners.

One of the most important contributions to human resource sustainability was development of a cadre of 250 local trainers who delivered almost all training by the end of the project.

Programmatic sustainability was also secured by institutionalizing many of ETP courses at local universities for day and executive students. The most visible example of this is that PDS programs continue to be offered in Poland, Slovakia, Romania, and Hungary. These are also leading examples of the institutionalization of the ETP-initiated curricula.

Management of ETP was composed of three elements, the CNT-based Management Team (strategic and operational management), ICCs (initially operational management) and Consortium Council with a general oversight. The design of the Project assumed full shift of power to ICCs by the end of the project. Because the ICCs gained experience and maturity faster than predicted, most of the power was shifted to the region after three years which coincided with additional training for ICCs. During the life of the project, an effective internal monitoring, reporting, and evaluation system was implemented that went beyond operational control of ICCs and the CNT management team and included annual retreats and Consortium Council meetings representing all ICCs and consortium partners. All these elements contributed to the rapid institutionalization of ETP in-country offices as independent non-profit organizations, usually one or two years before the end of American funding. This rapid maturity also led to the diversification of funding sources and set a foundation for future financial sustainability. Success in each of the four different measures of sustainability proved the value of the project's design and performance.

The end of the report contains a set of recommendations that lead to a proposal to continue the ETP mission in those six Central and Eastern European countries as well as to share the experiences of those countries with other nations in transition.

Foreword

This month marked ten years since we were able on behalf of the University of Minnesota to build a consortium to design a proposal for Environmental Training Project for Central and Eastern Europe (ETP) in response to a United States Agency for International Development (USAID) request for proposal. A few months later, in February 1992, the University of Minnesota signed an agreement with USAID on behalf of the Consortium composed of the University of Minnesota as a lead institution with the Center for Hazardous Materials Research (CHMR) from Pittsburgh, Pennsylvania, the Institute for Sustainable Communities (ISC) from Montpelier, Vermont, and the World Wildlife Fund-US from Washington, D.C., and I assumed duties as Project Director.

These ten years marked a very important period of my professional life. Arriving to the United States in 1985 as a founding member of the Polish Ecological Club, the first NGO fully independent of communist control not only in Poland but in the whole region of Central and Eastern Europe, I brought a deeply rooted sense of responsibility for the environment in my country and in the region. The communist legacy left the region not only with devastated economies and a damaged civic society, but also a heavily polluted environment and severely threatened biodiversity.

Winning the bid for the collaborative agreement with USAID provided a great opportunity for me to make a change in Central and Eastern Europe and, at the same time, imposed on me huge responsibility to the U.S. government and taxpayers to spend almost \$12 million effectively and efficiently in six Central and Eastern European countries. For that reason, writing this report was not only an inventory of our achievements but also a relief from responsibilities I bore for ten years.

Looking at the current state of the environment in those six Central and Eastern European countries, at their fast developing environmental business sector, flourishing environmental NGOs, thousands of environmental initiatives taken by local and national governments, and institutionalization of environmental curricula at Central and Eastern European universities, I feel that we did not waste our time. We should be proud of the changes we have initiated in the four major sectors of activity and be pleased for the chance to make our "footprint" in the historic transition undertaken in those countries.

Our "footprint" is specific and sustainable because it consisted of the two major cornerstones of modern development, human and social capital. Through these two forms of capital we contributed to the environmentally friendly restructuring of Central and Eastern European economies and to the building of modern civic societies in those nations.

We are also proud of our results in building bridges between the United States and Central and Eastern Europe, as well as among Central and East European nations by facilitating exchanges of people and ideas, NGO and business leaders, and academic faculty and governmental officials, as well as transferring knowledge, skills, and experience. Hundreds of exchange visits, internships, cross-border workshops and

seminars, and a wide collaborative network resulting from this “bridging” are just a few examples of the activities that the project generated and inspired. Taking into account contemporary European history, those trans-European “bridges” might be even more important for the sustainability of the region than the trans-Atlantic ones.

For the many faculty who participated in ETP, the project offered a great chance to take part in developing the most important asset for a country in transition: human capital. Our earlier research conducted in Central and Eastern Europe indicated that the deficiency of human capital in environmental management and economics was the most important barrier to restructuring and sustaining future development. ETP gave us a chance to participate in erasing this barrier and experience the joy of observing a paradigm shift, first among my Central and Eastern European academic colleagues and second among our participants in the region. For that reason, we feel enriched by the project and the opportunity to enjoy every new success of our partner institutions in Central and Eastern Europe and their graduates.

This report contains an Executive Summary, an introduction, six chapters devoted to specific countries, and three other chapters devoted to ETP’s major success stories and sustainability. There are also several appendices illustrating numerical and other features of the project.

Managing ETP for almost nine years was a big challenge, producing both stress and great satisfaction. Thanks to the partnership in all aspects of project management, we were able to resolve the most difficult problems without any negative effect. The sustainability of programs created through ETP is the best example of this successful partnership. The final success of ETP is the result of many people working hard on both sides of the Atlantic in designing, managing, implementing, supervising, evaluating, and financing the project. I was privileged to work with and learn from these wonderful people over the last ten years and I want to express my deepest appreciation for giving me a chance to cooperate in such a great project.

First, I would like to thank those who offered me their trust in building the Consortium: G. Edward Schuh, former Dean of the Humphrey Institute, Stan Kabala, former ETP coordinator from CHMR, George Hamilton, Executive Director of ISC, Richard Liroff, former ETP Coordinator of WWF-US, and Harald von Witzke formerly with Applied Economics at the College of Agriculture of the University of Minnesota. This group of people encouraged me to build the Consortium and supported my management efforts. This group was fortunate to be joined by Victoria Mikelonis from the Rhetoric Department at the College of Agriculture, Food, and Environmental Sciences, who became the chief proposal writer and later ETP Communications Director.

This initial trust was further sustained by the leadership of the Humphrey Institute: Sandra Archibald, Associate Dean, John E. Brandl, Dean, Deb Crane, Assistant to Dean, and Robert Kudrle, former Associate Dean. This project also enjoyed support of faculty and leaders from other participating units of the University of Minnesota such as the

College of Agriculture, the College of Natural Resources, and the Carlson School of Management.

These academic leaders created an excellent environment for the administration and cooperation performed by the ETP management team composed by Sarah Almquist, Project Office Coordinator, Victoria Mikelonis (Communication Director for the first three years), Jim Perry, Deputy Project Director (the first four years), and Randal Zimmerman (after the first three years), Project Administrator. This was the team that resolved the most important and difficult problems, particularly at the beginning of the project, and I would like to express my deepest gratitude to all of them.

Even with the excellent job performed by all above-mentioned persons, ETP would not have succeeded if we had not had talented and highly devoted "front officers," our In-Country Coordinators (ICCs). It was a great satisfaction to observe how they grew professionally and took more and more responsibility for themselves and their offices during the course of the project. We were very fortunate to have found such devoted people in the region, who were the most important contributors to the successes of ETP in each of their countries. So, I am deeply in debt to Elena Petkova (first 2 years) and Krustina Mandova, ICCs in Bulgaria; Jiří Hladiš, ICC in Czech Republic; Vilma Éri, ICC in Hungary; Aleksandra and Wiesław Chodasewicz, and Andrzej Drozdź (part-time during first three years) ICCs in Poland; Rodica Stefanescu, ICC in Romania; and Boris Strečanský, ICC in Slovakia. Special thanks to Martina Vagacova, the first ETP-International coordinator and Maria Ticha, Director of the Center for Environmental Analyses in Děčín, who continues the ETP training mission after USAID funding in Czech Republic. In addition, I would like to thank the many American trainers and the hundreds of trainers from Central and Eastern Europe whose skill in adapting Western knowledge to local conditions was a crucial part of ETP's success.

The other front-line officers took up the challenge of introducing new year-long Post-Diploma Studies (PDS) in Environmental Friendly Restructuring of Heavy Industries at Central and Eastern European universities. These are the people who contributed to the design and implementation of the most effective single ETP program in Central and Eastern Europe: Blago Angelov, Dean of the Graduate School, Ekaterina Dimova, Stoyan Hadzivelichov, and Milcho XXX from the Economic University of Varna, Bulgaria; Laszlo Boeszczeni, Rector, Istvan Szintay, Dean of Management College, Dezso Szokaly, Head of the School of Management and Organization, Csaba Edeleny and Csaba Horvath, PDS Coordinators at the Miskolc University in Hungary; Jerzy Barglik, PDS Director, Czesław Sajdak, Dean of Faculty of Material Sciences and Transportation, and Remigiusz Sosnowski, Vice President of the Silesian University of Technology in Katowice; Barbara Kozusznik, Dean of School of Management and Pawel Migula, PDS Director at University of Silesia in Katowice, Poland; Daniel Candea, PDS Director, George Lazea, Rector, and Mirela Miresan, PDS Coordinator, Technical University of Cluj-Napoca; Ludmila Komorova and Anton Lavrin, both Vice Presidents and PDS Directors at Technical University of Košice and their corporate partner Michal Haňdiak, Human Resources Manager of the former VSŽ Industria Ltd. in Košice, Slovakia.

Even the best ideas cannot be implemented without resources. In the case of ETP, resources were provided by USAID. During nine years of collaboration, a formal donor-grantee relationship turned into a professional partnership where the partners inspired and complemented each other. For such a good relationship I would like to thank former USAID Mission Directors in Bulgaria: Jerry Zarr and John Tennant; in the Czech Republic: Robert Posner and James Bednar; in Hungary: Thomas Cornell; in Poland: Donald Pressley, Susan Olds, and at the end of the project William Frej; in Romania: Richard Hough; and Pat Lerner in Slovakia. The directors were supported by highly professional USAID staff that included John Babylon and Antoneata Yoveva in Bulgaria, Ferenc Mélykúti and Bruce Adams in Hungary, Maryla Jakubowska, and Andrzej Pecikiewicz in Poland, Gianina Moncea and Marshal Fischer in Romania, and Loren Schultze in Slovakia. The collaborative efforts of field offices in those six Central and Eastern European countries were strongly supported during the first years by Lori Freer and later by Jennifer Fullmer Karp, both project officers at USAID in Washington D.C. It was a great partnership and I owe them a lot.

Finally, I would like to express my gratitude to staff members at CNT in Minneapolis, and our Central and Eastern European offices including Jackie Olenick, Lynn Nordquist, Julie Boris, Theresa Hageman, and John Radziłowski at CNT; Costina Apostol at ETP Bucharest and Simona Nicoara at the PDS Cluj-Napoca office, Romania; Ludka Majlathova, Slavka Macakova, and Andrej Steiner at the ETP Košice office.

Working with all of you over the last ten years was a great honor for me and I will always appreciate your contributions to the project, as well as to my personal efforts to manage it. For that reason the great impact of ETP is a success of which we should all be proud.

Zbigniew Bochniarz
Project and CNT Director

Minneapolis, September 2001

1. Introduction

The Environmental Training Project (ETP) was funded as a cooperative agreement between the United States Agency for International Development (USAID) (agreement EUR-00410A-00-2020) and a Consortium led by the University of Minnesota with the Center for Hazardous Materials Research (CHMR) at University of Pittsburgh, the World Wildlife Fund, United States (WWF-US) in Washington, D.C., and the Institute for Sustainable Communities (ISC) in Vermont. The following units of the University participated: Hubert H. Humphrey Institute of Public Affairs, Center for Natural Resource Policy and Management, College of Natural Resources, Department of Agriculture and Applied Economics, Center for International Food and Agricultural Policy, College of Agriculture, Food and Environmental Sciences, and Carlson School of Management. Management of the project was assumed by the Center for Nations in Transition at the Humphrey Institute in 1992.

The original target countries were Bulgaria, Czechoslovakia, Hungary, and Poland. After the division of Czechoslovakia, the project was continued in the Czech Republic and Slovakia. Romania was added as a target country after the original proposal was written and negotiated.

1.2. Background

The need for ETP was dramatically demonstrated by the terrible environmental conditions in the former communist countries of Central and Eastern Europe. Despite failing to achieve a Western-style standard of living, these countries produced a significant amount of pollution in air, water, and soil. This was the legacy of a command economy, central planning, lack of basic freedoms, and poorly developed civil societies.

It is now well known that over four decades under centralized economies left Central and Eastern Europe with severe environmental degradation. Pollution affected the quality of the environment and the natural resource base with implications for both human health and the economic well being of the region. At the beginning of the 1990s, pollution in the region was alarmingly high. In comparison to the European Union, \$1,000 of GNP production in the region yielded air pollution that was approximately 60 times higher than in the EU. Emissions of SO₂ and NO_x were, respectively, 30 and 8 times higher. Water quality in the region had also deteriorated over the previous 30 years with some rivers in the region incapable of supporting most human uses. About 35 percent of the arable land in the region was classified as seriously degraded, with half the forests exhibiting declines in productive yields from acid rain damage. Compared with the West, Central and Eastern Europe had significantly higher infant mortality, higher rates of cancer and respiratory illness, and lower-than-average life expectancies. (See Appendix 12.5.)

The region also inherited poor economic conditions at the beginning of the transition period. Its economies were dominated by outdated energy-intensive heavy industries and relatively undeveloped service sectors. All lagged in their participation in world trade and foreign direct investment relative to their share of total world output. Their average share of world trade was

about 50 percent less than their share in the global gross product. In addition, at the end of the 1980s, countries in the region were experiencing stagnation, or even negative growth, characterized by shortages of many essential products. These conditions were often disguised in official statistics. Hungary and Poland, for example, experienced hidden as well as open inflation. Bulgaria, Hungary, and Poland had serious problems servicing foreign debt. The large state-owned enterprises were inefficient and lacked organizational and management structures. Furthermore, basic market institutions such as property rights, a judicial system with necessary codes of commerce, and capital market institutions were lacking.

The generally peaceful revolutions (with the exception of Romania) in the fall of 1989 changed the structure of the political systems and set a foundation for establishing market economies. The poor initial environmental and economic conditions at the beginning of the transition imposed a heavy burden on leaders and policy makers to resolve both economic and environmental problems simultaneously. Economic growth was also needed to improve quality of life and assure political stability. Thus, environmentally sound restructuring was needed.

Although conditions in each of the six target countries varied in scale and intensity, their situation after the fall of communism shared many characteristics:

- Deteriorating economies in need of restructuring and a corresponding lack of resources to devote to environmental protection and clean up;
- Outdated industries that employed large numbers of people;
- Large-scale pollution, mostly industrial;
- Inefficient and overly bureaucratic governments and their agencies;
- Shallow tradition of entrepreneurship that discouraged personal initiative;
- Weak civic culture;
- Non-existent or underdeveloped NGO sector;
- Inadequate environmental laws and enforcement mechanisms;
- Lack of public involvement and input in environmental decisionmaking;
- Lack of academic curricula in environmental and natural-resource management and economics.

1.2. Goals and Objectives

ETP's basic goal was to contribute to environmentally sound economic restructuring of Central and Eastern Europe. The stated goals of the project were to strengthen the environmental business and management skills of existing and emerging private sector environmental businesses and to improve the capacity of NGOs, businesses, universities, and local governments to address local economic restructuring and environmental issues. The four stated objectives were:

- To provide business management training for emerging small- and medium-sized environmentally oriented firms and technical training on methods compliance with new environmental standards for existing firms;
- To help develop the capacity for informed and effective public participation by NGOs in environmental decision making;

- To increase communication and coordination among the private sector, local and regional governments, NGOs, and the university community;
- To strengthen the capacity of regional and local governments to make sound economic and environmental decisions.

ETP was designed in response to an RFP issued by USAID and implemented by the Consortium to address the environmental and economic problems in Central and Eastern Europe. The project's four objectives were developed in four components that together had the best chance to result in intersectoral environmental and economic stability, which, in turn, could lead to political stability. The four components are described below under scope of work.

1.3. Scope of Work

ETP training was addressed to managers of environmental businesses and polluting industries, NGO members as well as local government officials and academia. Many training activities used an intersectoral mix of diverse participants which included target groups of environmental entrepreneurs, NGOs, universities, and local government. Due to varying local conditions, different audiences were emphasized in each country. Target regions chosen at the start of the project were sometimes changed or expanded, depending on perceived needs and requirements. (These factors are described more fully in further chapters on particular countries.)

The four components of the ETP project derived from the project objectives helped to determine the scope and nature of training.

1.3.1. Environmental Business Management and Administration

This component built the environmental skills of business and industry and the management and marketing skills of environmental specialists. It was based on the following principles:

- Managers of existing enterprises needed better training in environmental management based on concepts of pollution prevention, efficient energy use, and accountability.
- Financial, marketing, and management training were needed so the existing pool of technically knowledgeable people in Central and Eastern Europe could better market their skills in home-grown environmental services and thus supplant reliance on foreign expertise.
- Industry and government needed to learn the concepts of environmental impact assessment to respond to new economic and legal conditions.

1.3.2. Public Participation and Outreach

Public participation drives the environmental regulatory business which spurs environmental improvement by the private sector. ETP training fostered public participation in environmental

decision-making. Such training focused on:

- Negotiation and conflict resolution;
- NGO financing;
- Policy analysis;
- Leadership training;
- Conducting public-awareness campaigns;
- Promotion of freedom of access to government information.

The goal of this training was to provide NGOs and other organizations with strategic management skills and experience to restructure their nation's political, economic, and social institutions in an environmentally sustainable way based on principles of democratic participation.

An important thrust for training in public participation and outreach was to increase the abilities of select NGOs and other organizations to influence policy in non-confrontational ways. Specifically, ETP taught communication strategies, strategic planning, and basic environmental analysis techniques to strengthen indigenous capacity of NGOs to identify and solve special environmental problems. It also trained NGOs in financial management to enhance their long-term viability and increase their professionalism.

1.3.4. Environmental Policy and Management

Institution building in the public sector supported development of indigenous capabilities in environmental policy, analysis, and management. Activities under this component were loosely coordinated with other elements of USAID programs in Central and Eastern Europe. The activities under this component were consistent with the following principles:

- Target audiences were sub-national, regional, and local officials who were being given increased responsibility for environmental management in Central and Eastern Europe due to democratization and decentralization of power.
- Training for this component, while including technical assistance, focused on broader policy issues such as how to implement environmental impact assessment processes, how to identify and ensure access to information necessary for effective environmental decision making, or how to establish community-level monitoring and enforcement programs and regional environmental management plans.
- Training for this component complemented public participation and outreach and the conflict resolution elements of the ETP's NGO training.

1.3.3. University Strengthening

University strengthening was designed to enhance the ways Central and Eastern Europe societies use university resources and capabilities in the field of environmental protection. The goal was to help direct the capabilities of universities in the region in teaching, research, and disseminating information for solving environmental problems. This approach focused not only on strengthening traditional academic functions through creation of better curricula and stronger libraries, but also

on designing new university-based institutions. This included:

- Developing university outreach in the form of environmental extension services;
- Establishment of technical assistance arms to serve government, industry, and the public with training;
- Creating technical services;
- Fostering applied research.

In substantive terms, this approach gave participating institutions in Central and Eastern Europe access to the most promising trends in the field of environmental management.

After consulting with ETP's Central and Eastern European university partners, it was discovered that environmental and resource management were the weakest curricular areas in Central and Eastern European universities because of the former emphasis on Marxist production-oriented economics. ETP facilitated creation of programs for faculty and curriculum development in two major areas: environmental resource management and policy and environmental and natural resource economics. As part of this faculty development effort, Central and Eastern European university faculty were eligible for study program at the University of Minnesota.

Perhaps the most significant response to the need for university strengthening was ETP's development of the post-diploma studies (PDS) programs in five of the six target countries. Although not part of the original ETP proposal, PDS was created to answer needs that manifested themselves after the project had begun and they became a key factor in the project's sustainability.

1.4. The ETP Approach

ETP training fostered active learning via site-specific case studies and interdisciplinary approaches to the material. It provided models of attitudes and behaviors that encouraged initiative, collaboration, healthy competition, problem solving, and informed debate. It incorporated the use of simulations, role playing, case studies, and collaborative teams in interactive learning environments. ETP sought to provide a "new way of thinking" that helped empower participants and build their confidence while giving them a better understanding of problem-solving strategies and systematic approaches for communicating about problems and opportunities. It also taught them how to identify funding sources and write proposals that would solve those problems. Cooperation across all sectors (business, local government, NGOs, universities) was encouraged, as was cooperation across regional and national lines. Whenever possible, local trainers and case studies were used.

As the program developed, ETP began to create, publish, and disseminate resources in each of the six countries. Some were translations or adaptations of works by American authors, but the majority were created by local experts, many of whom were ETP trainers in training themselves.

ETP training was not limited to the classroom but included public education and outreach. For example, ETP supported an environmental film in Slovakia that was aired on Slovak television.

The Consortium recognized that during the unprecedented transition period, the target countries faced new ideas and numerous conflicts that did not exist in the past. As a result, developing conflict management, negotiation, and mediation skills was extremely important.

1.5. Implementation and Project Management

ETP was an extremely management-intensive project from its inception, due not only to its size, scope, and the number of subgrantees involved, but also because of the nature of the project. Nevertheless, with excellent cooperation from USAID, Consortium partners, ICCs, and subgrantees, all major problems were overcome. The ETP approach to management was one of collaboration and interactive networking among partners, collaborators, subgrantees, and USAID. One example of this was the way in which the Consortium partners drew on each others' strengths to deliver quality training. The University of Minnesota and the Center for Hazardous Materials Research worked together to develop the business and academic components of ETP. World Wildlife Fund took the lead in developing the NGO component, while Institute for Sustainable Communities led in the area of local government training.

Early management problems were the result of normal start-up issues faced by any large project of this scope, including the request for an extensive field exercise in March 1992, delays due to slow field approval of the Year 1 PIP and subsequent revisions to the workplan, and the problems in setting up and turning around sub-agreements and financial documents at the University of Minnesota. These problems were solved through improved collaboration with USAID—Washington and USAID in-country representatives, and adding new staff at the University of Minnesota to expedite financial and contractual management.

Regular ETP retreats were an important management tool for self-assessment and project coordination. These retreats were held both in the U.S. and in Central and Eastern Europe, usually twice a year. The locations of the retreats included (among others): Wilder Forest, Minnesota (1993, 1994, and 1995); Modra-Harmonia, Slovakia (1995), Visegrad, Hungary (1996 and 1998), Balatonaliga, Hungary (1996), and Pezinok (1996) and Košice (1998), Slovakia. At these retreats the Management Team, University of Minnesota staff, In-Country Coordinators (ICCs), and often USAID officials from Washington, D.C., and/or regional USAID offices were able to evaluate progress in implementing the annual workplans and setting new targets for the coming year. Financial issues were a more important part of the retreats in the first two years, while strategic issues and sustainability were the more important topics in the years thereafter. All the retreats contributed to developing a sense of teamwork and built cross-border and cross-cultural links that played a crucial role in the development of future cooperation and sustainability. For example, the ideas for ETP International and cross-border training were born at the retreats.

Reporting was yet another important management tool that allowed all stakeholders to assess program outcomes, focus on areas of concern, and develop best practices. Annual published reports were issued for the first six years of the project. Quarterly reporting was also conducted to fulfill grant requirements and reports were also issued from each ETP retreat. Special reports

on the impact of PDS were issued for each of the five PDS programs. (For a list of published reports, see Appendix, Chapter 12: List of Sources.)

By the end of the second year, it was possible to shift greater managerial responsibility to ICCs. These coordinators grew markedly in their ability to make decisions and solve problems. This aided the long-term sustainability of the project by developing in-country managerial expertise that carried over into the post-USAID period. Reorganization for further decentralization began in earnest in the third year of ETP and continued during the remainder of the project. More initiative for developing local projects and training was taken by ICCs in each successive year. By the fourth year, for example, only about one-third of all training was being delivered by the Consortium partners, with the remaining two-thirds delivered by in-country experts. This was made possible by a growing cadre of trainers in each country who had developed the skills necessary to take over from Western trainers.

The decentralization process consisted of four specific parts:

- Shifting responsibility to ICCs for identifying training needs for respective countries, developing country plans, and soliciting the concurrence of local USAID offices.
- Placing authority for approval of individual training activity work plans with ICCs.
- Granting authority to ICCs for contracting with local organizations and trainers to conduct follow-up activities.
- Assessing ICCs' organizational capacity and developing specific plans for increasing their ability to manage these additional responsibilities. The University of Minnesota led this effort to develop the managerial skills of the ICCs.

The University of Minnesota led the effort to develop the managerial skills of the ICCs. As more responsibility was shifted to the ICCs, the role of the University of Minnesota's Center for Nations in Transition was transformed into more of an information and resource center for ETP. The Consortium Partners became contact points for ICCs for consultation more than recruiting trainers. The University retained overall responsibility for compliance and fiscal matters.

To improve overall performance, evaluations of each country's ETP project were undertaken at 6-, 12-, and 18-month follow-up intervals. In addition to final evaluations (the results of which are reflected in many of the subsequent chapters), mid-term evaluations were sometimes used. Evaluation was done both internally and/or using external evaluators, depending on the situation and needs in each country.

1.6. General Outcomes and Impact of ETP

In the eight and a half years of ETP, the project educated over 16,000 participants, approximately 40 percent of whom were women (see Tables 1-3). ETP created six independent, non-profit NGOs to institutionalize and continue its mission after the end of USAID funding. ETP graduates in the six Central and East European countries inspired ecologically friendly investment of over \$1.5 billion during the eight-year period.

Table 1: ETP Training Participants, by Year and Country, 1992-2001

	Year 1 1992	Year 2 1993	Year 3 1994	Year 4 1995	Year 5 1996	Year 6 1997	Year 7 1998	Year 8 1999	Year 9 2000	2001*	Total
Bulgaria	164	240	669	330	276	362	30	30	45	75	2,221
Czech Rep.	74	145	249	40	108	47	182	682	221	142	1,890
Hungary	89	168	321	478	220	127	252				1,597
Poland	304	330	545	427	858	1,147	163	89	130	20*	4,013
Romania	91	117	519	571	251	68	162	65	468	83	2,395
Slovakia	204	220	432	801	413	681	320	250	240	85	3,646
Transnational	n/a	35	83	n/a	n/a	n/a	0	278	0	0	396
Total	926	1,255	2,818	2,647	2,126	2,432	857	1,394	1,104	405	16,158

Shaded figures represent training conducted after the end of USAID funding.

*Figures for 2001 are preliminary as of September 2001. Not all participants reported.

Table 2: ETP Training Activities Offered by Year and Country, 1992-2001

	Year 1 1992	Year 2 1993	Year 3 1994	Year 4 1995	Year 5 1996	Year 6 1997	Year 7 1998	Year 8 1999	Year 9 2000	2001*	Total
Bulgaria	4	4	14	10	10	3	1	1	1	1	49
Czech Rep.	4	10	6	2	3	2	8	17	11	5	68
Hungary	2	6	13	7	8	2	9	5	4	0	56
Poland	4	4	15	22	18	16	12	4	3	1	99
Romania	3	4	21	17	10	2	3	1	11	3	75
Slovakia	6	10	17	24	14	28	15	17	12	6	149
Transnational	1	5	4	n/a	n/a	n/a	n/a	16	n/a	n/a	26
Total	24	43	90	82	63	53	39	56	38	16	522

Shaded figures represent training conducted after the end of USAID funding.

*Figures for 2001 are preliminary as of September 2001. Not all trainings reported.

Note: Some training activities were delivered in more than one offering.

Target regions have seen environmental improvement thanks in part to ecologically friendly restructuring led by ETP graduates. New small and medium-sized environmental businesses have been founded and polluting heavy industry restructured. Emission of CO₂, SO₂, NO_x, and volatile organic compounds dropped by one-quarter to one-third or more in some countries. (See Appendix 12.5.)

PDS programs were implemented in five countries and produced over 450 graduates from business, government, and NGO sectors through the end of Year Six of ETP (see Chapter 9). Academic research in environmental studies was initiated by ETP Ph.D. Fellows selected from the target countries. Their research resulted in new information regarding critical environmental problems (see Chapter 10).

ETP issued nearly 100 publications on numerous aspects of environmental policy and management and restructuring of industry (see Appendix 12.2).

Country	Men	Pct.	Women	Pct.
Bulgaria	1,276	57%	945	43%
Czech Rep.	1,024	54%	860	46%
Hungary	982	67%	479	33%
Poland	2,527	63%	1,492	37%
Romania	1,329	58%	938	42%
Slovakia	1,660	60%	1,091	40%
Transnational	73	62%	45	38%
Total	8,871	60%	5,850	40%

No gender data are available for 2001.

1.7. Structure of the report

This report provides the final follow-up on USAID-sponsored ETP activities. Following this introduction, the report is divided into six central chapters. Each of these chapters focuses on a single target country (Bulgaria, Czech Republic, Hungary, Poland, Romania, and Slovakia), describing the situation at the start of ETP, how the project operated, and what impact it had.

Following a description of the effects of ETP in each country, there is a report on the final evaluation of the training, often in the form of a special survey conducted among participants in each country. The country chapters conclude with information on the sustainability of ETP successor organizations and a description of their recent activities.

The next chapter contains success stories that illustrate ETP impacts on particular institutions, locales, and individuals. There are chapters on the PDS program and on the Ph.D. fellows. The report concludes with a description of the overall sustainability of the ETP project; and future prospects.

Appendices follow, listing ETP courses by target sector and country, as well as ETP publications, sources, and successor institutions.

2. Bulgaria

2.1. Background

Like other former communist countries, Bulgaria was saddled with serious environmental problems, outdated, polluting industries, a declining economy, and weak civil society. In 1985, for example, Bulgaria ranked third in SO₂ emissions among all ETP target countries and second only behind much larger Poland in 1990. Despite or perhaps because of such problems, a unique feature of the Bulgarian revolution of 1989 was Ecoglasnost, an environmental movement that attracted many of the country's leading intellectuals and integrated the opposition against the communist regime prior to 1989. Environmental concerns played an especially important role in galvanizing democratic opposition and Ecoglasnost proved a catalyst for economic and social transformations that were undertaken after 1989. As a result, in 1991 Bulgaria passed important and progressive environmental legislation aimed at sustainable development (the Environmental Protection Act). Nevertheless, the economic hardships of transition and the shifting political landscape made full implementation of the new laws and remedies difficult and at times impossible.

2.2. Scope of Work (1992–98)

USAID funding for ETP Bulgaria continued from 1992 to 1997. Additional training in 1998 was conducted with follow-up funds. Goals and objectives, stemming from ETP guidelines, remained consistent with changes in emphasis due to shifts in target region and target audience as noted below.

2.2.1. Target Audience

ETP training was addressed to managers of environmental businesses and administration, NGO members, local government officials, and academics. Many training activities used an inter-sectoral mix of diverse participants that included target groups of environmental entrepreneurs, NGOs, universities, and local government. Initial training focused heavily on NGOs and business, with training for local government and academia starting in the third year.

2.2.2. Target regions for ETP training in Bulgaria

After a needs assessment visit in Spring 1992 to discuss training needs and priorities, USAID selected the Plovdiv and Varna-Devnya regions for ETP training, in part because of their status as environmental "hot spots." Also, Plovdiv and Varna are located along two of the most polluted waterways in the country: the Maritsa River and the Black Sea coast.

The Varna-Devnya region is a site of intense air and water pollution. Devnya is the site of multiple industrial facilities including a fertilizer plant, a PVC plant, a cement plant, a power plant, and the largest soda-ash plant in Central and Eastern Europe, Sodi Devnya.

During the review process, however, the USAID representative in Sofia decided that the Plovdiv-Asenovgrad area already had a great deal of foreign assistance and the ETP programs could be more effective in other regions of Bulgaria. Therefore, the second region for ETP trainings was shifted to Veliko Turnovo and Gabrovo with the intention to link ETP activities with the WASH project, another USAID-funded activity. This is an industrial region situated in the Yantra River basin with heavily polluting leather and textile industries. This is also a region with heavily polluted agricultural land as a result of pesticide use and industrial pollution from Bulgaria's largest sugar plant in Gorna Oryahovitsa.

A third region, Rousse, was designated in 1993 as a result of a needs assessment conducted by USAID representatives and the ETP Management Team at the request of the USAID Sofia representative. This effort was the result of the initiative of local leaders who saw a critical need for better environmental management. Rousse is situated on the Danube River and is an environmental "hot spot" due to water and air pollution caused by local and transboundary sources. The Rousse region was also regarded as a potential area for an example of cross-border cooperation with ETP Romania.

2.2.3. Training Methodology

ETP training was delivered through a mixture of traditional and innovative delivery techniques in interactive and experiential learning environments using country-specific case studies. This type of interactive training was new to participants, local trainers, and facilitators. This style was later introduced in the Post Diploma Studies program at Varna Economic University and many other Bulgarian universities through the university trainers attending ETP courses and a special curriculum development workshop. The training activities were originally delivered by American trainers using Bulgarian co-trainers' and facilitators experienced in preparing country-specific case studies. As Bulgarian co-trainers gained more confidence and experience in interactive teaching, they formed local teams that were used for multiple training deliveries and follow-up activities and later became ETP subgrant winners.

2.3. Outcomes and Impacts

2.3.1. General Outcomes

Over the course of six years, ETP Bulgaria undertook 48 training activities and offered some 78 courses to over 2,100 participants (see Tables 1 and 2). In these courses trainees got acquainted not only with advanced management ideas and skills, and interactive training methods, but a different business and civilian culture and attitude as well. All elements of the courses were well received.

2.3.2. Environmental Business Management and Administration

Between 1993 to 1996 alone, about 300 businesspeople attended ETP training in Bulgaria. Exemplary outcomes were numerous. For example, one participant had a chance to attract foreign investment right after a training course on Financial Management for Small Environmental Businesses: The Business Plan and Financial Proposal. He drafted three variants of a business plan and his company won the investment. He viewed the training as "winning a prize in a lottery." Another local trainer was offered a new job in the Bulgarian-American Investment Bank thanks to her performance as a trainer in training. She also sits on the Board of the Small Business Loan Program managed by the Chamber of Commerce. She uses her knowledge from the workshop in helping businesses develop their financial proposals.

Another good example of an ETP business training outcome was the business plan workbook published in 5,000 copies in 1994 and distributed along with the course software for developing business plans under the title: *Managing an Environmental Business: The Business Plan and Financing Proposal*. This was the first professional business plan published in Bulgaria. A follow-up session was held in Gabrovo with participants from the first offering of the business plan course, and the results were typical to those from most of our trainings: Three attendees reported that they started new businesses, six completed their business plans or acted as consultants helping others to prepare business plans, three people applied for and received business loans, one participant was negotiating with a municipal authority to build a waste treatment facility and found an investor for the project, and two participants attended WasteExpo1993 in Chicago led by the In-Country Coordinator and spent time discussing franchises and joint ventures with U.S. firms. One of the local trainers published a series of four books on business management (distribution 3,000 copies each), two of which use ideas from this training.

The business component in Bulgaria saw many examples of another important ETP success: the use of trainers from Central and Eastern Europe. This "East-East" cooperation was possible due to the success of training trainers. Using trainers from other ETP countries and sending trainers to other ETP partners helped to build links and contacts in the region and created growing confidence in the ability of ETP target countries to help themselves and their neighbors.

2.3.3. Public Participation and Outreach

There were also many successful outcomes from ETP training of NGOs in Bulgaria. For example, the course Strategic Planning and Financial Management for NGOs, was the first ETP training designed for environmental NGOs in Bulgaria. The course was offered by Progressive Strategies to a total of 35 NGO representatives. Virtually all the participants have prepared proposals and won grants since that first training. The training topics, strategic planning, financial management and fundraising, and proposal writing, were important for the institutional strengthening of NGOs. The many training manuals have been extensively used by many NGOs since that first training.

Another successful outcome came from the training Management of Ecological Conflict between Agri-Business, Forestry, and Wild Animals. This resulted in formation of a new environmental NGO, Initiative for Sustainable Development, that was established in the town of Gabrovo and supported by ETP through several subgrants. This NGO has been very active in the region and has received several grants from various donors. It has established one of the first agricultural extension services in the country. It has also become one of the country's environmental education centers and is closely cooperating with ETP Foundation (Sustainable Development Projects). This proved to be another example of successful "East-East" training exchanges.

Another "East-East" training success in this component was brought about by cooperation with the subgrantee, Ecoglasnost Varna, one of the most active NGOs in the Varna region. The three trainings Ecological Culture: From Aggression to Protection of the Varna-Devnya Lagoon Regions, sponsored by Ecoglasnost Varna, found ways of changing public opinion through mass media, raising public awareness about Lake Varna and conducting information campaigns. A follow-up to this training was funded by ETP as a result of the recommendations of the participants in the training Pros and Cons of the Use of Chemicals in Agriculture and its Impact on Lake Varna. This was a well-organized information campaign with local radio and newspapers attracting attention from local government, industry, and farmers.

The WWF-managed training Advanced Strategic Planning and Proposal Writing for NGOs further strengthened the environmental NGO movement in Bulgaria by providing focused training and technical assistance to five selected NGOs. The final products were the development of five strategic plans and fund-raising strategies and seven funding proposals.

Training activity also supported institutionalization of ETP in-country activities through the ETP Foundation: Sustainable Development Projects. Its mission is to "contribute to sustainable development in Bulgaria by improving the decisionmaking process, strengthening institutions and development of civil society." Through this activity the ETP Foundation has become a strong local institution, able to provide high quality services for ETP's operations. (See section 2.5 for more on the institutionalization of ETP in Bulgaria.)

Other positive impacts of ETP training for Bulgarian NGOs included:

- In collaboration with the Gabrovo Society for Bulgarian-American Friendship, the Health Office and the Regional Environmental Inspectorate, the Gabrovo branch of the association organized a monitoring and educational field trip and an exhibition of environmental drawings by children. They also published a brochure with their field trip findings which were distributed among various government and non-government organizations, schools and the local community.
- The training *Effective Mass Media Strategies for Environmental Management*, brought a very significant impact on a national level: ETP Educational National Radio Program was broadcast over the National Radio 25 minutes per week for a period of 15 months. A contract was signed between National Radio, ETP, and the Humanity Research Center. The program leader was the president of the Humanity Research Center and the topics and participants were selected with the assistance of the ETP In-Country Coordinator. The

program started as Environmental Management for Leaders and later turned into the national *Ecojournal*. Thomas Dine, then–USAID Assistant Administrator for Europe and the Newly Independent States, who was a guest at an ETP ICC Retreat in Slovakia, gave the following comments about the radio program: “ETP Bulgaria has won a bingo with this program.”

- The training Teachers’ Workshop on Discussion and Implementation of a Solid Waste Management and Resource Guide for Schools successfully assisted the Veliko Turnovo municipality in implementing its municipal solid waste program by involving the public and young people. The chief of the Regional Education Inspectorate in Veliko Turnovo decided to test the guide in eight schools. Twenty teachers and 335 students from grades 1–8 participated in the experiment and the results were assessed in June 1998. ETP Foundation is trying to raise money for a trip to the United Kingdom for ten teachers, who will be taught how to prepare environmental curricula for Bulgarian schools. This will be a “Training of Trainers” workshop with multiplication of their experience in other cities of the country. The *Teacher’s Solid Waste Management and Resource Guide for Schools* was published in 1,000 copies and is being disseminated by the ETP Foundation throughout the country.
- A total of 64 participants attended the two Environmental Impact Assessment (EIA) workshops with American trainers. The majority of them have become EIA experts and consultants and some of them have started their own private environmental consulting businesses. Coupled with other ETP trainings they have attended, such as the Business Plan, Risk Management, Environmental Auditing, and Marketing, these participants have become leaders in the environmental business in Bulgaria. The EIA manual was expanded by incorporating case study materials and comments by Bulgarian experts related to the Bulgarian EIA practices. The manual was published in 500 copies in Bulgarian language and served as a basis for the development of the EIA Regulation, no. 1 (1995) of the Ministry of Environment. A very significant contribution to the regulation was the chapter on “Public Participation in the EIA Process.”
- Gerasim Gerasimov, a naturalist from the Bulgarian Society for the Protection of Birds, received an internship in Minnesota. He was hosted by the Audubon Center of the North Woods where he was able to learn first hand about the successful operation of an NGO, including using volunteers and fundraising.

2.3.4. Environmental Policy and Management

As a result of the ETP activities in the Veliko Turnovo/Gabrovo region and the strong influence of the Yantra River Basin Council (YBRC), supported by ETP significant quantitative impacts have been observed. (For more on the YBRC, see Chapter 8.) In Appendix 12.4 is a list of municipalities that have received grants and low-interest loans from the National Fund for Environmental Protection (Ministry of Environment).

This could only come about as a result of many successful trainings whose impacts accumulated quickly. For example, the training Integrated Solid Waste Management, was a culmination of a series of trainings on Solid Waste Management. The participants (mainly from local government and private businesses) prepared draft waste management programs for the municipalities and their private businesses, using practical examples of California cases. One participant from Sofia is using the manual extensively in her everyday activities. The training manual has served as background for preparing the National Solid Waste Management Policy for the Bulgarian government.

Another example was Sustainable Development of Municipalities, Investment in the Future, held in the Yantra River Basin region. In the first session there were four mayors, three municipal councilors, one district administrator, and several heads of municipal environmental departments. As a result of the workshop, the mayor of Strazhitsa managed to raise funds for a long standing project to clear construction waste materials from a vast municipal area. He was grateful to the ETP for having invited him to the workshop. The second offering was in the town of Dobrich (Varna region) and was organized in partnership with the National Association of Mayors. Thirteen of the participants (out of 19) were mayors from the Varna District. They criticized the current investment policy and made valuable suggestions for changes in the law on local self-governance.

This component was also enhanced when two Bulgarian interns came to Minnesota in 1994. Vanya Grigorova, a coordinator of environmental assessment from the Ministry of the Environment in Sofia, researched implementation of EIA procedures. She worked with Anoka Sand Plain Water Quality Demonstration Project and visited Metropolitan Waste Control Commission, Soil Conservation Service, and Department of Natural Resources. Angel Tselov, an engineer from Veliko Turnovo, furthered his research on water purification. He was hosted by McCombs, Frank, and Roos Associates, which specializes in civil and environmental engineering. In addition, he met with Minnesota Pollution Control Agency.

Just as ETP had an impact on local government, in Bulgaria there was also an opportunity to expand this to offer training that assisted the national environmental authorities. Three subgrants Environmental Conflict Management for National Nature Protection Service, Communication Skills Training for Representatives of National Nature Protection Service, Strategic Planning for National Nature Protection Service, were designed to assist the Ministry of Environment in building a new structure within the Ministry (the National Nature Protection Service with its regional and municipal sub-structures) and to build a bridge between ETP and two other USAID-funded projects: The Vitosha National Park Service project and the GEF Biodiversity Program. The training enhanced team building, improved interpersonal communication, and developed planning skills.

Other examples of ETP's impact on national policy included:

- As a result of the training Waste Disposal Management, the first of a series of trainings on this topic coordinated by ETP, there was a significant improvement in the national solid waste management policy. Along with the Integrated Solid Waste Management training, it

contributed to the adoption of the new law on Restricting the Harmful Impact of Wastes (September 1997).

- The training course *Advanced Environmental Auditing* served as a basis for preparing the new Environmental Auditing regulation of the Ministry of Environment.
- The first offering of Environmental Auditing course, developed by CHMR, focused on auditing for pollution prevention and waste minimization with the procedural context defined by Bulgarian regulations, European Community policies, and EBRD lending and reporting formats. CHMR made arrangements for the U.S. EPA to send 20 sets of technical resource documents on various aspects of auditing, site assessment, and monitoring to Bulgaria. This material was highly valued by participants, who were eager to learn more about the auditing process.

2.3.5. University Strengthening

University involvement in Bulgaria came from the very beginning of the project with the recruitment of Bulgarian co-trainers and facilitators. Then, the universities started to send their faculty to participate in business, NGO, or local government training. This slow but steady process led to the deep involvement of academia in ETP activities. A crucial moment came with the introduction of the curriculum workshop for Bulgarian universities in environmental economics and management. ETP was embraced by the universities. Many prominent academic leaders reported significant changes in their curricula during the two years this training was offered. After two years of this workshop, ETP organized a follow-up workshop to further capitalize on what had been learned.

Another excellent example of university strengthening came in response to requests from the business community and Varna University of Economics for establishing a PDS program. As a result ETP designed a PDS program in environmental studies jointly with the University of Minnesota. PDS modules developed included:

- Corporate Financing;
- Bulgarian Environmental Legislation;
- Intellectual Property;
- Teams and Communication Management;
- Business Development;
- Environmentally Friendly Technologies;
- Survival Strategies.

PDS at Varna University of Economics made a significant impact through the teaching experience gained by Bulgarian trainers. They utilized the best teaching practices from American trainers and have been implementing their new skills both in trainings and undergraduate classes. The participants prepared 22 marketing and business plans based on their company businesses, 17 environmental audits, and 15 environmental impact studies. The participants came from medium- and large-sized companies and their experience in the PDS program had an impact not only on

their personal performance but also on the decision-making processes of the companies they represent.

PDS and other university-oriented activities assisted trainers from five Bulgarian universities in designing and conducting future ETP courses for the local government and business sectors. The participants realized that the shifting paradigm in higher education in Bulgaria resulted from the political, social, and economic changes that occurred because of the transition.

Two Bulgarian scholars participated in ETP as Ph.D. fellows: Slavinka Petrova of the Higher Institute of Architecture and Civil Engineering, who researched water resource management, and Pavlina Filipova of the University of Architecture, Civil Engineering, and Geodesy who researched the environmental impact of hydrotechnical projects. (See Chapter 10.)

2.3.6. Intersectoral and International Cooperation

There were many examples of successful cooperation across sectors. For example, participants in the training *Using Information for Effective Environmental Management* formed an informal group representing NGOs, Regional Environmental Inspectorates, Health Offices, and local governments. They identified ways to coordinate the efforts of different institutions in information sharing and use.

A good example of cross-border cooperation with Romania came as a result of the successful training *Promotion of Ecological Education and Culture: A Prevention Measure to Avoid Ecological Conflicts*, and a follow-up plan prepared by participants. The mayors of Tutrakan, Bulgaria, and Kubrat, Romania, gave their full support for future environmental activities in the region, among which is the preparation of a municipal sustainable development program and the organization of a transboundary training course with the citizens along the Argeş River (Romania) and the town of Oltenita in particular.

The training *Avoiding International Conflicts between Bulgaria and Romania through Joint Training*, was approved by the USAID offices in Sofia and Bucharest as a follow-up to the *Promotion of Ecological Education and Culture: A Prevention Measure to Avoid Ecological Conflicts*. The purpose of this activity was not only to avoid international environmental conflicts between Romania and Bulgaria, but also to develop close collaboration between the citizens on both sides of the river.

Throughout its operations, ETP Bulgaria forged partnerships with many subgrantees and cooperating institutions. These include:

- Yantra River Basin Council
- Ecoglasnost, Varna
- IVS Environmental, Ltd.
- Hunting and Fishing Society "Chardafon"
- Humanity Research Center
- Environmental Management Training Center, Sofia

- Petrov Consulting
- Varna Economic University
- MMM Consulting
- Partners for Democratic Change
- Progressive Strategies
- Divas, Inc.
- PolyConsult Eco-BM, Sofia
- Community Environmental Council
- Jana Zimmer and Associates, U.S.A.
- Bulgarian Institute for Water Problems
- Interlex

The most significant cross-sector cooperative activity started after the workshop on River Basin Management in January 1994 when an agreement between ETP, the Ministry of Environment, the National Water Council, and the Lovech District Governor was signed to establish and assist a Yantra River Basin Council (YBRC) as a follow-up to the River Basin Management workshop and as a test of the Draft Water Law. According to the agreement the experience of YBRC was to be used to introduce amendments to the law and to develop regulations for its implementation. The YBRC was supported by ETP for three consecutive years as a pilot project and it has had a strong impact on national and regional bodies by introducing basin councils as integrated water-resource management bodies.

As a result of the ETP follow-up activities related to the Yantra River Basin Management workshop, a subgrant was executed between ISC and YRBC for the period October 1, 1995 to September 30, 1996. The consultations, hands-on training, and practical experience of the 40 members of YRBC assisted the institutional development of the council whose existence was made into a legal entity by the new Water Law (1999). The YRBC experience has been used as a model for the establishment of new river basin councils within the country.

4. Evaluation of ETP Bulgaria

A mid-term evaluation of ETP was conducted by ARD Inc., in Poland, Bulgaria, and Romania from August to October 1994. In Bulgaria, the team spent two weeks meeting more than 200 ETP alumni, representing local governments, businesses, NGOs, and university trainers. Group and individual interviews were conducted in Veliko Turnovo/Gabrovo, and Varna/Devnya. Some typical comments and conclusions were:

- “ETP workshops are useful and have a direct impact on my professional performance.”
- “ETP changed the working behavior of the participants.”
- “ETP helped establish a network of interpersonal business contacts with other participants.”
- “ETP workshops have improved the managerial decision-making of the participants.”

The recommendations of the evaluation team were that ETP should continue its activities in Bulgaria beyond Year III, although USAID Sofia (OAR Jerry Zarr) had announced their decision

of cutting the ETP program after Year 3 in March 1994: "we do insist that a phase-out strategy and corresponding budget should result from a genuine working plan and not from an announced cut-off. Planned follow-on links to ongoing and future USAID/Bulgaria activities should be included in the strategy and built into the phase-out" (*ARD Evaluation Report*, January 1995).

As a training project ETP had a fundamental goal of changing people's behaviors, and as a consequence, changing organizations, institutions, and policies. There is no way of fully reflecting and tracking the changes ETP brought about, but they continue and will have an impact in the years to come. ETP participants have helped shape national environmental laws, helped their businesses grow, developed new training courses, and initiated demonstration projects.

There were many positive comments. For example, a Ministry of Environment official stated that

- "The ETP Project was of paramount importance to institutional development";
- "It helped support already established network of institutions and in creating new ones";
- "It further developed human resources and increased the role of NGOs";
- "It rendered assistance to the Ministry of Environment, legislative bodies, local governments, and NGOs in improving their administrative practices."

These comments show the changes in attitude brought about among officials of a specialized ministry. The project encouraged the active role of these agencies on the local and international levels.

One of the project's main aspects was to offer solutions to the environmental problems on both local and national level. Great importance was attached to civic activism, environmental protection, and increasing the role of civil society as a whole, with an emphasis on local governments and individuals. The main goal was to expand the power and the decision-making abilities of local governments.

This could not be achieved, however, without relevant training because insufficient knowledge of the problems hampered local governments in environmental risk control. Efficient environmental protection and management requires a clear and accurate evaluation of the situation. Thus, a lot of specialized information has to be collected and processed. This is being done by government agencies and individuals.

The active participation of the public was of great significance for the formation of a government policy for sustainable development. Of key importance in the process of public participation was the role of NGOs. The project played a significant role in improving the organizational and managing abilities of society, in encouraging and expanding the scope of activities in the existing NGOs, and in creating new ones.

The participation of society was secured in three main forms:

- Access to information;
- Access to discussion and decision-making;
- Access to the court (which is the least regulated activity in the current legislation).

The materials developed during ETP training have been very useful for the future continuation of the training and for guaranteeing continuity in achieving the project's goals. Although during the first years of the project materials would arrive from the U.S. and only translated into Bulgarian, now many courses are revised and adapted for specific Bulgarian conditions. This made them much more useful, applicable, and interesting to participants.

In view of Bulgarian conditions, in the course of the project, the idea of presenting, teaching, and directly transferring Western technology proved unsuccessful. Nevertheless, the project was flexible enough to change and by the second year adapt Western materials to specific conditions in Bulgaria.

Taking into consideration the main goal of the ETP project, to improve the abilities and skills of the people to find their own long-term solutions for environmental problems in the context of a competitive market economy, multilateral subject training was organized. It included proposal writing for receiving grants, materials on financial management, and marketing, and a number of materials with technical orientation and implementation. As a result of the acquired knowledge of proposal writing a significant number of grant proposals, addressed to the National Environmental Protection Fund at the Ministry of Environment in the period 1993 to 1997, proved to be successful.

As a result of ETP programs and courses, people from the target regions have acquired:

- Ability to provide a realistic assessment of environmental problems and solve them successfully;
- Ability to make a risk assessment and to write proposals for grants;
- Ability to work out strategies and policies aimed at preserving natural resources and environment;
- Ability to analyze laws and regulations and to make proposals for changes and amendments to them;
- Ability for conflict resolution and relevant conduct in the course of negotiations.

2.5. Post-USAID Sustainability

2.5.1. ETP Foundation Sustainable Development Projects, Bulgaria

On July 6, 1995 the ETP Foundation: Sustainable Development Projects, Bulgaria was founded with the primary goal of institutionalizing and continuing ETP activities in the country and to develop into an independent environmental policy think tank. The ETP Eco-Business Club was established in 1996 with representatives from the environmental business and finance sector and ETP alumni. The ETP Foundation also serves as an environmental education and information center with its training manuals, publications, and newsletters. Since 1995 the ETP Foundation has diversified its funding and receives support from American, European, and local donors. ETP Foundation is considered one of the best environmental training institutions in the country working in partnership with NGOs, local government, business associations, and donors.

ETP Foundation: Sustainable Development Projects, Bulgaria has established itself as an independent non-government, not-for-profit institution, capable of continuing and expanding ETP activities beyond USAID funding. It has a strategic plan and fundraising strategy that involves diversified funding to secure sustainability of operations. The mission of the ETP Foundation is “to contribute to sustainable development in Bulgaria by improving the decision-making process, strengthening institutions and development of civil society.”

ETP Foundation has the following units:

- Environmental Education and Training program;
- Center for Sustainable Development Research (a think tank);
- ETP Eco-Business Club.

ETP Bulgaria projects and funders in 1997 and 1998 were:

- Civil Society Development Foundation, PHARE–Democracy Program, 1997 (training of trainers and consultants on Strategic Planning, Fundraising, Proposal Writing, and Human Resource Development).
- Regional Environmental Center, Sofia office, 1997 (Public Relations for NGOs).
- Charles Mott Foundation, 1996 to 1998 (Strengthening Business Contributions to Sustainable Development).
- Democracy Network Program, Bulgaria, USAID funded, 1997–98 (Cooperative Training on NGO Capacity Building partnership project; ETP Foundation, EMTC, and REC, Sofia).
- Regional Environmental Center, Sofia office, 1998 (Development of Municipal Waste Management Programs).

In 1997 the ETP Foundation (Sustainable Development Projects) Bulgaria received a grant from the Civil Society Development Foundation (PHARE Democracy Program) to conduct a Training of Trainers on Strategic Planning, Proposal Writing and Financial Management for NGOs. The Progressive Strategies’ two basic manuals were used: *Training of Trainers* and *Strategic Planning, Proposal Writing and Financial Management for NGOs*. The latter was published in 1,000 copies and is being distributed among various Bulgarian NGOs. Two trainers from the Environmental Partnership in Central Europe were invited to deliver the training. From the 70 applicants only 30 were admitted due to limited space.

2.5.2. ETP Foundation Network

ETP Foundation’s (ETP F) success is largely due to the network of NGOs and local government and business representatives within and beyond the ETP target regions. ETP F relies to a great extent on the capacities of its former subgrant winners and current trainers for sustaining its activities. ETP F also has partnerships with other nationally recognized NGOs in carrying out joint projects. ETP F is already recognized by and maintains extensive network with the international community and serves as an advisor and consultant on national environmental issues.

2.5.3. Yantra River Basin Council (YRBC)

The Yantra River Basin Council pilot project serves as a model for specifying the functions, place, structure and statute of river basin councils in Bulgaria. The actions of the council serve to speed up policy reform on water issues and the adoption of a new water law. Emphasis is on local identification and priority setting in water management and environmental problems and trying to solve them through public participation at regional and local level rather than at the national level. The ETP F works in close collaboration with the YRBC representatives in resolving local and regional issues. (For more on YBRC see Chapter 8.)

2.5.4. Post Diploma Studies Program, Varna University of Economics

Despite the first successful offerings in 1995–96, the PDS program organizers did not raise funds for a second offering in 1997 mostly due to the collapse of the Bulgarian economy and insufficient managerial effectiveness. Nevertheless, PDS curricula and training expertise gained by Bulgarian trainers involved in the program, and the training manuals developed in the first year of the PDS program in Varna, are extensively used in undergraduate and graduate curricula at Varna Economic University. The managerial skills gained by the participants who were top managers in the companies they represented will have a strong impact on the improvement of the performance of their organizations.

ENVIRONMENTAL TRAINING PROJECT - ETP • HAPSHIRE RESEARCH INSTITUTE - HRI
SPOLEČNOST PRO TRVALE UDRŽITELNÝ ŽIVOT - STUŽ

PRÁVO NA INFORMACE O CHEMICKÝCH LÁTKÁCH

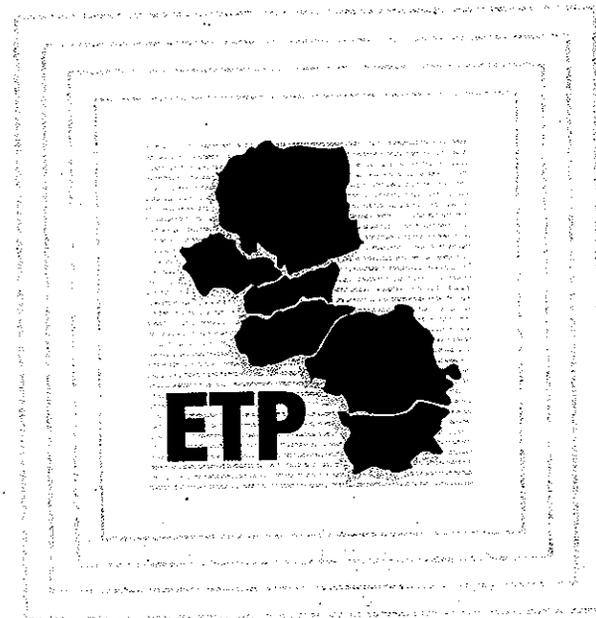
Registr úniků a přenosů znečišťujících látek



Dr. Warren R. Muir • Ing. Zdena Jurčíková • Ing. Ondřej Velek • JUDr. Petr Kužvar

Praha - červen 1995

ОЦЕНКА ЗА ВЪЗДЕЙСТВИЕ ВЪРХУ ОКОЛНАТА СРЕДА



Проект за обучение по управление на
околната среда за Централна и Източна Европа,
спонсориран от
Американската агенция за международно развитие

Samples of ETP Publications: Bulgaria
and Czech Republic.

3. Czech Republic

3.1. Background

Nearly 50 years of communist, totalitarian rule left the Czech Republic with a disastrous environmental crisis. Czechoslovakia was one of the largest polluters in Central and Eastern Europe during that era. The poor state of the environment presented a serious barrier to further development and posed a profound threat for the country's economic and political future. Following the break-up of Czechoslovakia, environmental and political leaders realized that ambitious political and economic reforms would be difficult to sustain with increasing degradation of air, soil, and water, deforestation, shrinking biodiversity, worsening food contamination due to pollution, and falling life expectancy and rising mortality rates. Thus, the ETP program was conceived and implemented at a time when the country needed a comprehensive plan to stop to degradation of the environment and living conditions while simultaneously improving the economic situation.

3.2. Scope of Work (1992–95)

USAID-sponsored ETP activities in the Czech Republic were conducted for only three years because USAID funding in the Czech Republic was phased out after Year 3 of the project. Because of this, ETP focus was foreshortened and in Year 3 greater emphasis placed on activities that promoted sustainability of the project.

In Year 3 of the project, the Center for Environmental Analyses (CEA) was formed under the directorship of Maria Ticha. This NGO carried on ETP training activities as a subgrantee and successor to ETP in the Czech Republic. Other institutions that actively collaborated with ETP included Institute for Environmental Policy (IEP) in Prague, North Bohemian Economic Association in Děčín, and Project Silesia Information Center in Ostrava. IEP hosted the ETP office for the whole three-year period of USAID funding. Its staff members delivered several ETP courses, including some of the newest and most advanced ETP courses such as EIA and Mediation.

3.2.1. Target Audience

ETP training was addressed to managers of environmental businesses and administration, NGO members, local government officials, and academics. Many training activities used an intersectoral mix of diverse participants that included target groups of environmental entrepreneurs, NGOs, universities, and local government. In the Czech Republic, most training activity was aimed at the business and NGO sector, with only one training each aimed specifically at local governments and universities.

3.2.2. Target Region

ETP conducted its activities in the Czech Republic in Northern Bohemia. The region was selected because it is a “hot spot” with numerous and serious environmental problems. There is also an active NGO community and significant interest in environmental protection among private companies and local governments. Some training was also delivered in the Ostrava region at the request of USAID–Czech Republic and in cooperation with Project Silesia, a U.S. EPA partner.

3.2.3. Training Methodology

One of the most significant effects of ETP training was the introduction of participatory, interactive, cross-sectoral methodology. ETP training included lectures, small-group sessions, and exercises through which participants acquired knowledge, techniques, and skills. Most of the theoretic training materials were compiled by American trainers and translated into Czech. These materials were adjusted to local circumstances and to the needs of participants who were surveyed by pre-course questionnaires. Local case studies and lectures by Czech experts were also included in the training materials. Teams of Czech and American trainers proved highly effective. The interactive training methods included small-group work sessions and exercises, analysis of case study examples, simulations, and role playing. Many participants experienced these methodologies for the first time and as completely new approaches they have been very provocative and appreciated. Later in the project, consultations provided by experienced local organizations were used to maximize the impact of previous training.

3.3. Impacts and Outcomes

3.3.1 General Outcomes

Since its inception, ETP has offered 68 trainings in the Czech Republic (including those offered after the end of USAID funding). Activities for which statistics were reported had nearly 2,000 attendees with an overall average of 46 percent women (see Tables 1–3). Czech trainers developed the capacity to deliver basic skills courses and develop their own materials. Twelve Czech trainers were affiliated with the ETP project.

In general, there were numerous examples of successful transfer of skills and knowledge. For example, as a result of ETP’s Toxic Release Inventory (TRI) workshop, participants became familiar with uses of Geographic Information System (GIS) for toxic waste monitoring, and the software for assessing toxic chemical risk. Participants received the publication *Right to Know: Pollutant Release and Transfer Register* (1995) and a revised electronic version as well.

In another example, through Conflict Resolution training, participants had the possibility to share experiences of practical resolution of conflicts and build new contacts with other participants, organizers, and trainers. As a result of the training it was possible to see how cooperative negotiation influenced conflict resolution in the lives and work of participants.

3.3.2. Environmental Business Management and Administration

Training in financial management for small- and medium-sized environmental businesses built networks, allowed businesspeople to hear from bankers, and began collecting data on Czech environmental business to allow for better financial analysis. Such training resulted in creation of numerous business plans. One participant wrote eight business plans and a project proposal for local entrepreneurs and for privatization of Chempetrol Litvinov. Another participant received a loan of 1.5 million Czech crowns to establish a restaurant based on the financial proposal prepared with the help of ETP trainers.

Virtually all participants reported applying what they had learned in the ETP small business training in their daily activities, allowing them to streamline operations, provide better human and financial resource management, and create clear marketing and strategic plans. By Year 3, results from the Czech Republic were:

- 24 new business plans created;
- 31 businesses reported increased activities and expanding markets;
- 22 new contracts and joint ventures;
- 13 new lines of credit and loans established;
- 12 businesses hired new employees;
- 11 businesses received new capital investments.

3.3.3. Public Participation and Outreach

Through learning about environmental impact assessments (EIA), NGO representatives were able to analyze gaps in public participation and documentation. They learned ways to improve public participation such as creation of an NGO coalition, public discussion of EIA documentation, and forums for political candidates.

ETP internships also had results for Czech NGOs in August 1994. Zdeněk Krivský, Executive Director of the North Bohemian Economic Association, was one of two Czech interns in Minnesota. At Holtec Energy Technology he studied biomass burning as an alternative energy source. He also spent time at 3M Corporation, meeting with an ISO 9000 specialist and the director of corporate sales and marketing. A second intern, Maria Ticha, Executive Director of CEA, worked with 3M, Minnesota Pollution Control Agency, and other companies.

Czech trainer Jiří Plamínek, then affiliated with IEP, produced the first-ever popular Czech *Guide to Environmental Conflict Resolution*, 5,000 copies of which were printed by a commercial publisher in Prague. ETP purchased a portion of this printing for free distribution in the Czech Republic and Slovakia. Other ETP publications for Czech audiences included:

- *Business Planning* (with accompanying software): 1,000 copies;
- *EIA: Principals of Environmental Impact Assessment*: 2,000 copies;
- *Financial Management*: 1,000 copies;
- *Toxic Release Inventory*: 1,000 copies;
- *Environmental Economics: A Resource Book*: over 1,000 copies.

3.3.4. Environmental Policy and Management

There were many examples of successful training for NGOs in the Czech Republic. In this sector ETP offered the course Developing and Implementing Environmental Monitoring and Enforcement Programs at the Local and Regional Level to 29 participants. Participants learned how to develop cost-effective monitoring programs to gather information needed to assess the effects of existing and proposed projects in Northern Bohemia and to enforce regulatory standards.

Participants in ETP training formed a work group to initiate incorporation of scoping into Czech EIA law. The work group participated in meetings and public hearings on a proposed waste incinerator in Liberec and distributed documents on EIA. Comments on EIA were collected and forwarded to the Czech government which was revising its EIA law.

3.3.5. University Strengthening

Strengthening Czech universities was an important consideration but fewer activities were carried out in this sector due to local condition. For this goal, ETP offered one training course, "Curriculum Development Workshop," for 29 participants from Czech and Slovak universities. Participants agreed to initiate joint research projects, require basic environmental economics for all economics students, and develop readings in environmental economics. The workshop resulted in recommendations that university students in economics, technical, and business fields be required to take a basic course in environmental economics.

The Ph.D. fellows programs also aided in university strengthening (see Chapter 10). Two Czech scholars participated in ETP as Ph.D. fellows. They were Tomáš Hák, Charles University Faculty of Natural Sciences, and the late Jindřich Tichý, Jan Evangelista Purkyně University, Faculty of the Environment. Dr. Hák's research topic was "Optimal Strategies for Decisionmaking in Environmental Project Management." Dr. Tichý's project was "Air Pollution Damage to the Forest Ecosystems in Sweden and the Czech Republic." (On the latter, see ETP Annual Report, Year 5, appendix F, page 143.)

Dr. Helena Vomačková received an ETP internship in Minnesota. A professor of economics at Jan Evangelista Purkyně University, her time in Minnesota was spent doing research in curriculum development at the University of Minnesota. She met with a leading expert on outcome-based education and researched Western-style coursework and evaluation systems, which she has worked to introduce at her university.

A second ETP intern from a Czech university was Dr. Petr Šauer, a professor of economics at the Economic University in Prague. He divided his time between the University of Minnesota and University of Northern Colorado and developed curricula for teaching environmental economic policy courses. He also served as a guest lecturer on environmental economics in Colorado. Šauer initiated academic contacts with American scholars, which contributed greatly to publishing the first environmental reader for university faculty and students.

ETP PDS activities were not initiated in the Czech Republic, although some individual participants attended PDS courses in Poland and Slovakia.

3.3.6. Intersectoral and International Cooperation

Where possible, trainings were conducted in cooperation with local subgrantees. These subgrantees were:

- North Bohemian Economic Association, Děčín
- Katz Graduate School of Business, Pittsburgh
- Foundation of the Environment Center of the University in Ustí nad Labem, the Center for International Environmental Law (CIEL), Washington, D.C.
- KZT, Prague
- KNO Worldwide, Prague
- Foundation Project North
- Institute for Environmental Policy, Prague
- Resolve
- ICF Kaiser, U.S.A.
- Czech Environmental Management Center, Prague
- Center for Environmental Analyses, Děčín

Numerous examples of cross-border cooperation between the Czech Republic and Slovakia emerged from ETP training. Joint workshops for Czech and Slovak participants were held in environmental and natural resource economics curriculum development. Results of Czech-Slovak cooperation included: Joint research initiatives on common environmental problems and market-based policy. In addition, there were also joint programs held with Czech, Slovak, and Hungarian participants. Czech participants also took PDS coursework in Poland and Slovakia. Such multi-national training resulted increased personal contacts, networking, and plans for future joint projects.

3.4. Evaluation

Evaluation of ETP in the Czech Republic was conducted by the Institute of Sociology of the Academy of Sciences of the Czech Republic and was completed in 1995. Survey methodology used a standard mailed questionnaire to all participants with a secondary questionnaire and personal interviews also conducted as follow up and control. ETP documents and publications were analyzed as was press coverage of ETP events and training. A total of 341 questionnaires were sent out and 107 returned; 68 percent of respondents were men, 32 percent women, almost the same proportion as actual participants in ETP.

Of those surveyed, 80 percent said that ETP satisfied their needs to a great extent or to a fair extent. Of the remaining 20 percent who were less satisfied with the courses, the main

explanations given were that the topics were too narrow or that the program was not relevant to specific Czech needs. Additional findings of the survey were:

- 80 percent of respondents increased their knowledge as a result of ETP;
- Two-thirds thought their attitude toward environmental issues had changed;
- 87 percent improved their skills and abilities;
- 85 percent stated that their aspirations had changed.

Perhaps the most important finding of the survey was that 86 percent of respondents affirmed that they were using the skills learned in ETP training in their professional lives. Three quarters also said that they had disseminated some of the knowledge gained in ETP training to colleagues and others.

In addition to this survey, follow-up surveys were conducted for many individual courses. Feedback from participants was very favorable. Participants in courses on environmental planning for businesses claimed that they all used the concepts taught in the training in their own businesses. In the words of one participant who was contacted by the follow-up survey "I can more clearly allocate duties to my employees using my business plan. We are now able to write more complex business plans, including marketing studies and strategic plans." Participants were also pleased with the organizational tools they received through ETP training. Most commented on how useful these tools have been. In the words of one participant, "The course made my ideas clearer, which helped me achieve my goals." One problem experienced in the Czech Republic's ETP program was that many courses had fewer than expected attendants. With many signed up for the courses, some did not attend. For the most part, however, participants reported that the training they received was useful and stimulating.

3.5. Post-USAID Sustainability

Center for Environmental Analyses (CEA) in Děčín, Northern Bohemia, was founded in 1994 as a successor to ETP in the Czech Republic. The main goal of CEA is to transfer and adapt environmental methodologies from the United States and European Union and disseminate them to all interested stakeholders in the Czech Republic and thus help build efficient tools of environmental protection including ecosystems and public health. Targeted audiences include local and regional governments, NGOs, environmental businesses, universities, research institutions, and major polluting industries. CEA continues to deliver high quality training courses that adhere to the basic principals of ETP training philosophy.

CEA is part of ETP International and is a member of the project Environmental Management Training in the Czech Republic, which is part of the Environmental Management Training Centers Network of the Regional Environmental Center for Central and Eastern Europe. CEA has also built close contacts with the Environmental School of the Regional University of Ustí nad Labem and the School of Transport, Technical University, Děčín. It has been involved in strategic planning of university planning, curriculum development, and teacher preparation. CEA also works with the Czech Ministry of Environment on the development of methods of environmental analyses and with the Institute for Environmental Policy, an independent NGO in Prague.

CEA training activities, conducted in Děčín in 2000, include:

- EU Accession, Environment and the Black Triangle (PHARE): 12 two-day seminars focused on EU accession in the field of the environment for 58 participants from local and regional authorities.
- Integrated Environmental Decision Making and Support to Public Participation Activities (PHARE), a project for 145 participants that included preparation, organization, and facilitation of a set of seminars to raise public awareness of environmental issues and make an effective contribution to environmental decision-making.
- Communication for Environment and Democracy: a training supported by OSF Prague and OSF Uzbekistan that helped show the main principles of environmental protection in the Czech Republic and basic principles of communication between state and local authorities, NGOs, and public for seven experts from Uzbekistan.

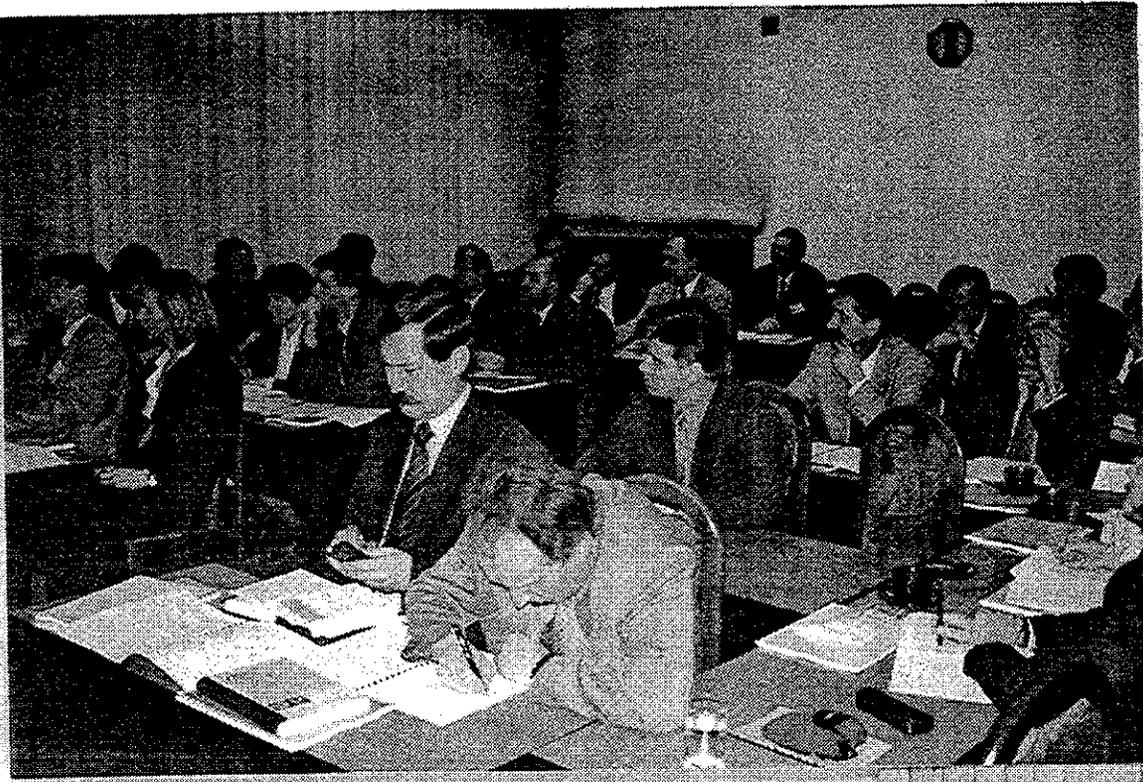
Other successful CEA projects include:

- Environmental Impact Assessment, a six-day seminar for the Committee for the Environment in Uzbekistan, May 1998, funded by Asian Bank for Development;
- Environmental Impact Assessment, a three-day seminar for regional environmental offices in Uzbekistan (Bukchara, Samarkant, Fergana), October 1998, funded by Asian Bank for Development;
- International Congress of NGOs of the Black Triangle, October 1999, funded by PHARE.

CEA continues to develop the skills, ideas, and methods provided by ETP. New skills, knowledge, and overseas experiences were important for building self-confidence and responsibility of NGOs and in helping those NGOs pass that knowledge on to others, both in the Czech Republic and in other countries.

Institute for Environmental Policy in Prague (IEP) has been an important ETP partner in the Czech Republic. It hosted the ETP office and helped develop some of the original Czech courses. This non-governmental, non-profit organization seeks to apply the principles of sustainable development in all spheres of public life. The institute is involved in ecological, legal, economic, and social problems of environmental policy at the levels of state, regions, and municipalities. IEP researches international aspects of environmental protection and their results for the Czech Republic, of multilateral international agreements to bilateral agreements. The institute also focuses its efforts on environmental aspects of incorporation of the Czech Republic into the EU.

IEP's main activities include expert projects and publication of reports including project results; seminars and expert discussions with public participation; radio discussions; publication of documents with environmental themes; advisory and consulting activities for governmental and municipal officials and the public. Its website is: www.ecn.cz/iep/indexan.html.



Students at first joint inaugural lecture of PDS at Silesian Technical University, Katowice, Poland, January 1999.



PDS Students, Košice, Slovakia

4. Hungary

4.1. Background

Hungary shares with its neighbors the environmental legacy of nearly half a century of communist rule. Furthermore, the political and social effects of totalitarianism left Hungary without a strong citizens' environmental movement to advocate for change as has occurred in most Western countries. Environmental degradation was made worse by weak laws and regulations and poor enforcement of environmental standards.

Hungary suffered environmental damage that was often worse than Western countries. Despite efforts at economic reform dating back to 1968, Hungary had suffered a long-term decrease in economic output, exacerbated by inefficient use of resources, especially in large state-owned enterprises. By the end of communist rule Hungary had a declining population and decreasing life expectancy. High levels of pollution coupled with low productivity made for a poor investment climate.

After 1989, as reforms were implemented, some environmental improvement was noted, but this was due mainly to decreased economic activity. Prior to the start of the ETP project, nine regions of Hungary suffered serious air pollution. Although they made up 8 percent of the country, they were home to 40 percent of the population. Hungary had one of the highest rates of SO₂ emission in Central and Eastern Europe. Surface water pollution had lessened slightly, but groundwater contamination was a serious problem, with 75 percent of Hungarian groundwater requiring treatment before use due to contamination by agricultural and municipal runoff. Other indicators causing concern included:

- Over half (55 percent) of the soil was in danger from erosion.
- Hungary suffered from low rates of recycling and serious problems of waste management.
- Morbidity rates were growing due to respiratory diseases, cancer, and circulatory diseases in the most heavily polluted areas.
- Nearly a quarter (22 percent) of forests were damaged by acid rain.

4.2. Scope of Work (1992–98)

The goals and objectives of ETP Hungary did not differ substantially from those of the main ETP project. Likewise ETP was able to reach all indicated target audiences as described in chapter 1. USAID funding for ETP Hungary began in 1992 and ended in June 1998 with funds for years five and six coming from regional savings. The methodology remained consistent with norms described in Chapter 1.

In the first years of the program ETP conducted most of its activities in Borsod County, in the area of Miskolc. This area was selected as a training location in support of other activity in the

area and because it was an environmental "hot spot" with such serious environmental problems including:

- Air pollution created by heavy industry in deep valleys where, under unfavorable weather conditions, pollutants accumulate;
- Karst waters threatened by inadequate treatment of solid hazardous waste and sewage;
- Strip-mining including depleted and abandoned strip-mines in need of rehabilitation.

In the last two years of the project (1997-98), at participants' request, the program spread countrywide, with several workshops outside Borsod County.

4.3. Outcomes and Impacts

4.3.1. General outcomes

During its five years of operation, ETP Hungary developed and delivered 30 training courses in 46 offerings and 28 follow-up activities as well as 16 Post-Diploma Studies modules in cooperation with Miskolc University. ETP trained 1,163 participants, including 370 women; 59 participants were involved in three or more workshops, and 12 participated in more than 5 courses. A total of 35 Hungarian trainers and 58 facilitators participated in ETP training, the majority of whom are fully prepared to conduct their own training courses. In excess of \$45,000 was leveraged for ETP-related activities. Based on partial reports, graduates of ETP courses through proposals, negotiations, and loans raised over \$113,000 in investments. Three sets of ETP training materials were published as books in runs of 2,000 copies each. (See Appendix 12.2.)

In ETP courses trainees got acquainted not only with advanced management ideas and skills, and interactive training methods, but also with the ideas of environmentally sustainable management, free markets and civic society. All elements of the courses were well received. The popularity of the courses is reflected by the fact that, while ETP courses continued to attract more and more new participants, there was a growing number of returning participants who attended several ETP courses. Many of the returning participants were using ETP courses as continuing professional education.

ETP's internships provided opportunities for three Hungarian ETP participants to enrich their professional experience through two-week internships in the USA. As part of the Ph.D. fellowship program, two Hungarian fellows studied at the University of Minnesota for a full year. (See Chapter 10.) In addition there were two Hungarian PDS interns from Miskolc University hosted by the University of Minnesota to design and prepare PDS teaching materials. There were more than 600 additional requests for different ETP manuals and these manuals were used in several courses or initiated by ETP alumni, even in regular formal graduate and post-graduate education at Hungarian universities.

4.3.2. Environmental Business Management and Administration

Business training activities had an important impact on environmental business in the target areas and throughout Hungary. Of 58 Borsod County business organizations providing environmental services or producing goods for environmental purposes, 22 were represented in one or more ETP courses. In addition, small- and medium-sized environmental businesses from all over the country benefited from ETP courses.

In the first years of the program, success of the ETP business courses was hampered by the depressed economic situation in Hungary, especially in Borsod County. Though business courses resulted in a higher level of professionalism, better business plans did not automatically result in business successes. The number of successful actions was also low because high interest rates resulted in new businesses lacking sufficient capital. Many of the existing environmental businesses were operated as second jobs. After ETP training began to take effect, however, the economic development plans and the environmental impact assessments and audits resulted in a significant improvement in the health of these businesses. Thus in the last years of the program, the financing ability of environmental businesses has increased significantly. The financial proposals made by ETP participants doubled in the last two years as well as the loans approved. In 1996 the most successful financial proposal won a 30 million HUF (\$15,800) long-term loan, while the total of the reported loans in the previous two years did not exceed HUF 500,000 (\$2,650). This fact indicates, that the confidence of banks has increased toward environmental businesses getting stronger and stronger in the last few years.

Since the start of ETP, environmental businesses have increased their incomes. Although getting information on incomes and earnings is not simple, the information received enabled a comparison of earnings of 10 environmental businesses. The earnings of seven of the ten enterprises increased, two decreased, and one did not change in comparison with previous years. Between 1993 and 1995 one of the enterprises doubled its income, another tripled its earnings.

There are four environmental enterprises on which ETP had an especially significant impact. Three of these are environmental consulting companies, the fourth one is developing and manufacturing installations to burn industrial waste. ETP fostered the birth of three of these four companies. The fourth one was initiated at the same time when ETP training started. The managing directors of this company participated in several ETP workshops and used in practice what they learned in the training. The ETP Hungary Office is very proud that leaders of those four companies participated in at least four ETP workshops.

Participants from environmental businesses reported several successful financial and strategic plans as well as financial proposals prepared after finishing ETP workshops. Some of the participants prepared these strategic plans, and financial proposals for their own companies, others prepared them at the request of industrial polluters in order to prevent or to reduce pollution. The majority of the latter referred to hazardous waste or polluted land. One of the participants prepared a strategic plan for the sustainable development of the Lake Tisza eco-region (the lake is a result of a dam building on the Tisza River). The plan deals with issues regarding the environment and nature protection. Besides environmental strategic plans and

financial proposals, environmental impact assessments and audits were also prepared by participants.

Results reported by ETP participants in all sectors as of 1997 are summarized in Table 4.

Activity	Prepared	Implemented
Financial plans	78	28
Financial proposals	20	12
Environmental strategic plans	4	3
EIAs	38	—
Environmental audits	45	—
Setting up new environmental enterprises	2	—
Publications	3	—
Grant proposals	83	42
Pollution prevention and reduction plans	13	pending
Internal regulations on environ. protection	7	pending
Environmental investments	2	pending

These statistics show the growing number and success of environmental enterprises as well as the growing interest among polluters for cleaner, environmentally friendly production. Rigorous regulations, due to privatization and bankruptcy proceedings concerning EIA and environmental liability and the new environmental law (valid from the end of 1995), force polluters into cleaner production. Market research and marketing activity, which are a part of good program management (the ETP training on strategic management, environmental management, and marketing were all meant to disseminate the required knowledge) turned the attention of small- and medium-size environmental enterprises toward polluting industries. ETP training on environmental liability and auditing as well as ETP Eco-Business Club meetings on the eco-audit plan and ISO 14000 standards, helped polluters to strengthen their environmental consciousness.

The results of the PDS program in Environmental Management are even more spectacular since they include a longer and more intensive training for a cohort of environmental managers. Fifteen graduates of the first offering of the PDS program in 1996 presented valuable studies as diploma theses. Six participants reported that recommendations from the theses were implemented by their organizations. As an impact of the PDS Program, measures were taken by the participants' organizations in the areas of air protection, water protection, hazardous waste treatment, noise and vibration prevention, flora and fauna protection, and increased effectiveness of equipment.

The economic effects reported by PDS participants include:

- Cost-reduction due to more efficient technologies in six organizations;
- One company reported decreasing logistics costs;
- Regular economic inspections are expected to result in further cost-reductions;
- Quality improvement was recorded at all organizations;
- One of the companies received ISO certification.

Direct technical and environmental effects include:

- Decreasing the amount of hazardous waste in six organizations; more effective technologies were introduced at six organizations;
- The use of hazardous materials decreased at seven organizations;
- Noise emission decreased at four companies;
- The protection of living environment (flora/fauna) improved at three organizations;
- Water use for industrial purposes decreased at three companies;
- Emission of polluted water decreased at two companies;
- Energy consumption decreased at four companies.

Institutional changes emerging from the PDS program included:

- ISO certification of an electrical company (ÉMÁSZ, Miskolc);
- Formalized customer service was initiated at the same company;
- Environmental training was introduced for ÉMÁSZ employees;
- A strategic restructuring plan has been developed for the town of Kazincbarcika as a result of diploma work by one of PDS participants. Recent environmental scandals in this much polluted, former "socialist town" drew the attention of the whole country. The thesis analyzed the present environmental situation of the town, the emission factors and alternatives for eliminating these problems. Furthermore, the thesis included a plan for emission reduction in the fields of industry, transport, and communal waste.

4.3.3. Public Participation and Outreach

Participants in ETP workshops represented over 50 NGOs including the most significant and respectable Hungarian environmental organizations. Trainees reported that lessons learned in these courses were put directly into practice and contributed to strengthening these organizations in the following ways:

- NGO workshop participants reported 68 financing proposals, prepared by them and submitted to grant-making organizations. There were 35 successful proposals and several more pending;
- Extant information on proposals shows that the most successful proposals made by ETP training participants raised about HUF 21,360,000 (\$113,000).
- One of the participants of the Proposal Writing course used the knowledge gained from the training for compiling tenders/requests for proposals.
- A series of conflict resolution workshops delivered by the 3K Foundation contributed to the organizational and financial development of the Zemplen Environmental Protection Association, which coordinates international collaboration of local Slovak and Hungarian NGOs working cross-border in Sátoraljaújhely and Nové Město.
- Ten of 13 participating organizations of the Promoting Environmentally Sound Government Policies workshop applied the experience gained in the training in their campaigns. After participating in the workshop, three started new campaigns.

- NGOs participating in the NGO Outreach and Development workshops revised their internal decision-making processes, adopted participatory methods, and developed a more conscious planning process. They all introduced techniques such as small groups and brain-storming to guarantee that everyone gets a chance to speak at meetings. There is a constant need for on-site training for individual organizations.
- Follow-up meetings to NGO Outreach and Development workshops were held for individual NGOs, organizing the 1994 and 1995 national meetings of environmental NGOs, helping them to prepare the conference and work with small discussion groups during the conference. The success of the 1994 conference and the participatory methods used by the organizers, induced the NGOs organizing the 1995 meeting to request similar assistance from the Facilitators' Group.
- Participants of the NGO workshops disseminated their experience by training fellow members of their organizations as well as by publishing reports, tutorials, etc.
- The Clean Spring Nature and Environment Protection Association, which aims to develop environmental consciousness from childhood in towns and villages, came to life from the initiative and with help of ETP participants.
- ETP fostered the organization of the Facilitators' Group, set up by Joe Szakos from the Community Organizing Project, the Goncol Foundation, and the Environmental Partnership for Central and Eastern Europe. Cooperation between ETP and the Facilitators' Group continued to the end of the Program. Thus, the Facilitators' Group designed, developed and delivered six successful NGO courses for ETP. These courses helped the Group strengthen itself as an organization, and it prepared its strategic plan and began fundraising for future operations. The Facilitators' Group consists of 22 members and has delivered 26 courses since its formation. This includes the group's transboundary training activity as well. The group delivered eight activities in Romania.
- ETP workshops and the Facilitators' Group not only provided extended training opportunities, but also created a forum for networking and promoted collaboration among participating organizations.
- Besides the Facilitators' Group, ETP subgrants helped four additional Hungarian organizations develop training activities. As ETP subgrantees, these organizations benefited not only from ETP training materials and contacts with participants, guest speakers, and American and other foreign trainers but they also benefited from their own training experience. They were able to extend and adapt the original course materials to improve their training methodology and to train their own facilitators. All of them are able to develop and deliver training courses independently with no foreign involvement. They all are conducting market research and fundraising for further courses.

4.3.4. Environmental Policy and Management

ETP training for local governments provided participants with the knowledge and skills to become effective organizers and environmental leaders in their communities. Special emphasis was placed on techniques for collaborative, community-based approaches in addressing local

environmental problems, on increasing environmental awareness, and on enhancing public participation in local decision-making. The training activities for local governments fostered coordination and communication among diverse sectors within the participating communities and promoted public participation as well as regional cooperation.

Training was organized on the following topics: Municipal and Utility Financing, Developing a Community Environmental Action Plan, Public Relations, and Integrated Waste Management workshops. The results of these workshops included:

- Two participants of the Municipal and Utility Financing reported that they used knowledge gained in the workshop in the financial planning of local investments.
- Five communities/regional associations of local governments, of the six participating communities of the Developing a Community Environmental Action Plan workshop, are actively working on and have started implementing their environmental action plans.
- The Hernád River communities established and registered a regional association to coordinate developing their environmental action plans for sustainable development. They won a PHARE grant proposal to foster sustainable development in the region with special regard to eco-tourism and eco-agriculture.
- The Dorog Basin Alliance, which focused on encouraging regional cooperation of member villages and coordination of agricultural and sustainable development initiatives, received further IEC assistance and developed a river-bed cleaning plan. Local water management supplied the necessary machines and gained grant money for financing communal work. Thus in June 1996 there was a river-bed cleaning action involving eight communities.
- The Gomor Alliance developed an environmental action project for the region. They conducted a survey of 11 communities and submitted their recommendations for the environmental vision of the region to the local government.
- The location of illegal waste sites is in progress in Kalocsa. ETP graduates involved students of the town, who and became enthusiastic and helpful activists for the program.
- In Sajószentpéter developing the environmental consciousness of the population was a priority issue. The participants of the training established an association, conducted a survey and organized forums for citizens. On Earth Day they organized a municipal exhibition as well as a drawing competition for children with the theme: How Can We Protect the Environment of our Town?
- Two mayors, participants in the Public Relations (PR) training, reported that public hearings, organized after the training were very successful. Citizens in the community noticed the difference between public hearings organized before and after the workshop.
- Another mayor who participated in PR training reported that he shared the information and the training materials with his colleagues from the municipality, which proved useful in everyday work as well as in preparing a proposal for developing a village tourism portfolio in the region of Bakony in association with several neighboring villages.

- A young woman participant in PR training attributes improved relations with her superior to ETP training. She also organized a conference dealing with role of local government in child and youth education.
- A young NGO representative and member of the Junior Chamber of Commerce of Vác began studying PR at university. She also organized a successful press conference in Budapest. The conference was held to announce that György Biro, the Head of Environmental Department of the City Hall of Vác, was awarded the world champion prize in the category of environmental protection in the International Youth Chamber's Ten Outstanding Youth program.
- As a result of the Integrated Waste Management (IWM) training one of the participants reported making use of the knowledge acquired during training to create a regional development plan for waste collection and transportation for 12 communities in Szabolcs-Szatmár-Bereg County.
- The environmental expert of the Szentendre local government prepared a waste management plan for the city that has been accepted by the general assembly of the city council.
- One participant, the organizer of solid waste and sewage transportation in the village Pomaz, developed advantageous business relations at the IWM training and these relations have helped him in his business.
- A participant engaged in a selective waste collection project that organized 64 selective waste collection stations in three years benefited from new business contacts she made at the workshop.
- The environmental expert of Heves County government shared IWM training information with the team that developed a waste management program for the county. She also initiated a second IWM training for Heves County government officials and businesses.
- A representative of the Hajdú-Bihar County government presented the IWM concepts at one of the meetings of Area Regional Environmental Committee, where each community of the county is represented by an environmental expert.
- In previous years, ETP courses often played a catalytic role in the creation of the environmental expert's position in the State Property Agency (SPA). In Year 3, the environmental expert of SPA had several presentations on different ETP courses (auditing and environmental liability).

4.3.5. University Strengthening

ETP programs to assist universities in establishing environmental economics and management courses also achieved notable success. ETP offered the first curricula workshop on Environmental Economics and Policy in Hungary. As a result of this workshop, academic participants agreed to initiate an information exchange, publish a newsletter, undertake joint research, and standardize terminology, course titles, and transfers between universities. Participants in this workshop included representatives and officials of Department of Research and Education in the Ministry of

Environment and Regional Policy and the Parliamentary State Secretary, all of whom recommended further such training.

Miskolc University launched its PDS program in September 1995. This created the most significant outcomes and impacts in the academic sector. In years four and five, 27 participants enrolled in 16 PDS modules. Following the end of USAID funding, PDS continues to be offered by the university. Perhaps the most important result of these courses has been an increased desire for further environmental courses and research among academics and the interested public. The impact of this program can be seen in several ways:

- Three young assistant lecturers from the Department of Management and Organization of Miskolc University participated in the first PDS offering. After this, they became co-trainers for other PDS courses. One of them is especially interested in environmental issues because environmental management is the topic of his Ph.D. dissertation. The department plans to prepare some new teaching textbooks using recent ETP manuals. A series of publications are expected to result from the program as well.
- Two PDS theses, “The Role of Environmental Protection in Manufacturing Companies” and “Analysis of the Environmental Protection Situation in Small- and Medium-Sized Engineering Firms in Hajdú-Bihar County” will be developed into teaching manuals.
- As a result of the curriculum development at Miskolc University, seven sets of American teaching materials have been translated into Magyar on the following topics:
 - Environmental Management in the International Business;
 - Pollution Prevention, the development of a first-class pollution prevention program with pollution prevention case studies;
 - Environmental Management and Strategic Management;
 - The Mutual Relations of Marketing, Logistics, Production, and Information Systems;
 - Regional Economics and Industrial Restructuring.
- Also five sets of instructional materials were prepared by Hungarian authors:
 - Environmental Auditing;
 - Theoretical-methodological Summary of Environmental Management;
 - Total Quality Environmental Management, Environmental Protection and its Position at MGM Rt. (case study);
 - Analysis of the situation in environmental protection at the small and medium size engineering firms of Hajdú-Bihar County (case study).

Additional effects of the PDS program at Miskolc University include:

- Dissemination of new teaching methods through the work of PDS professors and teachers.
- Dissemination of PDS knowledge at the university as well as among the organizations and businesses whence the participants came. Students shared their knowledge with colleagues and co-workers, which contributed to the visibility of PDS and the desire for more environmental education and research.

Further discussion of the impact of PDS courses can be found in Chapter 9.

4.3.6 Intersectoral and International Cooperation

The collaborative efforts of the four audiences participating in ETP training opened many doors for participants to meet and initiate cooperation in the form of business relations or joint projects. ETP training courses served as opportunities to improve communication among environmental NGOs as well as in other organizations. Several trainees and their organizations (mostly NGOs but some businesses as well) joined the Green Spider, the Hungarian environmental computer network that contributes to better networking among organizations.

- In the business sector, participants made business deals in ETP courses and continued to cooperate as partners (subcontractors, experts, suppliers, etc.)
- Within NGOs, the Facilitators' Group operates as an inter-NGO body. Two NGOs, represented in the Proposal Writing course (January 1994), made joint proposals one of which has already been funded.
- ETP participants from businesses, NGO, and government, raised funds and organized conferences and training courses for students, teachers, local government experts, etc., based on ETP curricula, and worked as trainers in these courses.

In the realm of international contacts there was a joint conflict resolution workshop with Slovak and Hungarian participants from two neighboring cities Sátoraljaújhely and Slovenske Nové Město at the common border. This was especially significant given the history of tensions between the two countries over this border. Participants discussed issues of shared interest, e.g., communication, transport, cultural, and environmental issues. They drafted a statement on their demands which was sent to the ministries of foreign affairs and parliaments. As a result, a new border station was opened between the two cities, which makes border crossing easier for inhabitants. Another outcome of the program is the development of international collaboration of local Slovak and Hungarian NGOs, which organize regular meetings discussing local environmental issues. Other results of international cooperation include:

- Hungarian facilitators were trained in Slovak and Polish courses;
- Several Hungarian participants participated in Slovak courses;
- Cooperation between Miskolc University and Technical University of Košice has been intensified as a result of the PDS program.

In its five years of activity in Hungary ETP forged partnerships with local organizations involving 15 Hungarian institutions as subgrantees in the training program. These organizations are as follows:

- 3K Foundation (Budapest)
- Ecological Center (Miskolc)
- Environmental Management Law Association (Budapest)
- Environmental Partnership Foundation (Budapest)
- Goncol Foundation (Budapest)
- Hungarokorr (Budapest)
- Independent Ecological Center (Budapest)
- International Management Center (Budapest)

- J. Englemann and Associates (USA)
- Miskolc University
- Oko Inc. (Budapest)
- Okotars Foundation (Budapest)
- Okotechnika (Miskolc)
- Partners for Democratic Change (USA)
- Regional Environmental Center (Budapest)

The participation in ETP training provided these organizations with the spirit of the program as well as with concrete knowledge, from which they could benefit in their own training activities.

4.5. External Evaluation

4.5.1. Aim of the survey

The aim of the external evaluation survey was to analyze the influence of ETP training courses held in Hungary between 1992 and 1996. (The survey does not cover the fifth year of activity, as this was added subsequently.) The survey focused on what ETP training participants think of the courses—their organization, thematic choice, the syllabus, and the applied methods. The authors also investigated what sort of results the courses had and whether they brought about any changes for participants. An additional aim was to find out the adaptability of the training material and how efficiently respondents can make use of the newly acquired knowledge.

4.5.2 Method of the survey

Forty persons were selected from former ETP participants, and interviews were conducted with them based on the above mentioned objectives. The sample of participants was divided into the following five groups, according to their fields of activity:

- Companies engaged in production (polluters);
- Enterprises engaged in environmental protection;
- Municipalities;
- Non-governmental organizations (NGOs);
- Academe.

Within each sector, the answers of eight respondents were analyzed. Because the program focused mostly on Borsod County and due to the availability of the respondents, interviews were conducted mainly with people living in the town of Miskolc and its surrounding area.

The evaluation was prepared by two sociologists: Erika Juhasz, with doctorate in political sciences, a senior researcher of the Institute of Political Sciences of the Hungarian Academy of Sciences, and György Gyukics, assistant professor at the Department of Sociology, University of Miskolc as well as a group of students of the Department of Sociology, University of Miskolc.

4.5.3 Summary of the External Evaluation

To give the reader an inside view of the evaluation, which can not be included to this report for its length, we summarized the evaluations of the five sectors and mentioned separately only those aspects which were apart from the general results. The structure of the summary follows the original structure with the following subtitles:

- Motives and Expectations;
- Evaluation of the Training Courses;
- Impact and Achievements;
- Making Use of the New Skills—Adaptability;
- Comments, Suggestions Concerning the Future.

4.5.4. Motives and Expectations

The new environmental regulations and requirements of the 1990s urged all those who work with or are interested in environmental protection to improve their knowledge, become acquainted with foreign experience, and enhance their skills.

Respondents of the polluters sector attended three or more ETP workshops. This sector favored most the workshops dealing with environmental auditing, strategic planning, environmental impact assessment, and proposal writing. The environmental business sector preferred training in management and economics, since this sector is relatively new in Hungary and lacks experience in organizing and managing an undertaking. Strategic planning, proposal writing, and environmental liability were the most popular topics of the ETP workshops among the respondents of the local governments, the work of which was greatly effected by the new environmental regulations.

The NGO sector was interested in strategic planning, financing, conflict resolution, and NGO outreach and development. Respondents from this sector were also keen to establish new relations with the business and government spheres. ETP training topics preferred by academics were the same as those of the polluters sector: environmental auditing, strategic planning, environmental impact assessment and proposal writing.

4.5.5. Evaluation of the Training Courses

All 40 respondents agreed about the high quality of the ETP training activities, the organization of the training, and the thorough coverage of the workshops, providing a complex, global view of environmental protection. "It was a professional course, effective, and memorable"—said an NGO representative, participant of the municipal and utility financing training.

The syllabus of the ETP workshops was highly appreciated. As one of the respondents said: "As compared to courses attended previously, I have gained much more in ETP training than I had expected." Respondents were very pleased by the fact that topics were not concentrated on a

single theme only, but they were discussed in a wider range of connections, and the syllabus had also been supplemented by timely information.

Three respondents from the polluters sector and two from the local government sector mentioned that the workshops attended by them required previous training and knowledge that they lacked, so they had some difficulties in learning the new concepts and supplementary information was needed. Five respondents of the local government sector, having technical degrees, were somewhat surprised that the workshop they attended did not focus on technical solutions: they had expected much more practical technical information. In contrast to this, respondents participating in the environmental impact assessment training emphasized that "ETP training did not merely give theoretical information but practical information as well: how to conduct an environmental impact analysis or its supervision. It stimulated intensive participation and even forced us to do so. Also, the style of the lectures did not remind me of the usual methods: they were informal, addressing us as partners in the given area."

Although the training required intensive work with a lot of information to be learned, the teaching methods used provided an easy-to-understanding format and the participants highly appreciated the novelty of the methods. The informality and the feedback techniques impressed participants very much. As one of them said: "There was not much chance to stay out, to remain an outsider. Instead by doing everything together, we could practice the newly learned skills so we have been able to learn much more than by listening simply to lectures." Or: "The trainers did not merely speak about the different issues, but also made us practice, so we learned how to make use of the skills. We could learn not only from the lecturers, but also from one another. The mentality of the lecturers, their eagerness and energy, the role-plays and case studies all had great impact on us."

The positive attitude of the lecturers reflected by their behavior, the dynamic style and manner of lecturing transmitted the certainty that problems can be solved and difficulties are surmountable thus giving great impetus to the work of the participants.

In commenting about the lecturers, 60 percent of the respondents, mostly those who did not speak English, remarked, that when the lectures were held in English, it was sometimes difficult to find the correct Hungarian equivalent of some technical terms used in the USA—and the interpretation slowed down the dynamics of the lectures. Forty percent stressed that by listening to the American lecturers, they had a good opportunity to improve their English.

More than half of the respondents mentioned the facilitators, who—as they said—gave significant assistance in solving problems and establishing and maintaining good relations between participants and lecturers.

The textbooks and auxiliary materials received during the trainings are still useful aids for most of the respondents. They helped both during the training and afterwards as a means of preserving in a readily accessible form the acquired knowledge, so they are still regularly used. As was said by one of the respondents, the textbooks are like "crutches one can rely on in case of need."

Whether the training materials can be used independently or not, was a contradictory issue since while some said that training materials can stand for their own and one can use them without participating in the training (e.g., faculty members of Miskolc University) others remarked that, in their opinion, the textbooks can only be used if one attends the related training, and they would appreciate the publication of workbooks giving information and assistance for them without attending a course (e.g., local government officials). Half of the respondents also participated in the follow-up activities organized by ETP. As they said, the follow-up was significant for them partly because of the topics dealt with and the possibility of exchanging information and partly because it offered an opportunity for nurturing relations and meeting colleagues engaged in environmental protection.

4.5.6. Impact and Achievements

Each of the respondents stated that the most important impact of the ETP training was the change of attitude they went through. Respondents of the polluter sector said that before ETP training they considered their work and tasks related to environmental protection an obligation they have been charged with, and they concentrated basically on avoiding paying fines. After the training, they approach environmental issues from a fundamentally different angle.

Respondents from environmental businesses were assured that through their business activities they can contribute to environmental protection and it is worth doing so: "The course convinced me that environmental protection is also a business, a good business." Moreover: "I have a much more complex view of the environment and my surroundings. The information received in the training convinced me that precaution and prevention are extremely important in contrast with falling behind." A project development engineer said that the course convinced him to consider the environmental aspects as well as the technical ones when solving a technological problem. "Today a development project starts with environmental protection—this is a requirement, a challenge that one must face," he said.

A local government representative remarked that as a result of applying what he learned at the workshop and by analyzing waste management costs, he is looking to prevent and decrease the amount of waste, rather than having to destroy it. About two-thirds of the representatives of this sector said that a significant change of attitude was brought about by getting acquainted with the viewpoints of companies engaged in production by getting an idea of the "other party's view" of environmental problems.

NGO representatives highlighted their new conflict resolution skills provided by ETP training. As one of them said: "It made me realize that problems can be solved not only from the position of strength. It taught me to exercise self-control and to pay attention to the other party without trying to force my own agenda only." Another participant said: "In the workshops I learned how to comprehend more complicated cases, to define my own position of negotiation and to approach the problems."

NGO respondents remarked that ETP workshops improved their communication abilities and negotiation techniques. Sixty-five percent of academic respondents stated that ETP training methods and style had considerably affected their own teaching practice and style. "My lectures are different now, and I am more keen on cooperating with the students. I use a more loose lecturing style, one that does not make students tired but stimulates them to be more energetic," said one of the lecturers.

Almost all respondents emphasized that ETP activities fostered the development of new relations both inside and outside their own sector. Participants regularly rely on these new contacts even though some respondents said that they had realized its importance of networking too late and now regret their missed opportunities. The most intensive relations have been formed within the business sector where participants were open to establish new business relations and get acquainted with possible customers or partners during the training. As respondents noted they trust environmental businesses more when they know their representatives personally because "there are too many frauds with questionable services in this area, therefore, reliable relations are especially valuable." As a consequence several business transactions and regular exchanges of information among participants have routinely occurred. Local government representatives confirmed the importance of the participants' list received at the end of each workshop. It is of great assistance as they often enter into contact with one another on the base of the lists.

Local government representatives confirmed the importance of the participants' list received at the end of each workshop. It is of great assistance as they often enter into contact with one another on the base of the lists.

All respondents except the NGO sector attributed special importance to intersectoral relations. NGO respondents stated that cooperation between the NGOs and academia was good, but relations with governments and particularly with the business sector were considered "rather problematic." Although the courses offered the opportunity to talk and get acquainted with one another, owing to different points of view, these relationships did not develop. "The state administration and the authorities place the acts of law too much in the center, whereas the business sphere does the same with technology. Our standpoint is either not taken seriously, or it is considered fussing, sheer opposition," summed up one of the respondents.

4.5.7. Making Use of New Skills and Adaptability

The practice of applying new skills differs from sector to sector. Nevertheless, they all agreed that these skills have been built into their activities. Respondents from the polluters sector state that they are more at ease when evaluating the quality of environmental services and making decisions on who will receive commissions for these services, although they regard the possibilities for direct application of the newly developed skills to be small and fall short of their pre-training expectations. This can be explained by the limited activities, investment, and development of the companies for which they work.

Respondents in the environmental businesses sector felt that using the knowledge acquired in ETP training confirmed their pre-training expectations. Thus since completing the workshops they confirmed that their everyday, regular activities include strategic planning, financing, business plan preparation, market surveys, environmental impact assessments, and proposal writing.

Local government respondents pointed out that they make most frequent use of their knowledge in environmental planning and conflict resolution, and that they feel more competent than before when adjudicating applications or writing proposals.

NGO sector representatives received great impetus in their work from ETP training. They make direct use of what they learned in proposal writing and preparing business plans as well as in conflict resolution and also indirectly as one of the respondents said: "in my attitude and negotiation techniques, these skills suddenly come to the surface."

The opinion of academics can be summed up by quoting one of the respondents: "Everything can be utilized—often even unconsciously, the skills learned in ETP training act unnoticed." Most of the lecturers confirmed that they applied ETP teaching methods to their own teaching, consult the training syllabus when preparing their own courses and are very satisfied with their newly acquired proposal writing skills.

4.5.8. Comments and Suggestions Concerning the Future

Each respondent emphasized the role and importance of ETP training. They considered it extremely important to continue organizing this type of environmental training for larger audiences in the future in order to develop an environmentally conscious attitude in Hungary. Respondents suggested organizing ETP workshops on a continuous basis because laws and technical requirements change so rapidly that it is indispensable to keep pace with them.

Respondents of the polluters suggested that practical, technical solutions should be treated and demonstrated within the framework of the workshops in the form of model solutions to practical problems related to investments. Another training topic proposed by representatives of this sector was EU patents related to environmental protection. Representatives of the environmental businesses sector would prefer training in environmental auditing offering certificates.

Among the list of proposed future themes all sectors requested a thorough analysis and interpretation of recent Hungarian environmental law. Local government officials with technical degrees would prefer workshops or follow-up offerings concentrating on more technical knowledge and information about the latest technologies, methods, and solutions.

NGO respondents suggested organizing more training on communication skills. Academic respondents proposed meetings to exchange experience among foreign and Hungarian faculty members on curricula and the methods and efficiency of environmental teaching.

Respondents sometimes felt that the foreign lecturers were not completely familiar with the actual state of affairs in Hungary, and suggested a more careful adaptation of the syllabus to Hungarian circumstances as well as involving more Hungarian experts in ETP training. (The ETP Office accepted this suggestion in the following period and organized training activities with more Hungarian case-studies and Hungarian experts. Lecturers and facilitators adjusted the foreign training material as much as possible to local conditions.)

4.6. Post-USAID Sustainability

4.6.1. Institutionalizing and Building Sustainability

In Hungary, the ETP mission has been assumed by the Center for Environmental Studies (CES), in Budapest. The center was registered in November 1993 and is directed by the former ETP in-country coordinators. The CES is an independent non-profit organization dealing with a broad array of significant environmental policy issues including the environmental impact of EU integration, the environmental effect of privatization, sustainable development in local communities, and the contribution of business to sustainable development.

The mission of CES is to serve as a catalytic institution for environmentally sustainable restructuring in Hungary. The staff consists of ten people with educational backgrounds in economics, law, environmental engineering, and political science, and professional experience in research, project management, government administration, and journalism.

A sizeable team of collaborating institutions and individuals has evolved around the Center. For example, professional contacts include researchers of the Budapest University of Economic Sciences, the Institutes of Economics and Political Science of the Hungarian Academy of Sciences, the Research Institute of Business Cycles, Economic Research Institute, and Miskolc University. These experts are from various professional backgrounds and increase the Center's potential significantly. Thanks to its advisory board of NGO leaders as well as board members with strong NGO backgrounds, the Center's collaboration with other environmental NGOs is quickly expanding.

CES continued to coordinate ETP activities under a subcontract, established during 1995, including follow-up activities, tracking program effects, producing publications, and facilitating training activities. The Center also delivered training courses for local governments, and has worked on raising funds for further training programs.

Besides its contracts with ETP, CES is funded by the Rockefeller Brothers Fund, the German Marshall Fund of the United States, the Charles Stewart Mott Foundation, and PHARE, as well as contracts with different agencies of the Hungarian government.

ETP participants initiated the incorporation of training courses based on ETP models into the curricula of several educational institutions:

- Based on the curriculum development workshop and several other ETP courses, the Economic Faculty of Miskolc University started an environmental management course for graduate students. The course material incorporates training materials of the Strategic Planning, Financial Management for Environmental Businesses, auditing, and other ETP courses.
- The Business School of the Miskolc Society of Humanities (a private university) has been teaching a two-semester course in Environmental Management as a Business for second- and third-year students for two years. Curriculum is based on ETP environmental business courses. Most of the guest speakers have been recruited from ETP alumni. All course expenses are covered by the Miskolc organization and the participants.
- ETP alumni regularly organize and deliver environmental management courses and workshops based on the knowledge and experience gained in our courses. Funds for these workshops were raised by the organizers from different sources. The workshops include environmental management courses for engineers, local governments, starting businesspeople, and high school students, as well as several regional seminars and a national workshop for ecology teachers. Alumni have also delivered a regular post-graduate training organized by the Borsod County Educational Methodology Center and the Eger College of Teachers.

Institutionalization of the ETP Eco-Business Club is also an indicator of the program's sustainability. The club, supported by Ildiko Gyarfas, member of the Hungarian Parliament and President of Borsod County Regional Assembly and Anna Szekely, general secretary of Hungarian Association of Environmental Service Companies, a member organization of Hungarian Chamber of Commerce, was launched in November 1994 in response to a request and suggestion of participants of several ETP courses. The club is a forum for discussing environmental legislation and regulation, networking of environmental businessmen with environmental experts of industrial plants, local and regional governments, environmental inspectorates, and university faculty members and NGOs. The programs and meetings were organized by an environmental consulting company in Miskolc, Oko Technika Co., a previous ETP subgrantee. The meetings were held in Malyi, a frequent site of ETP training, with the exception of the inaugural meeting, held in Budapest.

The Eco-Business Club program has gained financial independence and no ETP funding occurred after June 1996. Since then more meetings have been organized without ETP support. The ETP Eco-Business Club is a very positive impact of ETP training in Hungary.

The ETP Hungary Office created a grant application competition for ETP Eco-Business Club members for providing feedback on ETP training impacts. The success story applications received was very impressive. Its excellent work illustrated the impact and viability of the ETP program.

5. Poland

5.1. Background

At the end of communist rule in the 1980s, Poland faced significant environmental challenges due to years of mismanagement, central planning, overemphasis on outdated heavy industry, and damaged civic culture. Regions such as Silesia faced catastrophic environmental problems. In addition to severe environmental problems, Poland inherited the largest foreign debt of all the Central and Eastern European countries, over \$40 billion. Although Poland was able to reduce half of that debt with creditors and swap some of it for an environmental fund at the beginning of the 1990s, major difficulties remained given the poor state of the economy in 1989.

Although some environmentally oriented groups had emerged during the anti-regime protests of the 1980s, material conditions—financing sources and infrastructure—for environmental NGOs at the beginning of the 1990s were very difficult. This was offset to some extent by the enthusiastic attitude of environmental leaders. The leadership, however, were not supported by sufficient, trained personnel. Environmental NGOs also lacked the skills to interact with local government and business and had few funding sources. Finally, the laws regarding NGOs needed reform.

Businesses, too, faced serious challenges in the environmental field because many managers were not aware of the possibility of improving environmental performance along with profitability. Opportunities for ecologically oriented and ecologically friendly business were often overlooked. There was little knowledge of how to interact properly with NGOs and government in a new democratic environment. In addition, basic management skills needed for the market economy were in short supply among managers, especially those from the small- and medium-sized enterprises (SMEs) established at the start of the transition.

Local government also faced major hurdles. Conclusions from the ETP needs assessment indicated that gminas (basic, local municipalities) had to improve their own structures and strengthen democratic methods. There was an urgent need for training to transfer managerial knowledge to gmina policymakers. In particular:

- There was a lack of well educated civil service.
- None of the universities in the region offered a modern program of studies for gmina staff.
- More than 80 percent of gminas did not have realistic, professionally prepared strategic plans for sustainable development.
- Gminas budgets were frequently unrealistic and not professionally prepared; budget shortfalls were common.
- Gminas with an advantageous business climate could not attract outside investors.
- Although some gminas invested considerable resources in business development or more employment, the way the resources were used was inefficient and did not contribute significantly to the goals of the investment.
- There was misperception of public-private partnerships that could benefit both parties.

- There was a lack of effective communication between local authorities and the society, causing frequent conflicts.
- There was an inadequate understanding of principles, advantages, and conditions of sustainable development.

5.2. Scope of Work (1992–2000)

ETP was established in Poland in 1992 and was the Polish part of ETP was the largest and most extensive of all the six ETPs. Along with Slovakia, ETP Poland received additional funds for Year 6 and further extensions until June 2000. Its goals, objectives, and target audiences were the same as for the overall ETP project (noted above in Chapter 1).

5.2.3. Target Region

As a result of a prior needs assessment requested by USAID, Upper Silesia was chosen as the target region for training activities. The region was an environmental disaster area. For that reason ETP was a response to environmental and economic needs. By 1992 the country had entered a free-market economy in difficult circumstances caused by economic crisis and rapid inflation. The process of transition of a post-communist country to a new democracy and a new economic system demanded a special approach for ETP. Project management had to be innovative and flexible in developing the project.

5.2.4. Training Methodology

ETP experiences prove that the most effective form of training is interactive workshops enriched by case studies. ETP designed its own method based on close cooperation of both American and Polish instructors. Mixed teams of instructors (one American instructor and one to two Polish instructors) always have obtained the best results. Sometimes additional guest-speakers were invited. Usually these speakers represented local, regional, and national governments (including Minister of Environmental Protection), banks, or representatives of the environmental funds. Using these methods it was possible to present American experiences and approaches to the problems faced by Poland as “one way” of solving the problem, which engendered discussion of what could be learned and adapted to Polish conditions. In this way, new ideas were intermixed with Polish reality and regulations, helping the Polish participants envision new ways of exploring the problems and new solution spaces in which to be searching for answers.

5.3. Impacts and Outcomes

5.3.1. General Outcomes

ETP Poland trained over 4,000 participants between 1992 and 2000. It offered about 100 different training courses, often in multiple offerings. In addition, it developed two PDS programs at two different universities. The impact of ETP is best expressed in the changed attitudes and approaches to problem-solving by participants. Environmental businesses are more successful thanks to enhanced skills developed in ETP training, while many formerly high-polluting heavy industries have been restructured on a more environmentally friendly basis. Local government employees now have a better understanding of their role in protecting the environment in a democratic, market-oriented society. Leaders of NGOs are more effective in fundraising and managing projects, and universities have developed and strengthened curricula in areas such as natural resource management and environmental economics. These changed approaches manifest themselves in the significant investments made in ecologically friendly technologies and investments (outlined below and in Chapter 9 and Appendix 12.4).

5.3.2. Environment Business Management and Administration

In just the first six years, ETP Poland delivered 29 regular training courses for 1,188 businesspeople in 56 offerings. In addition there were 12 PDS courses in 72 offerings for 156 business participants. There were 12 follow-up trainings and other meetings. Moreover many representatives of business took part in training offered to mixed audiences including local government representatives. The participants represented 218 firms. Of this total, small businesses represented 18 percent, medium-size firms 56 percent, and large firms 26 percent.

During first three years of ETP Poland, the business sector was the main focus of training activities. Training was designed to build the environmental skills of business and industry participants and also the management skills of environmental specialists. This training embodied three principles:

1. Managers of existing enterprises needed better training in environmental management—how to evaluate environmental problems of their facilities and how to evaluate economic impacts and relative cost effectiveness of alternative pollution control investments. Such training was based on the concepts of pollution prevention, efficient use of energy and other inputs, environmental audits, and other methods of analysis and accountability.
2. Financial, marketing, and other management training was conducted so the existing pool of well-educated and technically knowledgeable individuals in Poland might better market its skills as home-grown environmental service businesses. The long-term objective was to supplant regional reliance on expensive, locally inexperienced foreign consultants with greater reliance of local talent. This principle has been accomplished. Now there are well known Polish consulting firms like Citec, Procon, Interdont, Consensus, and Ekoterm (established by ETP trainers) in Silesia, which provide professional consulting services for

industry and local government. The substantive progression of training courses included using material of greater complexity, including country-specific material, and expanding the share of program development and delivery for which local trainers were responsible.

3. Industry, as well as government had to learn about conducting environmental impact assessments for the analysis of prospective new activities. They also needed to learn how to cooperate. Throughout the training, ETP fostered active learning via site-specific case studies prepared by local experts and interdisciplinary approaches to the material. In the training, ETP modeled the kinds of attitudes and behaviors that fostered initiative, collaboration, healthy competition, problem-solving, and informed debate. It also incorporated the use of simultaneous and collaborative team work on case studies in interactive learning environments. This approach worked very well and was very positively evaluated by participants from business and public sectors.

Participants in all training activities consistently commented that they learned a "new way of thinking" that helped empower them and built their confidence. Moreover this new way of thinking gave them a better understanding of problem-solving methods, systematic approaches for communicating about problems and opportunities for requesting funding to solve those problems. Strategic planning, financial decision-making, cost-benefit analysis, market analysis, and other process skills related to economic restructuring all contributed to the skill base that grew out of this "new way of thinking." Step by step, participants went beyond "thinking" to "doing."

Training during two first years focused mainly on newly established private environmental business and NGOs. The most important training courses for business were Financial Management, the Business Plan, Marketing, and Management of Environmental Business. The demand for these courses was huge and we had to offer them repeatedly. For example, some months after the Business Plan course, one of the most active ETP alumni, Anna Buchta, the owner of a private firm, Ekoterm, successfully replicated the same training three times in Bielsko-Biala. In another example in Upper Silesia, more technical environmental assistance was necessary so ETP delivered four iterations of courses on Environmental Auditing. This training, based on the American concept of pollution prevention and effective use of energy and natural resources, was highly evaluated by participants. The training, delivered by a mixed team of American and Polish experts, was important for industry and local governments and formed the basis for many similar courses organized later by Polish trainers from the firm Procon.

In Year 2 ETP organized a very successful Conflict Management course. The training was designed by WWF and a group of four young Poles from the University of Warsaw. After completion of this course, Polish trainers established a new private firm, Consensus, which provided Conflict Management courses as an ETP subgrantee. Beyond ETP, Consensus prepared new advanced courses that were offered many times in different parts of Poland. The private firm Interdont provided many high quality courses on the Polish environmental legal system and validation of environmental damages focused on the needs of local governments. This course was highly evaluated by municipalities and businesses and was designed and developed in close cooperation with ETP as a response to growing demands.

In succeeding years ETP offered more and more advanced courses in accord with the growing strength of firms and the developing skills of their managers. The project provided advanced courses in Strategic Planning, Public Relations, Survival Strategies, Advanced Marketing, Business Logistics, Bidding Procedures, Pollution Prevention Strategies, Energy Efficiency, and others. Some of these courses were delivered for the first time in southern Poland. All the ETP courses were evaluated by participants as very practical and useful.

During first three years ETP observed many positive effects of its courses for new environmental businesses. In 1992 and 1993 when the first courses on business plans and marketing were delivered the knowledge was very limited and new. Generally managerial knowledge of people involved in emerging business was poor this time. Later ETP trainers were happy to notice 55 successful business plans and 20 marketing plans generated by participants. At one follow-up session after the first Business Plan offering, a participant told the instructor that he had successfully submitted and received two business loans and expanded his workforce from ten to 100 people. Participants typically reported a growth of their firms and development of their managerial skills. Today, after eight years of transition such statistics are nothing special for businesspeople. Business and marketing plans and other managerial tools are fundamental and normal among Polish business. ETP is proud to have contributed to this success reported growth in their firms and development of their managerial skills. After eight years of transition such statistics are nothing special for businesspeople. Business or marketing plans and other managerial tools are fundamental and normal among Polish business. ETP is proud to have contributed to this success.

After 1995 ETP Poland changed focus from business to local governments, but did not stop all work for the business sector, because apart from courses offered exclusively for local governments (gminas), the project also provided more advanced technical courses focused on mixed audiences: private business, industry, and local governments. Such courses were designed for local governments and bigger companies. As a rule, these courses were ETP responses to the emerging needs of the Polish economy. Many of these courses were offered for the first time in Poland. For that reason, many businesspeople participated in them together with representatives of local governments and academia.

The impact of ETP training on small- and medium-sized businesses listed below deals with the period 1992–95 when these businesses were a priority of USAID's activity in Poland. During that time ETP kept contacts with graduates, organized follow-up activities, and collected observations. In 1996 because of a shift in USAID's priorities from small- and medium-size business to local governments, ETP also changed its area of focus.

By the end of 1995 ETP observed many positive effects in small- and medium-sized enterprises (SMEs) as a result of its training courses:

- Number of courses focused on business by the end of 1995: 16 in 36 offerings;
- Number of people who took part in business training by the end of 1995: 535;
- Number of firms represented on training: 122;
- Number of private businesses represented in ETP training courses: 68;

- Businesses reported growing incomes: 72 percent;
- Businesses reporting growing employment: 54 percent;
- Businesses working in new areas of activity: 42 percent;
- Number of successful business plans: 55 in 1994, 76 in 1995;
- Number of successfully implemented marketing plans: 20 in 1994 and 25 in 1995.

The most significant outcomes in SMEs were:

- Environmental audits in industry: 29;
- ISO 9001 certificates: 18;
- ISO 14000 certificates: 5;
- Restructured or privatized firms: 28;
- New technology implemented: 15;
- New environmental investments: 32 water treatment plants, 18 air protection installations;
- Use of environmentally harmful technologies ended: 32;
- Closing down environmentally harmful installations: 18.

The approximate level of investments obtained by ETP graduates in the SME sector was over \$200 million.

In addition to these outcomes, PDS participants in Environmentally Friendly Restructuring for Heavy Industry at Silesian Technical University were also instrumental in creating positive outcomes in the business sector. PDS participants had an opportunity to solve current problems and create business plans at their plants using the advice, comments, and opinions of their professors. In cooperation with PDS professors, participants prepared a number of plans and analyses of different enterprises needed for their companies. (For more on PDS, see Chapter 9.)

The vast majority of these plans were implemented or are being implemented in industry. Many of these industrial firms invested successfully in environmentally friendly technology. For example, at just two power plants where employees participated in ETP courses, the total of environmentally friendly investment topped \$140 million: Jaworzno III (\$80 million) and Łagisza (\$60 million).

Other important outcomes of PDS for business include:

- Establishing a southern power consortium (by 7 power plants, 34 PDS participants involved);
- Number of restructured and privatized companies: 28;
- Harmful installations closed down: 28;
- Many plants were removed from the black list of 80 the biggest pollution emitters;
- Certificates received: ISO 14000: 7, ISO 9001: 38.

5.3.3. Public Participation and Outreach

Public participation in environmental activities is a very important element in the regulation of all parts of process of environmental protection and sustainable development, from the stage of needs identification to the final evaluation of environmental and cost effectiveness. There was a real need to strengthen NGOs in Poland and as a result NGOs were an important sector for ETP training in Poland. To respond to this need, ETP developed thirteen different courses for NGOs, ranging from Strategic Planning and Financial Resource Development For NGOs to Training Trainers to Complement NGO Strengthening to the Use of Internet for Exchange of Environmental Information. Many NGO participants attended cross-sectoral training as well with participants from other sectors. At least 1,250 people attended ETP training activities for NGOs.

To illustrate the impact of ETP on NGOs this report focused on three examples.

Tested Food for Upper Silesia

The Polish Ecological Club (PKE), Gliwice Branch, in cooperation with ETP initiated an expanded regional system for testing agricultural produce in the environmentally degraded region of Upper Silesia. The system covered five cities, which demonstrated the most enthusiastic approach to the idea. PEC in cooperation with ETP organized successful campaigns and training focused on wholesalers, retailers, consumers, NGOs, schools, and individual householders. Due to the engagement of all stakeholders and financial support provided by five cities the network continues to function. Successful matching funds allow the organization to receive about \$80,000 per year for the Tested Food, Promotion of Sustainable Agriculture, and other similar projects and campaigns. Now apart from Silesian cities some other Polish institutions including the Ministry of Agriculture are involved in the project. The idea of tested agricultural products became more and more popular in Poland. In May 26, 1999 PKE Gliwice together with 12 other organizations and institutions established the Polish Coalition for Sustainable Agriculture. The project is still going due to successful fundraising and well-organized public relations.

Environmental Bulletin edited by Information Center for Air Protection

In 1997 ETP provided a small subgrant to the Information Center for Air Protection (ICAP) of the Polish Ecological Club. The goal was to put on three workshops for NGOs. Due to the success of the workshops ICAP was able to do very effective fundraising. Additional money let them start monthly editions of the *Environmental Bulletin*. To date they have issued over 60 editions (1,000 copies each). The bulletin is distributed to all environmental NGOs, 65 schools, 100 gminas, and the regional and national parliaments. The center publishes articles written by independent experts, evaluate the effectiveness of environmental investments, report results of investigations, and features opinion pieces. The bulletin is well known and established in the region. The professional level of the magazine is well regarded by NGOs and environmental professionals. This project is sustainable due to donations from environmental funds, gminas, and the Swedish NGO Secretariat on Acid Rains.

Silesian Union of Municipalities and Counties

The project Strategies of Local and Regional Development of Upper Silesia, with about 100 participating municipalities from Upper Silesia, was one of the largest projects of this type in

Poland. The idea of the project was based on experiences gained in restructuring industrial areas in Nordrhein-Westfalen, Germany, as well as on the pilot project Support System for Local and Regional Development of the Province of Katowice on the Example of Ruda Śląska. This latter project was carried out in 1994 and 1995 by the Union and the Municipality in Ruda Śląska, in cooperation with the Regional Government of Nordrhein-Westfalen and Friedrich Ebert Foundation. ETP was the catalyst and facilitator of this effort and cooperated in preparation of the project, organizing training of facilitators of workshops for local leaders. This training played a key role in implementation of the project, and without transmission of ETP's experience, the work of facilitators would not have been effective.

The project was carried out in the years 1996–97 in 16 areas. The aim of the project was to work out socially acceptable development strategies above the local level, improvement of inter-municipal cooperation, and a higher level of social integration within the communities and of the whole region. The project covered about 100 municipalities in Katowice, Bielsko Biala, and Częstochowa provinces, associated in 16 communities (including two independent towns). In each of the communities, a council of local leaders was appointed representing key local stakeholders: local authorities, business, culture, education, NGOs, etc. The task of the council was to work out a feasible and socially acceptable development strategy for communities above the gmina level.

Workshops organized for Councils of Local Leaders played an essential role in the project. With substantial collaboration of ETP, 45 workshops were organized. Workshops for Councils of Local Leaders ended in each community with the selection of development priorities. Later, they were expanded in the form of projects with an accurate budget and time schedule (in conformity with European standard applications for financing)—through specially trained project managers from particular communities. This way, several dozen professional projects were prepared resulting directly from the development strategy of supralocal communities in Upper Silesia and from the adopted development priorities.

ETP has contributed—directly and indirectly—to projects and activities that have had a considerable impact on the regional development of the Katowice Voivodship and on other Polish regions:

- Establishment and functioning of supralocal communities prepared laid the groundwork for reform of local administration reforms (introduction of powiats in 1999).
- Through transfer of know-how and common work in Councils of Local Leaders, communities and regions became more integrated.
- Through preparation of development strategies and projects, participating municipalities became oriented toward development, which replaced the stagnation prevailing in many communities.

A second project conducted by the Union in cooperation with ETP was Building Municipal Cooperation for Implementation of Common Projects of Supralocal Scope. The goal was to create a municipal cooperation network that would enable implementation of regional projects in Silesia. The project used workshops through which representatives of municipalities gained practical knowledge and skills for implementation of projects above the local level. An example of

such an undertaking was Bicycling in Silesia that is being implemented by the Union. The aim of Bicycling in Silesia was to create an alternative, ecological system of transport and promotion of bicycling as an environmentally friendly means of transportation. The project involved cooperation of municipalities in preparation of bicycle lanes in towns and municipalities, to create a cohesive and functional system of bicycle lanes (Silesian Network of Bicycle Lanes) in Silesia.

During implementation of the project, sub-regional and regional project teams were organized. The regional project team (people prepared and trained by ETP) was the coordinating group whereas the sub-regional teams dealt with planning and construction of particular segments of lanes. From May to November 1998, 16 workshops for municipalities were organized. The goal was to work out practical forms of cooperation between municipalities and other local communities in the region. As the result of the project, a regional network of cooperation, functioning within Bicycling in Silesia, was successfully established. Year by year hundreds of bicycle lanes have been built using common, well coordinated plans. One outcome of this project is better and better cooperation among Silesian municipalities in realizing other cooperative projects.

The result of cooperation between ETP and the Union, as well as its impact on the operation of local authorities, is decisively positive. ETP inspired and helped direct the operation of the Union, as well as its member municipalities. Of particular importance was its promotion of best practices, coming from the United States (with consideration given to a wider, global context). In a time of difficult modernization and transformation, instilling new ideas was of great significance. ETP has contributed to a large extent to furthering the advancement of the voivodeship in these processes. Also due largely to ETP, the local and regional system of self-ruling in the Silesian Province is considered a model in Poland.

5.3.4. Environmental Policy and Management

ETP offered 30 regular courses in 55 offerings for representatives of local governments in addition to 12 PDS courses (with 24 offerings). There were 15 follow-up activities. The total number of participants was 1,525, representing 125 municipalities. ETP provided a program of training and related development activities designed to upgrade the skills of local government policy- and decision-makers and other ETP audiences in a combination of subject areas critical to effective environmental policy analysis, planning, and management. These included environmental management, comparative risk analysis and priority setting, permitting and enforcement, interagency coordination, municipal financing, and environmental planning and practical action management.

Target audiences were local and regional government officials and policy makers who have been handed increasing responsibility for managing local environmental problems resulting from democratization and decentralization of power from the national government. ETP's primary aim was to ensure that the economic restructuring process was supported by improved management capacities by local government officials in environmental protection.

All training courses for local government had the following goals:

- Improvement of gmina managerial effectiveness in accord with prepared strategic plans and realistic, balanced budgets;
- Increased and effective spending for environmental projects including projects that develop public-private partnerships;
- Restructuring of gmina management systems to increase effectiveness and harmonize with EU requirements.

To achieve the best effect in gminas, courses were designed as a sequence of trainings to educate top management staff. The best long-term solution was a special PDS for executives of local governments. This unique educational enterprise in southern Poland was provided using numerous local resources.

The needs assessment and development of work plans for this PDS program was performed in cooperation with the following partners:

- Gminas represented in previous ETP trainings;
- Union of Municipalities of Upper Silesia and Northern Moravia;
- Silesian Technical University (a PDS partner for CEOs and top managers of industrial plants);
- University of Silesia (a PDS partner for local governments);
- Economic University in Katowice (a PDS partner for local governments);
- Foundation for Energy Efficiency (FEWE);
- Firms: Interdont, LEM S.C., PROCON, Citec (ETP grantees).

During the whole ETP period, the ICC did not have any difficulties with recruitment of participants because of the high quality of the training offered and the high demand for the courses of the courses. The modern, interactive teaching methods used in ETP were also highly evaluated. The participants greatly appreciated the fact that each course was supplemented by a number of practical exercises and carefully prepared Polish case studies.

Between 1995 and 2000 ETP delivered 30 training courses (in 75 offerings) for local governments. The training concentrated on the problems of finance, human resource management, bidding procedures, and public relations, as well as management of investment processes in gminas. About 1,250 people from gminas and municipal institutions took part in the training. Apart from this many people from local governments took part in other ETP courses offered to businesses or NGOs. The total number of people from the government sector who participated in ETP trainings reached 1,525. They represented 98 gminas and 5 voivodships.

Beginning in 1996, ETP Poland researched training effectiveness. An increased level of environmental investment was selected as the indicator of training effective. The research covered 24 to 32 municipalities per year which sent top-level officers to ETP training. The levels of investments every year reached about \$100 million. This amount is significant considering that the research covered not only big cities but small ones as well. From the statements of many course

participants (mayors, vice-mayors, heads of departments in gmina councils) it was evident that knowledge gained in ETP courses considerably increased effectiveness and mobilized significant public and private investments in those gminas.

During follow-up meetings, participants reported many investments completed in their gminas in the period of 1996–99 (see tables of investments, Appendix 12.4). The investments were in four main areas: water protection, air protection, waste management, and land reclamation. Of these, water protection received the greatest amount of investment (\$140 million). There was also significant investment in air protection (\$98 million) with lesser amounts in waste management (\$50 million), and land reclamation (\$10 million).

Based on participants' declarations and interviews after courses ETP identified the following outcomes and impacts of ETP courses in several key areas.

A. Strategic planning

- Developed and strengthened capacity of local governments to professionally design and implement strategic plans in gminas.
- Developed capacity to apply appropriate policy investments and use institutional opportunities for effective technology transfer.
- Developed capacity to understand and use foreign experience in public-private partnerships.
- Strengthened capacity of local governments to design and implement strategic decisions dealing with local resources.
- Used opportunities to develop employment in private business by public environmental investments.
- Developed capacity to take advantage of the governmental program "Contract for Silesia."

B. Institutional reform in local governments

- Developed capacity to design and implement policy and institutional reforms according to E.U. requirements.
- More effective organization and teamwork in many gminas.
- Developed capacities in management of human resources.

C. Environmental management

- Strengthened capacity to manage natural resources using the best U.S., Polish, and Western European solutions.
- Developed capacity to conduct environmental audits to improve management of natural resources and quality of life.
- Strengthened capacity to effectively manage municipal waste and natural resources.
- Developed capacity to conduct EIA procedures for planned investments.
- New approach to conversion fuel from coal to natural gas in private houses.
- Increased capacity of municipal staff to reduce energy waste in public sector.

D. Management of public finances

- Improved capacity of local governments to effectively planning and execute budgets.
- Developed capacity to apply the best U.S. and Polish experience of bond financing.
- Increased capacity to use new opportunities to develop and finance municipal projects using support of European Union financing institutions.
- Increased capacity to properly manage competitive bidding.

E. Community outreach

- Developed capacity for promotion of investment activities by gminas.
- Enhanced capacities of mayors in effective participatory policy design and implementation.
- Increased capacity of gminas for cooperation with the media.

F. Management of investment process

- Developed the capacity of local governments and business to match resources and skills in developing sustainable projects for communities.
- Developed diversified portfolios of investments based on the best U.S., Polish, and Western European experiences.

The level of environmental investments in particular years published in Appendix 12.4 is one of the most interesting outcomes which describes activities and decisions of ETP participants. Apart from them ETP identified following training outcomes:

- 45 municipal strategic plans have been designed;
- 15 municipal strategic plans successfully implemented by the end of 2000;
- 30 promotion plans and 20 offers submitted to potential investors;
- 32 plans for policy and institutional reforms;
- 35 proposals of utilizing opportunities of the "Contract for Silesia";
- 30 identified joint projects in municipalities;
- 20 percent increase in number of balanced and effectively implemented investment plans;
- 22 proposals submitted to EU financial institutions;
- 10 drafts of proposals for municipal bond emissions;
- 85 press announcements of local issues and 35 scenarios for TV appearances;
- 25 environmental audits and 10 plans to reduce energy waste in hospitals and schools;
- 135 old, small, and environmentally harmful boiler stations closed;
- Building or modernization of 32 central heating plants;
- More than 80 km. sewage collectors built;
- 170 km. water supply systems built;
- 15 percent increased employment in environmental business;
- 15 properly conducted EIA of new projects;
- 45 plans of waste management designed and implemented by the end of 2000;
- 25 logistic plans for waste management designed and implemented;

- 10 adaptations of foreign cases to local conditions conducted;
- 58 sewage treatment plants built;
- 18 modern waste dumps built;
- 10 Silesian gminas jointly financed conversion of fuel from coal to natural gas.

5.3.5. University Strengthening and Institutional Capacity Building

The university sector was very important for the target region and the entire country but for many reasons it was very difficult to offer regular ETP training for this sector. The best way to strengthen Silesian universities was to create links between Polish and American universities. During the course of the project there were five ways this was accomplished:

- Curriculum development workshops in environmental and resource economics and in environmental management, mostly for technical universities.
- Designing and delivering PDS programs.
- Internships at the University of Minnesota.
- Ph.D. Fellowships.
- Joint publications and research.

Curriculum workshops were organized jointly with Silesian Technical University (STU) and its PDS Center and drew about 40 participants, mostly deans and other leaders of technical universities. This was regarded as a major success. The curriculum was new for the vast majority of participating universities and was enthusiastically received.

As preparation for PDS, seven internships were offered for both Katowice-based university: STU and University of Silesia and effectively implemented at University of Minnesota. The internships focused on designing curriculum and developing particular course for PDS programs at both universities. In addition, PDS offered two Ph.D. Fellowships at the University of Minnesota for Polish Ph.D. candidates (see Chapter 10).

Besides curriculum development workshops, the major gateway to Polish academia was an opportunity to take advantage of the ongoing restructuring of Polish industry and organize PDS for senior managers of industrial plants. PDS responded to all aspects of U.S. assistance to solve Central and Eastern Europe's environmental problems, particularly:

- In creating new institutions (PDS centers) that facilitated integration of the environmental aspects of ongoing restructuring;
- Developing new curricula in environment and natural resource management;
- In strengthening local universities (i.e., Silesian Technical University and later University of Silesia) by improved information and skill transfer;
- In developing the human capacity (especially managerial and entrepreneurial skills that were in a short supply in Central and Eastern Europe), and articulating and designing environmentally sound restructuring.

Poland was the first Central or Eastern Europe country where a PDS program was implemented. Experiences of the first run of the PDS program formed the basis for establishing similar programs in other ETP countries.

A major part of ETP Poland's success was its development of Post-Diploma Studies (PDS). ETP worked with two local universities, Silesian Technical University and the University of Silesia. PDS was offered for two main audiences: business leaders and local government officials. The first program at Silesian Technical University (STU) began in the fall of 1994 under the title of Post-Diploma Studies in Environmentally Friendly Restructuring of Heavy Industry. Many PDS offerings were geared to specific problem industries and went titled such as Environmentally Friendly Restructuring of the Metallurgical Industry or Environmentally Friendly Restructuring at Polish Non-Ferrous Metals Companies. From 1994 to 1999, PDS at STU served 126 participants. Now a self-sustaining program, the university's PDS program graduated 16 participants in 2000 and another 20 enrolled in 2001. The latter group will graduate in December 2001, making a total of 162 graduates in seven PDS offerings.

Local governments were the second major audience for PDS. Following the success of PDS at SUT/STU, a similar model was developed at University of Silesia in 1997 for executives of local governments and council leaders. The goal was for these leaders to gain the skills and knowledge necessary to improve democratic management and further a sustainable transition process at the gmina level. In the first year of this program, 25 participants graduated. In the second year of PDS 16 participants received a diploma after a final defense exam and presentation of individually prepared diploma work related to the urgent problems facing each locale (gmina level). As with PDS directed toward business leaders, the thesis topics for local government PDS were based on practical issues directly related to the participants' own gminas. Based on experiences of two years of PDS, a new school of the university called the School of Management was established in Chorzów. The modern curricula and new methods of teaching were prepared by Polish professors who cooperated with Americans in delivery of PDS courses. In Spring 2001 the School of Management received a grant of \$200,000 from the EU for further development of the school and adaptation of new buildings. The actual sum matched by the university was about \$1.8 million. Based on experiences and skills acquired during the PDS for Local Government (PDS-LG), the university created a new interdisciplinary bachelor-level program in Environment Protection in 2001.

The University of Silesia prepared a special facility for post diploma education in Chorzów with modern classrooms, computer labs, and a library. PDS-LG also received space in this building. In Spring 1997, the university received an old building with a surrounding park from city of Chorzów. The building was 60 years old and needed an expensive overhaul. The cost of the renovation was \$1.2 million. The City of Chorzów covered 75 percent of this expense, with the remaining 25 percent was covered by the University of Silesia. The School of Management is located in the building. The school continues to grow and has more and more participants. The program has already outgrown the first building and the university is preparing new buildings for the facility.

At Silesian Technical University, a new program, Management of the Production Process, was also started. Curricula was based on experiences of PDS for industry. The new program has been very popular with participants. In addition to the program, during six runs of PDS the university published over 70 textbooks and other teaching materials that are used not only by PDS participants but also in regular management course. ETP contributed to the total cost of these publications (not exceeding 20 percent). In many cases the handbooks were prepared based on selected materials from ETP courses or workshops. All handbooks were available at the PDS Center in Katowice and at the ETP office for all interested parties. Some of them were translated and used in other ETP target countries. The ETP office has its own library of books and training materials. During the past year 64 people requested and received copies ETP publications.

5.3.6. Intersectoral and International Cooperation

Since 1993 ETP cooperated with the Environmental Partnership for Central Europe (EPCE) in its work with NGOs. EPCE conducted several trainings and was evaluated very highly by participants. These trainings were jointly financed (70 percent by ETP). Some ETP trainings were performed using additional resources from other domestic and foreign organizations and institutions, i.e., Poniecki Foundation, Friedrich Ebert Foundation, and also Voivodship and National Fund for Environment Protection and Water Management.

ETP enjoyed good cooperation with the USAID-sponsored Local Environmental Management (LEM) Project. At the beginning of ETP, the project trained the future managers of LEM, including Zbigniew Jędrzejewski and other top leaders. Later, ETP exchanged training materials, trainers, and experiences with LEM. In 1996, ETP financed three trainings (two offerings each) performed together with LEM Project. ETP continued to support USAID Peer Projects, working with LEM in Poland.

5.4. Evaluation of ETP Poland

In addition to continuous internal evaluation, an external mid-term evaluation of ETP Poland (as well as Bulgaria and Romania) was completed in 1995 by Associates in Rural Development, Burlington, Vermont: "Evaluation of the Environmental Training Project in Central and Eastern Europe." The evaluation focused on both management of ETP in Poland and on participants' response to training programs.

Although the management of ETP Poland initially suffered from turf issues with other USAID projects that delayed start up, overall cooperation was rated as good between consortium partners, in-country staff, USAID, and subgrantees, as well as with other assistance programs such as those sponsored by the U.S. Environmental Protection Agency. The evaluation report noted that "The ETP project has been very successful in reaching the four target groups for training: universities, environmental businesses, non-governmental organizations, and local government. This success is due to the excellent work carried out by the ICC [in-country

coordinator], and input from the OAR [Office of the AID Representative], and the ability of Polish participants to translate the training into practice.”

During evaluation interviews, the participants consistently cited the participatory, intersectoral methodology of ETP to be extremely important in determining the value of the courses. Thanks to courses that trained trainers, ETP produced a significant cadre of people in various organizations who, through their own initiatives, are able to satisfy the demand for additional ETP-type workshops. The evaluators’ report noted that “We commend this example to ETP for other countries and for additional grants in Poland.”

Regarding the ETP PDS program at Silesian Technical University, the evaluators wrote that “The university has planned and developed this advanced-level program with great care and envisions it to be a major contribution to environmental amelioration not only in Katowice, but in the CEE region as well. . . . It appears to be a very ambitious program, dependent upon a diverse group of funding sources.” Furthermore, the report stated that “the team was impressed by the enthusiasm and commitment that the University leadership has for this program. They are mobilizing University, Voivodeship, and National Environmental Fund support to rehabilitate space and provide computers and training for this program. . . . The University leadership has a long-term vision to make the program fully self-supporting through tuition fees.”

The evaluators rated the sustainability of ETP Poland highly. “ETP participants in the Katowice region, especially those who had taken part in more than one training, had formed an environmental action network among themselves that was in many ways mutually reinforcing. They seek one another out to solve problems because fellow ETP participants now speak a common language and adhere to the common proposition that ‘There are no, no-way-out situations.’ Thus ETP-trained NGOs talk to ETP alumni in business and local/regional government and vice versa in a community of interest and collegiality that did not exist before.”

During the last year of the ETP activities in Poland, the ICC and his staff conducted series of interviews with the most active participants representing all major four constituencies. The results of those interview are partly reported on in this impact analysis, and partly are presented in the special chapter devoted to the ETP success stories.

5.5. Post-USAID Sustainability

There are many types of sustainability. This report focused on four of them:

- Human Resources;
- Programmatic;
- Institutional;
- Financial.

Providing training for over 4,000 participants during almost 10 years created a large pool of expertise in environmental management in all four sectors targeted by ETP educational activities. It is impossible to trace all of them, but many maintained good relation with the ETP office,

reporting their successes and problems and inspiring the Polish project management to develop new courses or request them from University of Minnesota and other consortium partners. The most important element of sustainability of this crucial component is the change in the way of thinking that took place during ETP training. The fruits of this “new thinking” introduced by ETP can be found in the modern management of many businesses, from SMEs to large firms. It can also be found in fiscal discipline and effective management of local governments and NGOs, and finally in new academic curricula.

One of the most important contributions to human-resource sustainability was the development of a cadre of about 80 local trainers and facilitators who started almost immediately offering ETP–designed courses through their own firms, NGOs, or universities. In the business sector, there were about 10 firms offering executive training that have been established or significantly expanded since the first series of ETP trainings. Among them are, for example, LEM, Procon, Consensus, Interdont, Citec, Foundation for Energy Efficiency, Ekologus, Atmoterm.

Those firms took responsibility for further dissemination and upgrading of training courses initiated by ETP. For that reason, ETP focused mostly on developing new courses through the USAID grant in their development. When ETP significantly reduced its activities in the business sector due to the change of USAID strategic objectives, the ETP “children” took over the regional market. This way, programmatic sustainability was anchored in local educational businesses and linked to their profit making on delivering attractive, high-quality courses on this increasingly competitive market. One effect of this was that when the ETP Poland Foundation was finally registered in 1998, this lucrative market was already taken.

Programmatic sustainability was also secured by institutionalizing many ETP courses at local universities for day and executive students. The most visible examples of this are the continuing offerings of PDS programs at STU and its adapted courses of bachelor programs at the College of Management at University of Silesia. These are leading examples of the institutionalization of ETP–initiated curricula.

There are many forms of institutionalization, from legalizing an academic program and continuing its offering through registration of an independent business, NGO, or academic organization. ETP contributed to all of these types of institutionalization. The academic courses and programs initiated or inspired by ETP are on the educational market. Most of the educational businesses facilitated by ETP are operating in that market. The Polish-American Post-Diploma Studies Center at the STU was recently transformed into International Post-Graduate Education Center and is active on the educational market. The College of Management at University of Silesia in Chorzów is booming and preparing an MBA program to offer soon. The College of Management is developing very quickly because of its good managerial staff (especially its dean, Dr. B. Korzusznik) who maintain a high level of teaching in the College and were able to raise more money than any other faculties of Silesian University.

All those successful ETP–associated organizations were able to secure their financial sustainability either by efficient revenue-generating activities and/or by effective fundraising. The accession process will bring significantly more money to Central and Eastern European countries and will

give additional impetus for further development of these organizations. The following projects have proven sustainable thanks to successful fundraising:

- “Environmental Bulletin” PEC: Information Center for Air Protection;
- “Tested Food for Upper Silesia”: PEC Gliwice Branch;
- “Strategies of Local and Regional Development of Upper Silesia”: Silesian Union of Municipalities and Counties;
- “Building Municipal Cooperation for Implementation of Common Projects of Supralocal Scope”: Silesian Union of Municipalities and Counties.

Finally, the ETP Foundation organized at the end of 1996 but registered formally by the Warsaw Registration Court in early Spring 1998 exists as a legal entity along with the private firm ETP-Polska. The lost business market for its graduates and the well-known financial deficiencies of public and NGOs sectors have so far prevented the Foundation from booming like other ETP successors. The coming integration with European Union will bring new funding for both those sectors and will provide a chance for invigorating its activities and following the achievements of ETP successor organizations in Poland and other Central and Eastern European countries.

6. Romania

6.1. Background

After the fall of the communist regime in late autumn 1989, Romania could begin to assess and address its environmental situation in an open way for the first time in almost 50 years. Photographs of heavily polluted areas in Romania were seen around the world as symbolic of the environmental legacy of communism. Although environmental conditions in Romania were similar to other former Soviet satellite states, the country faced serious economic, social, and political problems. In the early 1990s, as in many neighboring countries, an economic restructuring reduced the level of emissions, but this fact did not reduce the urgent need for modern environmental laws and improved social awareness.

6.2. Scope of Work (1993–2000)

Because Romania was added to the ETP program after the original proposal was written and negotiated ETP, training did not begin until early 1993. ETP Romania's funding from USAID was later extended through 1999. Training in 2000 was conducted with left-over funding. Activities successfully encompassed all major goals and objectives as well as the four main target audiences outlined below.

6.2.1. Target regions

ETP conducted its Romanian activities primarily in the Argeş River Basin area including Piteşti and Ploieşti as well as Bucureşti (Bucharest). These areas were selected as training locations in support of other primary USAID activities and because they are "hot spots" facing serious environmental problems. In addition there was an emerging NGO community in the area as well as some interest from local governments and private firms. Later, after a needs assessment, USAID recommended that ETP move to the hot spots in Transylvania-Sibiu, Alba Iulia, Zlatna, Cluj-Napoca, and Baia Mare.

6.2.2. Training Methodology

The training was delivered through a mixture of traditional and innovative delivery techniques in interactive and experiential learning environment using country-specific case studies. This type of training was new to participants, local trainers, and facilitators. This style was later introduced in the Post Diploma Studies program at the Technical University Cluj-Napoca. Training activities were originally delivered by American trainers using Romanian co-trainers' and facilitators' experience to prepare country-specific case studies. As Romanian trainers and facilitators grew more familiar with these techniques they were able to deliver more of the training. One of the most significant effects of ETP training was the introduction of participatory, interactive, cross-

sectoral methodology. ETP training included lectures, small-group sessions, and exercises through which participants acquired knowledge, techniques, and skills. Most of the theoretical training materials were compiled by American trainers and translated into Romanian. These materials were adjusted to local circumstances and to the needs of participants who were surveyed by pre-course questionnaires. Local case studies and lectures by Romanian experts were also included in the training materials. Many participants experienced these methodologies for the first time and as completely new approaches they were provocative and appreciated. Later in the project, consultations provided by experienced local organizations were used to maximize the impact of previous training.

6.3. Impacts and Outcomes

6.3.1. General Outcomes

ETP Romania conducted 175 training activities over the course of seven years of USAID funding. These activities reached over 2,200 participants. Approximately 42 percent, or 938, of these participants were women. (See Tables 1–3.) Participants came from NGOs, businesses, local governments, and universities. These participants were trained by 60–70 local trainers and facilitators.

Another general outcome was coverage of ETP activities in local media which signaled an important impact on public consciousness. In Years 4 and 5, for example, ETP was covered in 35 television news reports, 69 newspaper articles, and 33 radio news broadcasts. In addition to the media, ETP Romania furthered outreach through its own publications, issuing two catalogues *Catalogue of Environmental Business Firms in Romania*, and *Catalogue of Romanian Universities with Environmental Curricula*.

6.3.2. Environmental Business Management and Administration

During the period of ETP's operation, environmental business in Romania was in its infancy. As a result, ETP training had an important formative influence on the development of such businesses. A full range of training courses were offered, including such courses as *Managing an Environmental Business: Business Plan and Financing*, *Strategic Planning for Environmental Small Business*, and *Developing a Marketing Plan*. In addition, participants from the business sector attended cross-sectoral training courses.

Training on creating business plans and financing proposals for environmental businesses taught participants how to start a business and create a business plan, as well as some strategies for doing market research and strategic planning. One of the participants stated that the class helped him to rethink and reorganize his business. Another participant had received similar training from the World Bank and offered to share his business plan with the trainer for future ETP training. He stated that he was initially skeptical that he would learn anything new but soon realized that the exercises would help him improve his productivity and do a better job of managing his business.

The participants also decided to establish a Romanian Environmental Business Club, similar to a chamber of commerce. The more significant long-term result of this training was a dramatic increase in business activity among the participating companies, due to better business and financial planning and networking among participants.

A follow-up meeting was held to help create the Association of the Environmental Private Firms in Romania, to debate and finalize a charter for legal registration. Board staffs were also elected and the process of creating a legal entity was begun (see Chapter 8 for more information).

6.3.3. Public Participation and Outreach

The courses ETP delivered on fundraising and writing proposals were the first such training was offered in Romania and greatly impressed NGO representatives who attended, opening new horizons and understanding for them. As a result of the training, over two-thirds of participants were able to articulate effective, measurable objectives and to design both methods and evaluation sections of a proposal. One participant used what she learned to organize an international meeting of NGOs in Denmark. Because of the leadership she demonstrated she was elected to preside over the group for a year. Likewise, three of the participants met with the Minister of the Environment and a U.S. expert on environmental legislation. Because of the “problem-solving methodology and presentation techniques” they learned in the proposal writing course, the NGOs favorably impressed the Minister and were told that they would be consulted regularly on environmental legislation.

Several previously recalcitrant NGOs have developed a strong interest in networking and identifying potential areas of common interest and collaboration. ETP training was helpful for new NGOs, most of which received financial support as a result of what their representatives learned. For example, from February to July 1993, 14 participating NGOs raised over \$750,000 including grants from World Bank, German Marshall Fund, and REC. In a follow-up report, representatives of 36 organizations reported leveraging \$1.6 million for about 250 environmental projects, since ETP started.

Another example of ETP’s effects on NGOs is evident from the results of the Year 2 Strategic Planning courses. Participants learned:

- The concept and methodology of strategic planning and the tools and techniques used to facilitate cooperative planning;
- To use these skills to involve the public in planning regional environmental management;
- The need for training a group of Romanians who have the technical skills and subject matter interest in environmental issues who could provide similar training to others;
- The need for regional cooperation through fostering productive relationships among the representatives of key industries, government, NGOs, education, and media.

As a result of this training the main stakeholders from Argeş County formed a local taskforce for environmental decision making, Group for the Environmental Management in Argeş. The same group of participants also elaborated and presented actions plans, prioritizing their environmental needs, local resource availability, and feasibility of coordination and cooperation.

The *Strategic Planning* course also helped give birth to three NGOs thanks to local young EPA employees attending the course. Each of them made important contributions to the ETP programs in Argeş, as well as improving community environmental awareness and management by working with local authorities, media, and schools. Incentives and relationships gained through ETP courses created an opportunity to institutionalize ETP training in an area where no NGO environmental activities existed before.

Other examples of the impact of ETP training include:

- The Organizational Development course had a great impact on the NGO Albamont, which partly as a result of the skills and knowledge gained in this course has become one of the most respected, trustworthy, and appreciated environmental NGOs in Romania.
- Participants in the course Training of Trainers for NGOs became successful in teaching and related activities. One gained a position as training director, first to a foundation (on EU funds) and then as a personnel trainer in a large national investment company (GSM). Another gained two grants to run training sessions for youth in schools. One participant has been nominated by his director to conduct and organize training sessions engaging their institution, and then took a leadership position in a foundation assisting NGOs. One became PR/strategy director for Shell Romania. Another continued to work as teacher in a school, introducing more new programs and activities of environmental education as well as being involved in an NGO.
- A course on using environmental information for effective management created a framework for structuring group management decision making that resulted in design of a public information program.
- The ETP project Public Information Program for Argeş County helped establish a local taskforce (GAMA) to initiate a program of systematic public information concerning environmental issues. This program was adopted by the local EPA in 1994. It informed the public about environmental issues and data, and involved the public in the EPA's environmental protection efforts by obtaining public input and participation and building on ETP assistance in Argeş. Funding was used to facilitate the initial meetings of GAMA, buy a printing machine, design informational material, and support public surveys conducted to identify the best approach for setting up the informational program. Lasting achievements of this program include gaining a weekly TV spot, a daily column in a local newspaper, NGOs support in community awareness events initiation, and the creation of voluntary "environmental agents" among school children to report on non-ecological community behavior or environmental incidents for the local EPA.
- A session was held April 22, 1995 to edit a brochure for the 25th Earth Day. The brochure features 60 Romanian NGOs and their Earth Day activities. A goal of this activity was to enhance the role of environmental NGOs in building public awareness in the community, to increase their involvement in environmental issues, and to make them more visible to the media. This event was related to other activities organized by former ETP participating NGOs and the Peace Corps Volunteers network all over Romania.
- As a result of ETP's fundraising and proposal-writing courses, two attending NGOs established environmental centers, one for databases of environmental information and one

for conflict resolution and mediation training. Another NGO started by publishing an information bulletin for NGOs.

- The courses on environmental partnership building and organizational development of NGOs launched the idea of a National Conference of Environmental NGOs that was established on April 22, 1994 with 143 members.
- A training program to develop environmental programs for young people resulted in a series of other events aimed to help participants to develop, publicize, and to put into practice environmental education programs designed at the workshop:
 - ❖ Two environmental education camps (August/September 1995);
 - ❖ An evaluation meeting of thirteen of the teachers who participated in the workshop (September 1995);
 - ❖ A presentation about the project at the environmental NGOs conference (October 1995);
 - ❖ Cleaning activities in Pitești (October 1995);
 - ❖ Development and implementation of several environmental education projects and activities designed at the workshop (November/December 1995);
 - ❖ Presentation of the workshop and environmental education programs to biology teachers in Pitești;
 - ❖ A common program with a local radio and TV station;
 - ❖ A final meeting to evaluate the success of the project (January 1996).

Another program that has had an impact on the Romanian NGO sector was the ETP internship. In August and September 1994, three interns from Romania participated in an internship program organized by the University of Minnesota, two of them from NGOs. This program sought to continue investing in human capital to improve the long-term capabilities of people from the region to address environmental problems in the context of competitive market economies. At the same time, it built on local training resource individuals, to further organize, deliver, conduct training courses. It also represented assistance in strengthening local organizational capacities for sustainability by learning about fundraising and getting community support.

The two Romanian women from NGOs participated in the program:

- Lizica Fenesan, a geologist working at the EPA in Pitești, Argeș County was also the founder of the NGO Center for Sustainable Development. She learned about effective tools for information management, methods for increasing public awareness, and how to design educational activities relevant to sustainable development. She was partnered with the Minnesota Pollution Control Agency and hosted by Wayne Sarappo and Deb DeLuca, specialists in the Voluntary Compliance Program, focusing on Superfund sites.
- Simona Hentia was a student at the Ecological University and the Academy of Economics, in Bucharest, the founder of the NGO Group for Alternative Energies, and an ETP assistant. She was hosted by Jo Habermann and Amy Middleton, with the Citizens for a Better Environment, an NGO focused on community organizing. She was involved in different aspects of the grassroots work, phone canvassing, media relations, community focus groups, and research. She also worked with the local Greenpeace office to generate a computer print out of Romania on GIS.

6.3.4. Environmental Policy and Management

ETP's impact on local government can be illustrated with a number of examples:

- As a result of ETP training in solid waste management, participants from Topoloveni (Argeş county) implemented a waste management program that caught the attention of other communities, the national government, and foreign investors. Starting with special activities in schools, the community found pride in becoming a model of good “town-keeping” and showing environmental awareness. Their example became a case study for public conferences and raised interest of officials from outside the country.
- Due to the integrated waste management training the Local Council in Timișoara promulgated an ordinance that nominated members of a new taskforce designated to coordinate better waste management policies and regulations. A press conference presented on local TV got the message to the population at large. In addition, the local environmental protection agency initiated an internal waste collection and recycling program and started a daily 15-minute program on local TV to present an environmental bulletin for the county.
- New training activity and on-site consultation by a training consultant helped citizens in the Argeş River region to develop and act on a strategic plan for managing solid waste from an aging, overloaded landfill near Pitești that was threatening water quality and human health. The plan was developed in concert with NGOs, government, and business. They formed an Action Group for Argeş Environment that set goals of creating an improved system for disposal of household waste, creating a new sanitary landfill, reducing hazardous waste by 40 percent through sorting and recycling, and ensuring that 30 percent of the population was participating within one year.
- As a result of training in strategic management, the local EPA applied the mechanism of strategic planning in redesigning their institutional role, and submitting their newly developed strategy to the Ministry, in support of an additional funding request. The document created such an impact that the Ministry decided to publish it in their newspaper as an example for other EPAs. The extra funding demanded was also approved.
- Training in river basin management resulted in formation of a River Basin Management Group for the Argeş River basin. A work plan was prepared and the regional EPA became interested in spearheading this activity. In addition, the local EPA has increased its own budget from the Ministry of the Environment.
- One representative of Romanian local government also participated in the above-mentioned internship program in Minnesota. Dorina Manolescu is a chemist working at the EPA in Pitești, Argeş county, and a link with the Ministry of the Environment and is also founder of the “Semper Virent” NGO. She was hosted by Gary Oberts of the Metropolitan Council. This internship provided her with hands-on opportunities to develop her skills in air and soil management. A large portion of her time was spent in field research

6.3.5. University Strengthening

The first step taken in Romania to strengthen university was to offer curriculum development courses. Curriculum development workshops were delivered for faculty and staff of Romanian universities in order to present American curricula in environmental and natural resource economics, explain fundamental issues of such curricula, to facilitate exchange of experiences and information among Romanian professors, and to prepare specific recommendations and strengthen the movement for environmental curricula in universities.

After careful review of six applications the Technical University of Cluj-Napoca was selected as a site for PDS which was begun in October 1996. PDS proved very successful and other universities sought to join and develop a network of PDS programs in the country. As a result of this success, the Ministry of Education also approved new environmental programs, department chairs, and research in Romanian universities.

PDS introduced new teaching manuals, presented new teaching skills, and produced a core of Romanian trainers with new professional skills and abilities. The University of Minnesota hosted two Romanian professors as interns who designed PDS programs and main courses. Many professors have taken responsibility for designing new courses and developing case studies. (For more on Romanian PDS, see Chapter 8.)

Two Romanian scholars participated in ETP as Ph.D. fellows: Cristina Ionescu, University Politehnica of Bucharest, Faculty of Energetics; and Nicolai-Valerian Marocico, University of Stefan cel Mare. Dr. Ionescu's topic was "Water Quality Protection in the Area of Waste Disposal Sites." Dr. Marocico researched "The Economic Efficiency of Different Organizational Structures for Forest Research Management." (For more on the Ph.D. fellows see Chapter 9.)

6.3.6. Intersectoral and International Cooperation

Establishment of the Action Group for the Argeş River Basin (GAMA) brought together all stakeholders in the target region: municipalities, NGOs, and businesses to manage environmental issues. This has resulted on several initiatives, including better solid waste management and collection, better disposal of household waste, and some point-specific recycling programs. It has also spearheaded environmental public awareness campaigns through the local media, public surveys, contests, and advertising.

A training to aid in the creation of environmental programs for young people brought together NGOs and school teachers. Together they created common plans for future work. In Argeş county they will be established a group for environmental education; a number of NGOs will develop a joint proposal on environmental education programs, called OAZA, meant to be a model for other NGOs, in both the topic and collaborative work.

In its seven years of activity ETP forged partnerships with many organizations in contractual or sub-grant relationships. These organizations were:

- Romanian Ecological Society
- Ronnie Brooks Consulting, Minnesota
- Regional Environmental Center, Bucharest
- CEC, Santa Barbara
- Timișoara EPA
- Sibiu EPA
- Timced (Ploiești)
- Resolve, U.S.
- PDC Consensus (Warsaw)
- People and the Environment
- Albamont
- Ecotur
- Nick Allen Associates, California
- PACT, U.S.
- Harvard Institute for International Development, USA
- Center for International Environmental Law, Washington, D.C.
- Center for Sustainable Development, Pitești
- Institute for Sustainable Communities, Vermont
- Semper Virent
- WWF, Washington D.C.
- VINS, Vermont
- Jana Zimmer and Associates, USA
- Center for Hazardous Materials Research, Pennsylvania

International cooperation was found in a course on cross-border environmental issues initiated in Bulgaria as a common offering to representatives from two neighboring cities, one on each side of the Danube (one Romanian, one Bulgarian). The goal of the activity was to encourage two sides of an environmental conflict to use the same criteria to help in solving problems through democratic approaches and by means of environmental education. The course used real-life case studies and teamwork, with examples from community pilot projects developed by ETP in Romania and presented by Romanian trainees.

Participants were so appreciative of the idea of facing environmental problems and solving them through common efforts that they requested a continuation of the experience and the work they had begun by transferring the workshop over the Danube to the Romanian side of the border. On this occasion, the event was entirely supported by the financial efforts of the local community. It involved local government and administration, businesses, schoolteachers, and NGOs. Participants have been enthused at their new, improved success in communicating about these issues and in approaching trans-border cooperation through common programs that they have initiated several ideas for project proposals. This will help them further maintain the links they have created and enable them to involve more community members in these activities and extend the activities to other important joint environmental actions.

Training on library and environmental information yielded the development of in-country and cross-border information sharing through networks such as Strawberry Net in Romania and Green Spider in Hungary. In addition two listservs for ETP communication were established.

6.4. Evaluation

A mid-program evaluation of ETP Romania (as well as Bulgaria and Poland) was completed in 1995 by Associates in Rural Development, Burlington, Vermont: "Evaluation of the Environmental Training Project in Central and Eastern Europe." The evaluation focused on both management of ETP in Romania and on participants' response to training programs.

Although Romania was added to the ETP program late and without additional funds, the USAID officer in Romania was especially effective in developing the project coordination necessary for ETP Romania's success. The evaluation team was impressed by the collaboration among the USAID office in Romania and the ETP in-country coordinator with other foreign assistance and training programs in the country: "The level and range of such cooperative and collaborative action is greater in Romania than in the other countries the team visited [Bulgaria and Poland]. The results bear witness to the importance of such collaboration."

ETP Romania suffered from the same start-up problems experienced in other countries, but "excellent, aggressive, creative management" by the in-country coordinator and the cooperative spirit shown throughout the project helped mitigate these problems. Significant management successes found by the evaluators include:

- "Creative" management of funds to ensure all classes were held despite delays in payment from the U.S.
- ETP worked to directly strengthen the staffs of the EPAs in three Romanian cities, the first instance of training carried out in cooperation with a local government agency.
- Development of an environmental information center.

Although there was no efficient way for evaluators to access participant data, they rated the value of ETP Romania training quite high. Participation among all target audiences was good and there was sufficient attention paid to local needs and conditions in courses offered.

Evaluators found that the in-country coordinator "has done creative follow-up targeting, using workshops to facilitate sustainable actions." Workshop content was tailored to specific objectives with evident, tangible results. Of the three countries visited the evaluators credited Romania with some of the best examples of effective, adaptive training.

In terms of longer-range sustainability, the team noted that "In Romania, the team found that informal networking among ETP workshop alumni, especially those who had taken part in more than one training, has strengthened the environmental actors in Bucharest, Pitești, Ploesti, and Sibiu. They seek one another out to solve problems and to mobilize effective citizen participation in environmental campaigns for parks, national reserves, and for voluntary urban clean-up days." In addition, the team found:

- Many cases where ETP training strengthened NGO capacity;
- Anecdotal evidence for positive effects on selected environmental businesses;
- Improvement in knowledge and skills among local and regional government environmental officials;
- Increased and more effective media engagement on environmental issues.

6.5. Post–USAID Sustainability

The institutionalization of ETP Romania began during the fifth year of the project. Today, ETP Romania is an independent, self-sustaining NGO that carries on the work of the project. In addition to the Foundation, there are three other ETP successor organizations:

- ANFPM, the National Association of Environmental Private Business Firms in Romania;
- 3C, Communication, Commitment, Cooperation Training Institute;
- CEM, Consulting in Environmental Management, Inc.

All four are legally registered as separate entities, two as NGOs and two as companies, each with specific missions and profiles, covering focused areas from ETP diversification of professional expertise.

ETP Romania continues to offer training courses and sponsor special events. In 2000, these included:

- Toward Results through Communication (26 participants);
- Community Relations Building/ Effective Communication with Communities (32 participants);
- Thinking Strategically, Thinking Businesslike, Communication for a Change (21 participants);
- Management Skills in Working with People (23 participants);
- Financial Management and Environmental Economics (20 participants);
- ANFPM Annual Meeting (52 participants);
- Aquadepol Exhibition and Symposia;
- Systems and Instruments of Environmental Management (51 participants);
- Environmental Education NGOs Forum (25 participants);
- Post Diploma Studies (31 participants);
- Urban Waste Minimization and Recycling (28 participants);
- Climate Change and Development (46 participants);
- Economics of Climate Change: Implications for National Development (28 participants);
- Macro-Economic Modeling for Climate Planning Options (24 participants);
- The Role of Local Governments in Climate Change (30 participants);
- ANFPM General Assembly, EBC proposal (31 participants).

In addition ten more course were offered under the auspices of the PHARE 98 project in 2000 and early 2001.

The challenge of fundraising has been met by winning the following contracts and grants:

- Two Ecolink Challenge Grants;
- One Ecolink grant won for “Municipal Waste Minimization,” for the community of Câmpulung Muscel, Argeş County, with Waste Management, Inc., and CEC (Santa Barbara, Calif.);
- A contract with IIE, Washington, D.C., to organize a local training event and three regional workshops on issues related to climate change;
- A proposal for the Ecolink Twinning Grants, as concept paper, with the Environmental Business Council of New England (full proposal application in progress);
- A contract with IRG, Washington, D.C., for organizing a national debate forum, on the Environmental Fund issues, and a documentary trip to Czech Republic, on the same subject, for government employees.

ETP Romania has also established a media monitoring system that gathers and organizes all past and current data on environmental issues as well as on the country’s economic situation and the reform process in Romania. This allows greater precision in identifying trends, needs, and important issues during the Romanian transition. It also helps foreign partners better understand Romanian needs. This project has led to building a database of references for future research, policy evaluations, and information gaps for ETP alumni and other interested stakeholders to address.

Because alumni of previous ETP training courses still feel connected to the program and depend on the ETP office for providing reliable information and advice on environmental and economic issues, ETP continues as a source of information and support for many Romanians. Past participants often refer others who are interested in environmental issues to the ETP Romania office for research materials and other forms of aid as they begin their own projects. This kind of interest continues to demonstrate that even after the end of direct USAID funding, the program is recognized as a solid, responsible, and valued agency for environmental information and ideas. ETP Romania’s website is: www.etpromania.com.

Environmental Training Project for Central and Eastern Europe

Main Menu



Welcome to The ETP Romania Website. Please use the menu on the left to navigate around the site.

This site is best viewed with Microsoft Internet Explorer 5.0 at 800x600.

The "E.T.P. Romania" Foundation

Is born out of the "E.T.P. - Environmental Training Project, for Central and Eastern Europe", an US AID funded program, as a Collaborative Agreement with the University of Minnesota.

ETP was designed to serve six countries (Bulgaria, Czech Republic, Hungary, Poland, Slovakia and Romania) in human capacities enhancing and institutional strengthening, toward sustainable development. The program offered training assistance on environmental management topics. The audience of these courses can be grouped in four categories: local and central government and administration, industry and private business, academia, NGOs and civic society.

Another objective was to identify potential local instructors, who could carry on the training activities after the completion of the ETP Program. There are about 25 such instructors so far, and they are able to resume several courses or to initiate new ones.

During the seven years of project evolution, as US AID funded assistance, several out-comes had taken shape. Thus, former ETP participants from the business sector are networked into the "Romanian National Association of the Environmental Business Firms".



[Click for Pictures](#)



Sample page from ETP Romania's Website.

7. Slovakia

7.1. Background

The former Czechoslovakia was one of the biggest polluters in Central and Eastern Europe prior to the fall of communism. The poor state of the environment presented a serious barrier to further development and posed a profound threat to the country's economic and political future.

Following the break-up of Czechoslovakia, Slovak environmental and political leaders realized that political and economic reforms would be difficult to sustain with increasing degradation of air, soil, and water, deforestation, shrinking biodiversity, worsening food contamination due to pollution, and falling life expectancy and rising mortality rates. The break up left the new Slovakia with many old-style heavy industrial facilities and a difficult road to economic and political reform. Thus, the ETP program was conceived and implemented at a time when the country needed a comprehensive program to stop degradation of the environment and living conditions while simultaneously improving the economic situation.

7.2. Scope of Work (1992–98)

The Request for Proposals for ETP was designed by USAID as a response to the environmental and economic problems in Central and Eastern Europe. ETP's goal was to contribute to the environmentally sound economic restructuring in these countries as they make the transition to market-oriented, democratically governed societies. Thus the central objective was to improve indigenous capabilities to identify, assess, prioritize and address environmental problems taking into account the efficient use of natural resources, pollution reduction, and pollution prevention in the context of competitive market economy. ETP has addressed the issue of management skills as one of the lacking competencies of environmental professionals and activists to efficiently cope with environmental challenges. However, the goals of the project have changed the emphasis during its life in a response to the changing context in Slovakia. As a result, the project strengthened its democracy building and cross-sectoral component.

ETP training was addressed to managers of environmental businesses and administration, NGO members as well as local government officials and academia. Many training activities used an intersectoral mix of diverse participants which included target groups of environmental businesses, NGOs, universities, and local government.

7.2.1. Target Region

In the first years of the program ETP conducted most of its activities in eastern Slovakia with a focus on the Košice valley comprising the areas of Spiš, Košice, and Prešov. This area was selected as a training location in support of other USAID activity in area and because it is a "hot spot" with serious environmental problems such as air pollution created by heavy metallurgical industry (VSŽ Košice) and water pollution as a result of industrial and agricultural activities and

inadequate treatment of hazardous solid waste and sewage. Since 1996 the program has spread its activities countrywide, conducting activities outside the original area and serving a broader audience. The reason for reaching outside of the Košice area was twofold:

- In some segments of the target audience (e.g., NGOs) the program has exploited the absorption capacity of Košice region in the area of training and expanded to cover the needs of environmental NGOs in the whole Slovakia;
- Other donors provided new programs that partly covered some of the issues covered by ETP. Therefore, ETP looked for a new niche, sometimes beyond the area of Košice.

7.3. Impacts and Outcomes

7.3.1. General Outcomes

ETP delivered 132 training courses and 30 follow-up activities as well as three years of PDS programs for 2,746 participants in Slovakia in that period (see Tables 1–3). In these courses, trainees got acquainted not only with advanced management ideas and skills, but also inter-active training methods and a different business and civilian culture and attitude as well. All the elements of the courses were well received. The popularity of the courses is reflected by the fact that while ETP activities continued to attract more and more new participants, there was a growing number of returning participants who attended several ETP courses. This reflects the need for training in a variety of management aspects. Those who participated in several courses received comprehensive knowledge that enabled them to work more effectively and successfully in their field.

Besides training participants, ETP courses trained 70 Slovak facilitators (some of them were trained in different subjects) and 40 Slovak trainers extending both their professional and methodological knowledge. They all are ready to deliver further courses independently using the manual and other sources of information they received on ETP workshops. ETP's internships provided an opportunity for three Slovak ETP participants to enrich their professional experience by two-week study trips in the USA. Within the ETP Ph.D. Fellowship program two Slovak Ph.D. fellows studied at the University of Minnesota (see Chapter 10).

7.3.2. Environmental Business Management and Administration

The program did not make the business sector a major focus area of ETP. Nevertheless, there were two major activities, first, PDS, and, second, an initiative group of environmental entrepreneurs from Eastern Slovakia with whom ETP cooperated in delivery of business development training. Within business development workshops most typical outcomes were that participants made several business deals at ETP courses and continued to cooperate as partners, subcontractors, suppliers, etc. Many of the leaders or facilitators (also former ETP interns) of these workshops (Burda, Kovač) are today successful entrepreneurs in the field of environmental consulting.

Through the PDS program in Environmentally Friendly Restructuring of Heavy Industry, initiated by Dr. Zbigniew Bochniarz, Boris Strečanský, Dr. Anton Lavrin, Vice-President of the Technical University in Košice and Dr. Michal Haňdiak, then Human Resources Manager of VSŽ Industria Ltd., managers in industrial businesses gained skills and exposure to management and organizational techniques, learned new professional and training skills, and obtained more experience with monitoring and evaluating work and making assessments. The high demand for further offerings of the PDS program reflects the quality and need for this type of continuing education. After graduation, second-year students have implemented their PDS theses in their companies. As long-term evaluation revealed, three projects dealt with innovative business strategies, four projects dealt with improvements in the management systems, and seven projects dealt with environmental improvements. All second-year students started with implementation of their projects and during the evaluation reported 50–80 percent completion. The formation of an Alumni Club by first-year graduates shows the commitment to increasing contacts, monitoring implementation of knowledge, organizing seminars, workshops, conferences, and excursions, and finding new contacts in Slovakia and abroad.

7.3.3. Public Participation and Outreach

Although the NGO strengthening component has been one of ETP Slovakia's strongest suits, there is still a great need for increasing public participation and civic initiative. One of the most successful projects has been Increasing Legal Awareness of Environmental and Public Interest NGOs, led by the Center for Environmental Public Advocacy in Ponicka Huta. Among the effects is a successful case that has been taken to the Constitutional Court, which ruled in favor of citizens of village Dubakovo against a large state utility company. This was the first such case ever raised.

ETP Slovakia's strongest impact has come in the NGO sector. The partners and subgrantees of ETP remained or became key leaders in their respective areas. ETP itself became a respected institution. The institutional impact includes:

- Subgrants to the Center for Environmental Public Advocacy for Strengthening Environmental NGOs, proved successful in assisting NGOs in institutional development and sustainability after the end of foreign assistance. Three workshops for NGOs have been held: NGO Fundraising and the Legal and Tax Related Issues, Accounting and Insurance for NGOs, and Law and Green Agriculture. Several manuals were produced from the workshops answering questions on accounting, insurance, and tax issues. Free legal consultation has been offered generating about 100 requests for assistance a month. Two student workshops have been held to form student teams interested in NGOs and public interest law, with the possibility for student internships and a future university course on the subject.
- Training Project Design and Management conducted with partial funding from the Foundation for Development of Carpathian Euroregion resulted in several projects that have been designed and successfully funded. Over \$50,000 has been raised using proposals written according the framework presented at the training. The municipal office of Haniska established a partnership with the NGO Kostitras to work toward common goals.

- Training on Strategic Planning for Public Sector Institutions, resulted in a large nationwide association of mentally handicapped that has implemented a new organizational structure, and developed new responsibilities for the board and management of the association. Also a new strategic plan is in place at the Children of Slovakia Foundation thanks to this training.
- As a result of the activity Developing a Local Environmental Action Plan: Developing a Vision for Liptovsky Hradok Community, with the consent of the deputies of local council a community fund was established with a support of \$2,000 from the municipality.

Another successful project has been Environmental Monitoring of Hornad River, accomplished through a subgrant to the Sosna Foundation. This was a year-long project of public monitoring of water quality in Hornad, and was completed by a workshop held in December 1996 which was attended by 30 participants from NGOs, the State Environmental Agency, Waste Water Inspectorate, Hornad River Basin Authority, water and sewage companies, and local governments. This project included the publication of a manual titled *GIS Use and Monitoring Results* and an exhibit open to the public that received so much interest it was prolonged for two weeks with over 3,500 visitors. The comments in the guest book reflected the increase of public awareness and interest in this subject. A major reflection of the new importance monitoring has been given in the area is the compilation of a project team from all areas of interest, which will develop and submit a proposal for a new project to the State Environmental Fund.

A different approach was taken in the training workshop on Public Participation for Improvement of Municipal Waste Disposal held in October 1996 in Bardejovske Kupele. Participants included officials from local self-government, state environmental inspectorate, municipal waste companies, and the media, who were presented and trained in tools of public outreach on municipal waste issues. The second half of the three-day workshop was devoted to discussions on the strategy for municipal waste in Košice and identifying specific activities to improve municipal waste management. As a result of the activity a manual titled *How to Deal with Communal Waste* was published and distributed to the public. A list of recommendations from the workshop was sent to the mayor of Košice, along with a list of concrete activities that contribute to improving the waste disposal situation. A weekly television show "Waste and Us" was created, and other media coverage on waste management was increased. The participants have formed a group to meet quarterly and continue efforts in this area.

Although many NGOs are still little aware of public relations, it is essential for increased effectiveness and public awareness and support. A workshop held in December 1996 addressed these issues and produced concrete results including a manual on public relations for NGOs. Participants have since managed to increase the number of press conferences and articles published on relevant environmental topics. The subgrantee Greenpen Foundation has become an available contact for NGOs in the area of public relations.

7.3.4. Environmental Policy and Management

ETP training for local governments provided participants with knowledge, techniques, and skills useful to become effective organizers and environmental leaders in their community. Special stress

was laid on techniques for collaborative, community-based approaches in addressing local environmental problems, on increasing ability to communicate effectively with the public on environmental issues, increasing environmental awareness, and enhancing public participation in local decision-making. The training activities for local governments fostered coordination and communication among diverse sectors within participating communities, and promoted public participation and regional cooperation. ETP trainings conducted through the Partners for Democratic Change Slovakia stirred a defensive response from higher levels of the Ministry of Environment, due to their openness and participatory methods, which the Ministry leadership did not like.

ETP has advanced policy development in Slovakia in two areas. First, was in development of sustainable cities and methodologies for municipal environmental management and public involvement. This was the result of the systematic involvement of ETP Slovakia staff which went beyond the ETP program. Second, was opening EIA to public participation. ETP involvement was instrumental in the pre- and post-adoption phases of this legislation in Slovakia. ETP helped open the door to increased input from NGOs and public to the lawmakers and experts and thus improved the level of the debate.

Beside these two areas, there were many other effects, including:

- After several years of environmental management training offered to Slovakia's NGOs, local governments, and businesses it was necessary to reflect on the effects of previous efforts and focus training in areas needed for the future. Several projects addressed this issue at the local, regional, and national levels. In November 1996 ETP held a workshop on Analysis of Training Needs in the Environmental Sector, a cross-sectorial meeting of training experts designed to evaluate and analyze needs for the future of environmental training. Participants from each of the sectors presented papers and the participants discussed, analyzed, and compiled a list of training needs to be published. The discussions and meetings not only generated information but created new contacts and networks within the cross-sectorial group.
- Slovakia's environmental policy was positively affected by a training course held by the Veterinary University in Košice. The course Risk Assessment for Toxic Elements in the Food Chain and Animals, was designed for professionals from National Pesticide Reference Laboratory, Institute of Preventive and Clinical Medicine, State Food Certificate Authority, Regional Environmental Office, and the Military Veterinary Research Institute. The course presented methods used by the U.S. EPA, European Union, and Slovakia in risk assessment, a new subject for most of the participants. This course contributed to a discussion on acceptance of risk-assessment methods, and the preparation of a new law for the Ministry of Soil Management. The manual from this course has been sent to relevant libraries and will also serve as material for new courses at the Veterinary University. The course has the potential to become self-financed, as there is high demand for the information especially from veterinarians and people involved with pesticides.
- Another example of how ETP influenced environmental policy-making in Slovakia is a follow-up workshop organized by ETP in 1994 on the topic of developing methodological guidelines for monitoring underground water near waste dumps. The guidelines have been used in design and adoption of a technical norm on the issue in 1995 by the Ministry of Environment. The

workshop was a follow-up to ISC-led training on Environmental Monitoring and Enforcement on the Local and Regional Level.

7.3.5. University Strengthening

The University strengthening component started in Slovakia with a joint Czech-Slovak workshop in environmental economics curriculum design in Ustí nad Labem in the Czech Republic in 1994. Two years later, Slovak universities requested a special curriculum development workshop for technical universities. This workshop was organized in Košice in 1996. Both workshops initiated an environmental curriculum reform movement in Slovakia.

The PDS Program in Environmentally Friendly Restructuring of Heavy Industry inaugurated at the Technical University in Košice (TUK) in 1995 yielded the most significant ETP impacts on the university sector. The first offering recruited 22 participants, the second offering 17 participants, and the third offering 14 participants. All were top- and medium-level managers from the steel and metallurgical industries, chemical industry, and mechanical engineering and local environmental authorities. The PDS program has continued to have a favorable impact on the Technical University of Košice. The university has benefited from observing and participating in newer methods of training. The use of interactive exercises, role-play, case studies, and practical examples presented Slovak professors with a new perspective on academic learning and teaching. The manuals from the courses will contribute to the libraries in the region, and will be integrated into regular courses. The recent entry of the U.S. Steel into VSŽ makes the presence of the PDS program with U.S. involvement more relevant for the labor market. (For more on PDS in Slovakia see Chapter 9.)

In order to support PDS curriculum and faculty development four faculty members from TUK received internships at the University of Minnesota prior to the first PDS offering. The ETP Ph.D. Fellowship Program involved two doctoral candidates Martin Malovesky and Martin Dovčiak, who spent ten months of study at the University of Minnesota. The former works as environmental expert in a hydro-geological and environmental consulting company in Slovakia, the latter completed his Ph.D studies and recently works in Slovakia in environmental forestry research in Slovakia. The program provided access to current courses and publications in environmental management and environmental economics helping Ph.D. candidates to make progress on their theses. (For more on Slovak Ph.D. fellows, see Chapter 10.)

7.3.6. Intersectoral and International Cooperation

The collaborative efforts of the four audiences participating in ETP training opened many doors for participants to meet and initiate cooperation in the form of business relations or joint projects. ETP training courses served as opportunities to improve communication within the environmental NGO sector as well as in intersectoral and international aspects. Several trainees and their organizations (mostly NGOs but some businesses as well) joined the Green Spider, the Hungarian environmental computer network that contributes to better networking among organizations.

Intersectoral ETP participants, businessmen, NGO representatives, and governmental employees raised funds and made training courses for students, teachers, local government experts, etc., based on ETP curricula, and worked as trainers in these courses.

Noteworthy activities in the area of international cooperation included:

- There was a joint conflict-resolution workshop with Slovak and Hungarian participants from two neighboring cities of Sátoraljújhely and Slovenske Nové Město at the common border in 1994. Participants discussed issues of shared interest, e.g., communication, transport, cultural and environmental issues. They drafted a statement that was sent to the ministries of foreign affairs and parliaments. As a result, a new border station was opened between the two cities, which makes border crossing easier for inhabitants. Another outcome of the program was the development of international collaboration between local Slovak and Hungarian NGOs, which helped organize regular meetings to discuss local environmental issues;
- Hungarian facilitators were trained in Slovak and Polish courses;
- Several Hungarian participants participated in Slovak courses;
- There were several Polish participants in Slovak courses and several Slovak participants were jointly trained as facilitators in Hungary.
- Cooperation between Miskolc University and Technical University of Košice is being intensified as a result of the PDS program.

In its six years of activity, ETP Slovakia forged partnerships with local organizations involving 28 institutions as subgrantees in the training program in 49 contractual or subgrant relationships.

These organizations were:

- Center for Environmental Public Advocacy
- Partners for Democratic Change Slovakia
- Society of Landscape and Nature Protectors
- NGO People and Water
- Sosna Foundation
- Greenpen Foundation
- Center for EIA at the Natural Sciences Faculty, Comenius University
- Technical University in Košice
- Veterinary University in Košice
- A-projekt
- Society of Friends of the Earth
- For Mother Earth
- Association of Healthy Cities Slovakia
- Institute for Development of Regions, Towns, and Villages
- Ekoefekt s.r.o.
- Board of European Students of Technology, Slovak chapter
- Technical University in Zvolen
- Slovak Cycling Club
- Pal-Inalfa a.s.
- PB Consulting
- Institute of Preventive and Clinical Medicine
- Daphne Foundation for Applied Ecology Research

- Sami Sebe Community Association of Pezinok
- Focus Agency
- Resources for the Third Millennium
- Center for Waste Reclamation s.r.o.
- Eva Romančíková, Economic University, Bratislava

Participation in ETP training provided these organizations and individuals with the spirit of the program as well as with concrete knowledge from which they could benefit in their own training activities.

7.4. External Evaluation

The external evaluation dealt with a selected period of time of the overall life of ETP. This was intentionally done because participants of 1992–94 may have difficulty remembering the training they attended. The evaluation was a random selection of respondents. The evaluation was conducted by FOCUS, Centrum pre sociálnu a marketingovú analýzu [Center for Social and Marketing Analysis] (Grösslingova 37, P.O. Box 293, 810 00 Bratislava 1, Slovakia; phone: (+421 7) 5361 366; fax: (+421 7) 5361 378; e-mail: focus@gtinet.sk).

7.4.1. Survey objectives

The Foundation ETP Slovensko organized 39 trainings or seminars in 1994–97. Those events were organized via various organizations with an attendance of 891 people of differing professions. The training was classified as either skill training (“communication training”), which was intended for people working in the environmental field, or “knowledge seminars” dealing with environmental issues and intended for all interested attendees. The survey also examined reaction to four books issued by ETP Slovakia:

- Marcus, Alfred. *Strategický plán a environmentálny manažment* (Strategic plan and environmental management). Bratislava, 1996.
- Šauer, Petr and Livingston, Marie. *Ekonomie životního prostředí a ekologická politika* (Environmental Economics and Policy) Praha-Minneapolis-Greeley-Bratislava, 1996.
- Macedo, Ľubica and Briestenský, Laco. *Dekocúrkovizácia alebo ako spáchať fungovanie spoločnosti* (Improvement or how to Commit a Better Working of the Community), Bratislava, 1997.
- Romančíková, Eva. *Životné prostredie, ekonómia a financie* (Environment: economy and finance). Bratislava, ECO Instrument, 1997.

The survey sought to map of the effects of the ETP training programs implemented in the period of 1996–97 in terms of the activity of training participants and their environment or the utilization of the knowledge and skills learned during the training and practice; and map the acceptance of the four selected books by readers.

7.4.2. Survey methods

The survey was conducted via phone interviews. The phone interview consisted of six open-ended questions in the case of the evaluation of the training programs by their participants and of five questions in the case of the readers evaluation of selected books. The approached respondents answered the questions freely. The phone survey was carried out in two stages, classified according to the survey subject among the training participants and the readers of the selected books. Respondents were chosen randomly.

Out of 860 participants who took part in the 39 trainings implemented in the period of 1994–97, 30 were chosen (which were subsequently addressed by phone, or 10 “substitute” respondents). The respondents were proportionally chosen according to the sector they worked in at the time they took the training (local governments, NGOs, businesses, and academia). Out of 191 book recipients we chose 30 to be interviewed. The respondents were proportionally chosen according to the book they read. The phone survey was carried out in January and February 1998.

The statistics of refusals or non-current addresses include:

- Twelve of the contacted participants refused to participate in the phone interviews. The most often stated reasoning statement was that they could remember the training.
- Fifteen participants did not have a known address or employer.
- Ten book receivers could not take part in the interviews due to miscellaneous reasons.
- Ten of the registered receivers did not have the book or had not read it.
- Seven of the book receivers refused to participate in the interviews for various reasons.

These respondents were replaced by other participants.

7.4.3. Main Conclusions

Training evaluation

The participants of the training and meetings financed by the ETP–S Foundation had different expectations from those events:

- About one third of participants expected new information to extend their knowledge.
- The next third of the training graduates had no specific expectations before the training.
- The rest of the training graduates expected to improve their communication abilities.

Almost all training participants were satisfied with the training they received. Many expressed an above-average satisfaction with the benefits of ETP. This was true even among participants who had no advance expectations at all. Participants in communication training appreciated the chance to improve their communication skills. One quarter of participants valued the fact that the training provided a place where people from different fields of expertise came together. About a quarter of participants saw those trainings as a source of information.

More than half of training participants stated that they personally benefited from the training by changing their behavior, especially their communication with other people. In their work they most often experienced an improvement in communication with fellow workers and clients.

Almost half of surveyed training participants listed improved professional knowledge as a personal benefit of the training. The vast majority of surveyed training participants familiarized their colleagues, friends, clients, co-workers, or students with the knowledge and information learned at the training.

Over half of the participants noticed changes in their professional life after the training. The changes seen by the communication-training graduates were associated with a change in behavior in their professional life. Others felt the change mainly in the enrichment and extension of their professional knowledge.

Evaluation of selected books

The most frequently expressed benefit of the books was their mere existence or the fact that the books were issued in Slovakia. Other benefits listed by the readers were:

- The expert aspect of the content;
- New information;
- New point of view on a particular issue.

More than a quarter of the interviewed readers evaluated the style of the books and their ability to summarize information in a particular field. The information in the books was best utilized:

- In the teaching process (noted by one third of those interviewed);
- Within publishing or scientific activity (noted by one quarter of those interviewed);
- In various activities of NGOs.

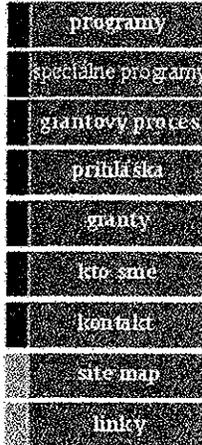
In most cases the interviewed readers recommended the books to their colleagues or to people from their place of work. The books were also frequently recommended to students, mainly as compulsory or recommended literature.

7.5. Post-USAID Sustainability

7.5.1. Institutional Development of ETP Slovakia

The most visible sustainable legacy of ETP is ETP Slovakia. There are other institutions that have been supported through ETP and pursue the ideas and approaches of ETP. Nevertheless, it is difficult to ascertain and quantify this. Therefore the most palpable outcome is the institution of ETP Slovakia. Its beginnings, growth, and key challenges are outlined below.

In 1994, Boris Strečanský, the ICC for the ETP program in Slovakia together with a group of committed former participants and program partners decided to create an organization that would build on the experience, know-how, and resources created by ETP. Thus, ETP Slovakia was established as a foundation and formally registered. Although this organization remained focused on developing management skills within the environmental field, it broadened the target for these training programs to include a variety of NGOs. Thus, since 1995, first as a foundation and then as a civic association, ETP Slovakia has pursued its mission using the name ETP. Although much of its identity and resources have been related to the USAID-funded ETP program, it has also successfully developed its own indigenous initiatives and programs.



Napíšte
na adrese

- ☒ **Slovo na úvod ...**
- ☒ **Najbližší termín uzávierky je 14. 2. 2002**
- ☒ **Grantový program Tvoja zem dostal 83 žiadostí o granty**
- ☒ **Na podporu aktivít k voľbám do VÚC** bolo podporených 15 projektov
- ☒ **Program Tvoja zem udelil** granty na podporu decentralizácie verejnej správy
- ☒ **Špeciálne grantové kolo** "Milión pre komunitné nadácie"
- ☒ **Prihláška na internete.**

TVOJA ZEM je grantový program, ktorého cieľom je zvýšenie účasti verejnosti na aktivitách mimovládnych organizácií a správe vecí verejných. O podporu sa môžu uchádzať mimovládne neziskové organizácie registrované na Slovensku pôsobiace v štyroch oblastiach: obhajoba občianskych záujmov, komunitný rozvoj a filantropia, vidiecky rozvoj a ženy - menšiny - tolerancia. Program Tvoja zem je administrovaný konzorciom Nadácie Ekopolis a ETP Slovensko. V období 1999 – 2002 budú v rámci programu rozdelené granty v sume 2,160,000 USD. Finančné prostriedky sú poskytnuté Americkou agentúrou pre medzinárodný rozvoj (USAID) a od iných súkromných a verejných donorov.

programy | grantový proces | granty | prihláška | kto sme | kontakt | mapa | aktuálny | linky |



hosted by ChangeNet, webmaster BOZEMAN

Sample page from ETP Slovakia's "Your Land" Website.

7.5.2. Story of an Institution

The ETP ICC felt strongly that the continuation of ETP in Slovakia without an appropriate institutional base would be ineffective. This opinion was supported by ETP management in Minnesota. The increasing number of activities required building a locally registered organization that could handle all aspects of ETP management in Slovakia. At the same time ETP ICC together with its main partners were convinced that the role of such an organization in Slovakia would go beyond merely managing ETP activities.

This institutionalization started in 1994. Through the participatory process involving ETP partners, subgrantees, and collaborators (in three meetings in Košice and Spišská Nová Ves in summer and fall of 1994) it was decided to establish an NGO. ETP Slovakia Foundation registered in 1995 in Slovakia to carry on the ETP mission to improve environmental decision-making processes through cross-sectoral collaboration and training. The process has been from the beginning supported by the management team at the University of Minnesota and by other consortium partners.

7.5.3. Strategic Approach: Diversification of Funding and Programs for Sustainability

The ETP Slovakia Foundation, later re-registered as a civic association, proved its vitality and developed into one of Slovakia's leading environmental training and NGO intermediary organizations with a variety of local and international partners. Since its beginning, the foundation was aware that the main funder, ETP, would phase out and the financial sustainability of the institution would be a crucial issue. This led the staff to diversify the foundation's project portfolio with other educational, research, and community-development projects. This caused a lot of strain on the capacity of the young institution and demanded a lot of commitment.

The share of non-ETP/USAID funding has never reached less than about 25 percent. This shows that the institutionalization of ETP Slovakia has not been stimulated only by the availability of ETP funding, but that ETP Slovakia has had from the very beginning other program alternatives and others considered ETP Slovakia a viable partner. This positive trend has continued. In 1998, non-ETP/USAID funding reached 61 percent. This was significant since in 1998 ETP was still being implemented in Slovakia with a relatively large budget and funding installments to ETP Slovakia from Minnesota peaked in 1997 and 1998 and total annual expenditures also grew quickly.

Another important indicator of the sustainability of an NGO in Central and Eastern Europe is the diversification of its program portfolio. Here the story of ETP Slovakia is also dynamic. In the beginning, ETP Slovakia started its official program with the Upper Nitra Project, a USAID-funded collaboration with the World Resources Institute (WRI). The first installments of the ETP funds arrived in 1996. Thus, technically ETP Slovakia was not implementing the ETP program in 1995 and the non-ETP programs (WRI plus consultancy work for the Charities Aid Foundation in Eastern Slovakia) represented the entire program portfolio. Later, the number of separate projects doubled and stayed at level of 15 distinct projects in 1997 and 1998. Although this had its

positive elements (diversifying the funding, enlarging the potential client base, gaining experience) it also had some negative effects on the institution (many short-term projects, permanent capacity crisis, difficulties in managing sudden institutional growth). In 1999, the number of projects decreased to 10, but many phased out in 1999 and replaced by larger, longer-term programs.

The third indicator of the institutional sustainability of ETP Slovakia is its success in increasing the percentage of its own income in its total revenues. In 1999 ETP Slovakia increased this percentage beyond 50 percent. The services provided to local and foreign clients included consulting services in the areas of delivering training, needs assessments, technical assistance in environmental management and NGO development, curriculum adjustments and adaptations, facilitation and organization of seminars, and the occasional sale of books. In 1999 the major clients of ETP Slovakia remained the International City Managers Association, Washington D.C., Children's Foundation of Slovakia, Globtel GSM s.c., and National Democratic Institute, Washington D.C. USAID Slovakia became a major new partner of ETP Slovakia through the Your Land program. (See Chapter 8 for more on this program.)

7.5.4. Management and Governance of ETP Slovakia

The organization currently has two offices, one in Košice (head office) and one in Bratislava. Programmatically there is a Center for Philanthropy and Non-Profit Activities in Bratislava and Center for Eco-Management in Košice.

The organization has operating principles and procedures that include internal governance and fiscal rules. The executive board meets at least twice a year. The institutional development of ETP Slovakia is a continuing process. Due to the change of legal status in 1998 a new board was created. A conscious effort was made to attract members with diverse backgrounds, experiences, and expertise. The staff includes the director, an accountant, a program director, five full-time program coordinators, two program assistants, and two part-time program coordinators. Until August 1999 there was a U.S. Peace Corps volunteer in the Bratislava branch. Two program coordinators received year-long training at the Environmental Academy in Netherlands and Non-Profit Management at the University of Kentucky during their employment at ETP Slovakia in 1997 and 1998 respectively.

7.5.5. An Overview of ETP Slovakia Programs

From the beginning, ETP Slovakia has been working on two parallel areas: environmental management and NGO development. The program portfolio has been organized around three main areas:

- Environmental Management at the Local Level;
- Environmental Policy;
- NGO and Philanthropy Development.

Activities	1995	1996	1997	1998	1999*
Environmental Management	100	89	68	43	52
Environmental Policy	0	0	6	32	7
NGO and Philanthropy	0	11	26	25	41
Total Expenditures	\$5,224	\$92,677	\$196,609	\$259,539	\$97,825
* Includes first 10 months of 1999.					

Year	Source	Amount	Total Annual Income
1998	USAID	101,216 USD	210,150 EUR
1999	USAID/ICMA	35,000 USD	
	Leonardo Program	9,500 EUR	153,200 EUR
2000	USAID/EcoLinks	22,558 USD	
	FDCE	20,000 USD	
	Leonardo Program	9,500 USD	195,050 EUR

7.5.6 Environmental Management at the Local Level

This program area has been ETP Slovakia's major one since its beginning and has received most of its resources and attention. The organization is best known to the public through activities in this area.

Currently ETP Slovakia is one of the leading organizations in Slovakia that combines necessary expertise with available capacity to facilitate local government/NGO partnerships and raising funds for such initiatives in the environmental management/sustainable indicators planning area. The main products of this program have been:

- Improved management skills of environmental professionals working at the local level;
- Changed attitudes toward cross-sectoral cooperation in addressing local environmental issues;
- Increased knowledge of approaches and methods of environmental management at the local level.

The strength of ETP Slovakia in this area has been in training experience, both in content and in process. This program area has addressed the educational needs of local or state government at the local level so that they will be more competitive in further opening Slovakia to the EU. This program area currently occupies half of ETP Slovakia's capacity and this share of the overall program structure will continue in the future. (Most recently a program on developing environmental management expertise with close partnerships of business and local governments in the U.S. and Slovakia has been supported through the Eco-Links program, which is USAID funded).

The major activities include:

- Developing environmental management skills through a targeted training program. This was the core of the ETP Slovakia's activities until 1998. The ETP program provided for the accumulation of expertise and experience that were crucial in development of other activities of the organization. The main forms of the work have been direct implementation of training activities or providing designated subgrants to Slovak or U.S. subgrantees to implement training. Another instrument in the work of ETP was the follow-up budget that allowed for further development of interesting activities initiated by previous subgrant or training delivery.
- Participation in ETP International. ETP Slovakia is a member of the ETP International network of offices located in the six ETP countries (Bulgaria, Czech Republic, Hungary, Poland, Romania, and Slovakia).
- Assisting local governments in environmental planning on a local level. This was done through the WRI managed project Opportunities and Limits of Environmental Management on the Local Level: Institutional Tools for Air Protection in the Upper Nitra Region. The project was a unique effort in Slovakia to facilitate a cooperative cross-sectoral process aimed at the development of local/regional environmental action plans. The context for this project (attitude of the Ministry of Environment and restructuring of local administration) limited the results and the full potential of this project has not been fully exploited. A case study of the project has been published in the series of Regional Environmental Center (REC) publications. The project was launched in 1995 and finished in 1996 and was the first non-ETP/USAID project for ETP Slovakia.
- Developing expertise and providing knowledge to local governments on water management in the EU. In the autumn of 1996, ETP organized two seminars on water management for local governments in the context of the Danube Environmental Program.
- Developing local capacity to design, plan, and monitor measures leading to sustainable changes at the local level through the Sustainable Cities Program. The program goal was to facilitate the process of implementing the Local Agenda 21 in Slovak cities by increasing awareness of sustainability among city public officials. The program is divided into four integrated sub-projects:
 1. Environmental Management Systems (EMS) design of training module;
 2. Selection of sustainability indicators appropriate for Slovak cities, preparation of relevant training module;
 3. Public Officials Awareness: Developing a training manual for public officials in cooperation with the ICMA and delivering training;
 4. General Managerial Skills for Local Government staff.

7.5.7. Environmental Policy

The goal of ETP Slovakia in this area has been to provide a platform for discussing topical issues that have emerged in the nexus of developments in the economy, politics, and environment. ETP Slovakia has initiated and facilitated the discussion, and also contributed team-based research and raising awareness for key stakeholders in government, NGOs, and the general public. ETP

Slovakia has also provided its capacity to manage projects for which other organizations (CEPA, STUZ) did not have time or capacity (for example EU Enlargement project).

The future development of ETP Slovakia in this area depends on an internal discussion on whether it would be better to establish a separate legal entity whose mission would be solely environmental policy analysis or keep it as one program within the ETP Slovakia. The fundraising and public relations aspects are major factors in this debate.

Other projects are:

- Book distribution. In 1995, ETP supported the publishing of *Environmental Economics and Policy*, edited by P. Šauer and M. Livingstone. ETP Foundation arranged a presentation of the work in Bratislava (which was attended by 60 people) and in Banská Bystrica, and facilitated its distribution to universities, libraries, and other institutions where it has recognizable academic utility.
- Life cycle analysis. In November 1996, the Center for Environmental Analysis in Kristin Hrádok pri Dečine in cooperation with ETP Slovakia Foundation held an international seminar on Life Cycle Analysis.
- Research project "Business Contribution to Sustainable Development." From August 1996 to December 1997 ETP Slovakia was involved in an international research project initiated by the Center for Nations in Transition at the University of Minnesota. The project was supported by C. S. Mott Foundation and operated in Bulgaria, the Czech Republic, Hungary, Poland, Romania, and Slovakia.
- Community Right To Know. From January to February 1996, in cooperation with the Harvard Institute for International Development and the Ministry of Environment, ETP Slovakia organized two seminars on the proposal for a Law of Access to Environmental Data. Comments and observations from participants at both seminars were applied to the development of the Law of Access to Environmental Data. In autumn of 1997, ETP Slovakia started an 18-month project The Community Right To Know funded by PHARE Partnership Program, the aim of which was to develop the capacity of NGOs to effectively use environmental data access tools at the local level. The project has been conducted in cooperation with the Environmental Partnership in the Czech Republic, Hungary, and Poland, and with WWF. A brochure, *Access to Environmental Information: Guide for Active Citizens on the Road for Accessing Environmental Information at Different Offices and Institutions* was developed and published. It serves many environmental NGOs in finding a way through government red tape.
- Organizing and conducting a conference Toward Sustainable Slovakia. In cooperation with the Society for Sustainable Living, we assisted in organizing conferences throughout Slovakia as part of the campaign Toward Sustainable Slovakia in 1995–96.
- EU Enlargement Project: Increasing Public Awareness and NGO Consciousness of the European Union. The overall goal of the project was to ensure that environmental concerns are properly addressed in the accession process and to prepare the environmental NGO community to be active contributors to this process and beyond. The project consisted of questionnaire survey, information package, web page, and workshops with key stakeholders.

- Decentralization of Forest Management (Management of Natural Resources in National Parks). The aim of this project was to identify ways to improve the management of forest resources in the High Tatra mountain range by promoting benefit sharing, problem solving, and cooperation among local stakeholders. The project was conducted with funding from the Rockefeller Brothers Fund, in cooperation with the World Resources Institute and A-projekt n.o. of Liptovský Hradok. An information profile with developmental options was produced and discussed among local stakeholders.

7.5.8. NGO and Philanthropy Development

In the area of assisting the development of the NGO sector and philanthropy in Slovakia ETP Slovakia has implemented following projects/initiatives:

Conducting and facilitating meetings

- Two-day seminar Educational Needs of Non-governmental Sector in Slovakia in Trenčianske Teplice, February 1997, organized by PDCS;
- Meeting of community initiatives representatives, Trenčianske Teplice, February 1997, organized in cooperation with PDCS;
- Debate of the community initiatives section at the Stupava conference, October 1996, organized in cooperation with PDCS;
- Meeting of community initiatives representatives at the U.S. Peace Corps, May 1996.

Providing consultation in NGO development, facilitating NGO initiatives, and helping establish NGOs

- Association of NGOs of Košice—KAMO, Institute for Public Affairs (1996–97).
- Providing advice and co-designing supportive projects for NGOs such as Children of Slovakia Wish Foundation, Environmental Award Sasakawa Central Europe Fund, Environmental Project, and Project for Community Foundation Support of Open Society Fund, NGO Development Initiative of Foundation for a Civil Society (1995–99).
- Facilitating strategic planning of Sosna Foundation, People and Water NGO, Children of Slovakia Foundation (with PDCS), and Open Society Fund Bratislava (1996–98).
- Facilitating preparatory meeting of community initiatives for the National NGO Conference in Pezinok in October 1997.
- Arranging for the selection of young Slovak NGO leaders for a six-month fellowship of the Civic Leadership Foundation in Minnesota.
- Institutional development consultations and technical assistance for the Children Foundation Slovakia that consisted of needs assessment, training, and on-site consultations for the grantees of the foundation working in the area of environmental education (1998–99).
- Assisting in evaluation of the community organizing project of NDI for the evaluation team from Washington D.C. (1999)
- Establishing a consortium with the Partners for Democratic Change Slovakia to implement projects focused on support of community initiatives (Sept. 1996).

- *Reviving the Spirit of Bratislava*, a project aimed at facilitation of community activities in Bratislava with the long-term goal to facilitate establishment of community foundation in Bratislava (1999).

Analysis and study of NGO development and philanthropy

- An analysis of NGO needs in Eastern Slovakia. The study was conducted for the British Charity Know-How in cooperation with 18 representatives of NGOs from eastern Slovakia.
- Feasibility Study on Possibilities of Developing Community Philanthropy in Slovakia funded by various private foundations such as Rockefeller Brothers Fund, Open Society Fund, and Sasakawa Peace Foundation. The study has been a vital element in stimulating the debate on philanthropy and community foundations in Slovakia. It has been quoted in number of international reports (USAID NGO Sustainability Index Report for 1998, Institute for East-West Studies: Feasibility on Building Endowments, 1998) analyzing the NGO and philanthropy context in Slovakia.

Training for NGOs

- Three courses in the field of project design and management in Eastern Slovakia were organized in cooperation with the Foundation for the Development of Carpathian Euroregion (Feb.–April 1997).
- Effective planning seminars for over 60 participants of 12 NGOs from three areas of the Carpathian Euroregion.
- Designing and delivering four courses in project design and management for the Open Society Institute, New York. These trainings were delivered to 80 staff members of Soros Foundations across Central and Eastern Europe and NIS countries (1996–97).

Corporate Philanthropy Consultations

- Designing and administering an open grant program for one of the mobile telecommunication corporation (Globtel GSM s.c.) to support creative regional development projects worth of \$200,000 in 1999/2000. Providing consultations in designing and formulating a corporate philanthropy policy and corporate philanthropy statement.
- Co-designing and managing the \$2 million USAID funded Indigenous Grant-Making Organization Project Your Land in 1999–2002 to support public participation, third sector sustainability, and advocacy in the consortium with the Ekopolis Foundation of Banská Bystrica (www.tvojazem.sk) through subgrants and technical assistance. ETP's role is in program development and assistance (grant management, technical assistance to grantees). (See Chapter 8.)

The last two items have become the major activities for this program area and will remain central to the work of the Center for Philanthropy and Non-Profit Activities, a department within ETP Slovakia that manages this program area.

8. ETP Success Stories

The ETP program has produced many successes since its inception in 1992. These success stories illustrate the impact of ETP not only on large businesses, local governments, important NGOs, and university, but also on individual participants. ETP has not only changed institutions, it has changed lives. The sections below show the impact of ETP on particular institutions and individuals. Where possible, this has been illustrated with the participants' own words and experiences.

8.1. Environmental Business Management and Administration

A. Pioneering Environmental Business in Hungary

The following section was written by ETP participant Sandor Dioszegi who co-founded an environmental business in Hungary. In his own words he explains the importance of ETP courses.

My name is Sandor Dioszegi. I am 44. I am a mechanical engineer and engineer-economist. From 1989 to 1993 I was the technical assistant manager of DIMED Instrument Techniques Ltd. in Miskolc. The company was privatized in 1993. The branches of the company started to operate as independent enterprises, according to the strategy developed by the former management and approved by the future owners and financing bank. During their operation these enterprises pay rent for the owners, in return for the services and equipment they are using.

Because this business did not exist earlier, we decided to establish an enterprise to deliver environmental services. We relied on our experience in management, our eagerness to learn more about environmental protection, and our readiness to cooperate with experts in the field living in the region. Although the idea was born in the early summer of 1993, we kept postponing its implementation. Fortunately, during that period of hesitation, a notice was published in the local papers, announcing an ETP course called: Financial Management for Small Enterprises of Environmental Protection: Developing a Business Plan and Financial Proposal. I enrolled in the course with one of my co-partners. After a week of hard learning we elaborated the business plan of our future enterprise. We became very enthusiastic, and decided to start the enterprise of which we dreamt. We founded Environmental Protection Service Ltd. on October 1, 1993. Looking back, we know that ETP acted as a catalyst. Without its contribution, the enterprise would have been established later or not at all.

We found ETP training very useful, suitable for broadening our knowledge. We attended as many courses as possible, despite limited time. We also consciously developed our basis of experts. We selected the persons of basic importance in time, and offered them full-time employment. All our collaborators were encouraged to attend ETP courses. One of them became a full-time employee: Erzsebet Rakaczkine Kecskes, who attended two ETP courses: Environmental Auditing and Environmental Liability.

We consider each course very useful, since we could make use of what we learned in practice, and that's the most important thing about a training.

Up to that moment, we have been in business relation with 33 partners, from which 18 returned to our enterprise twice or more. We think that we have won the confidence of our contractors by the quality of our work. It is a great pleasure when a new business partner addresses us referring to former customers who are satisfied with our work. I would also like to emphasize that we work in a region with difficult economic conditions. Our business partners must consider very carefully where they spend their money.

At the present we work with nine enterprises. Our constant presence in these enterprises has resulted significant changes in the environmental condition of our business partners. The repeated controls as well as the training of employees and managers improved their environmental consciousness. Due to audits we performed, the concerned firms have stopped contaminating the environment. Relying on our cooperation, they have destroyed part of their hazardous wastes and minimized costs. Sometimes we feel as if our work is similar to that of religious missionaries, and we are extremely pleased, when we succeed in helping firms to function in a more environmentally sound way.

In addition to helping the environment, we have been successful as a business as well. The company has balanced business activity since its foundation. It clears its accounts immediately or in due time, and it has never had debts toward Social Insurance or the Tax Office. Furthermore, it has not asked for loans for its operation. We employ several people on a regular, full-time basis.

Finally, I have to mention the ETP ECO Business Club, which has regular programs giving the opportunity for further professional training and flow of information. An elderly colleague, a late friend of mine, said once that the most useful part of every meeting is the break, when people have the chance for consulting each other and exchanging experiences. The club was established for such purposes. The programs of ETP also contributed to finding friends among valuable people, both men and women, and I consider that, this fact is as important as our economic achievements.

I am convinced that in our changing world, knowledge is still a good investment. ETP guided us toward it. In addition, the ETP program emphasized an attitude, via the foreign lecturers, that had a strong favorable impact on participants, by forming the firm belief that they can be successful.

B. Polish ETP Trainer Advances in Business

Dr. Tadeusz Klimek, of Promobil S. C. Klimek & Co. in Katowice, participated in several ETP trainings and was also an ETP trainer. He found ETP to be the key to improving his business and making international contacts:

Thanks to ETP training courses, I have learned to formulate documents addressed to Western partners, including Americans, in a way comprehensible for them,

i.e., in a way that they are prepared for and which they expect. It decisively enhanced the efficiency of my communication with Western partners. Thanks to these skills I took part in a competition relating to participation in the USAID program conducted by PIET in the U.S. I passed the tests successfully, took part in a training in the U.S. in 1996, participating in the program that was prepared at my request and concerned mainly with appraisal of machines and technical equipment. After passing exams in Washington and Los Angeles, I was granted the status of a candidate member of the American Society of Appraisers.

In Poland, because of my enhanced skills and specialization in appraisal of machines and technical equipment in conformity with western standards I was appointed to the Silesian Society of Appraisers and I give lectures for appraisers in many societies in Poland. Appraisal of machines and technical equipment became an additional and constantly developing part of my business activity in my company (Promobil S. C. Klimek & Co.).

Due to my knowledge of English, I could take direct advantage of lectures given in English by American lecturers which was an invaluable asset in learning this way specialized vocabulary.

Because I took part in the ETP training courses from 1993 to 1998 and I had living contact with the English language. I have upgraded fluency in my English and since 1996, I work also as an interpreter. Due to my fluency in English, I was hired in September 1998 as a consultant in the company BUDUS SA for contacts with a Belgian investor.

The ETP training courses gave me the knowledge about the negotiating process and enhanced efficiency in achieving goals in talks leading to the conclusion of contracts. The above-mentioned skills allowed me to have a positive impact, for example winning a contract for appraisal of cranes for a French customer in 1997 and another contract for appraisal of a part of a German steelworks in 1998.

The ETP training programs were a basis for a long lasting acquaintance with two lecturers (Veronica Bukowski and Richard Stanton). This acquaintance gave us mutual benefits: I invited them for further lectures in Poland and they send me American materials that I need. We carry on correspondence till today. It was huge benefit and real pleasure to participate in ETP courses.

C. First ETP Business Group formed in Romania

The National Association of Environmental Private Businesses in Romania was the first ETP-inspired business association in Central and Eastern Europe. It has over 100 member firms. More than 30 percent of the members are accredited by the Ministry of the Environment as expert organizations. They represent almost half of the total firms with this certification. The association is also member of the Consultative Committee of the Ministry, a member of the Chamber of Industry and Commerce of Romania, and a member of the National Union of Industry of Romania. It has been present in all representative exhibitions, and their sector niche has become more and more prominent, gaining governmental bids and foreign contracts. Moreover, member businesses have

learned how to win grants, get credits, and make investments. Cooperation among firms has also been fruitful and to the benefit of all parties. Contacts for collaboration have also been established with the Environmental Council of New England (U.S.), and the Canadian Environment Industry Association. The 2001 annual meeting of the association was held in Busteni with 31 participants.

D. Sustaining Success in a Polish Environmental Business

During nine years of ETP activities, participants often described the program's most important impact of as a "change in the way of thinking." Here is an example of such a change and its business implications described by Witold Rosa, co-owner of EZT, in letter about his ETP experience:

I took part in two courses Environmental Audits in Industrial Plants and Management of a Small Company of an Environmental Profile. My partners in EZT participated in Business Logistics and Marketing. These courses were conducted at the beginning of the ETP Program in Poland. At that time, we ran a company that provided cleaning services and we employed a dozen people. We had a "feeling" that the company might develop but we did not believe in success. We saw a lot of obstacles and rather few good sides of our undertaking. There were a lot of barriers to hiring workers. Very often, we were traumatized by a feeling of "self-censorship." Instead of expressing our ideas they were smothered. The effect was that no idea could get off the ground, even one that after minor modifications might be carried out with success.

Then, the ETP training courses came to our aid. The program occurred at just the right time! There were not many companies or similar programs in Poland at that time. We had no business tradition inherited through generations that would help convey good experience in market conditions, particularly in the transformation from a centrally planned (communist) economy into a market economy.

During the training courses we also met trainers who had gone through successes and failures in their life and who have exercised them personally. The fact that they would talk about it was something completely new. Everyone likes to tell stories about success but who likes to speak about his failures and who wants to listen to it? Yet, in this way we learned to avoid pitfalls and seek success. Also the way the classes were conducted was innovative. I know how it is difficult to talk theoretically about practical matters. But to listen to it is even more difficult. It was a breakthrough in ways and methods of teaching. All participants took active part, regardless of age or present position.

Another very important advantage to ETP training was to get to know many new people working in various areas of our economy. Lists of participants were invaluable for us and we have been taking advantage of them ever since. If we took part in any other training program and the organizers did not provide a list of participants, we did it or we encouraged them to do it.

After the ETP courses, we paid more attention to cooperation with our business and social environments. We have established cooperation with Sanders International Inc., and Warsaw and we continue to have contacts with them. We work in corporate organizations and we often sponsor undertakings carried out by others.

In the year 2000, we celebrated the tenth anniversary of our company. Each year, we have increased our turnover by 30–40 percent and we employ around 700 people. Among our customers are such companies as Pepsico, Polish Railways, Commercial Centre M1, Silesian University, and Plus-Discount. Apart from Silesia, we provide services in Radom and Poznań. We have done away many complexes, such as “we won’t be able to do it” or “it won’t be a success,” and the credit for that goes to a large extent to ETP.

We have broken down barriers we had to talking with difficult or prospective customers. But during one of the ETP training courses I realized that my partner in cooperation is not a big company but one person in that company. And my cooperation with that company has to be based on an agreement with him and have to satisfy his expectations. Cooperation between the partners within the company has also improved. Mobilized by this example, we finished our post-graduate studies, each one within the field that is the most interesting for him.

We have taken up new challenges and we tried to operate also in other fields. Protection of property proved to be very promising and profitable and it is at present one of the pillars in our company. We established a new plant that produces abrasive materials and we are developing it. Thanks to ETP, we are built up our company and are thinking about future development and our place in the market.

8.2. Public Participation and Outreach

A. “Your Land” Builds Third Sector in Slovakia

One of the main objective of ETP was to prepare the ICCs to raise funds and organize training and other activities initiated after end of ETP. ETP Slovakia is an excellent example of meeting this objective. One of its most successful new programs is Your Land (Tvoja Zem), a re-granting program developed by ETP Slovakia. Its main goal is to increase participation of citizens in NGO activities and in public policy and community decision making. Your Land is a subgrant program designed to support Slovak NGO activities in four program areas: advocacy; community development and philanthropy; women, minorities, and tolerance; and rural development. The Your Land Grant Program is administered by the consortium of the Ekopolis Foundation and ETP Slovakia. The program will last from 1999 to 2002 and will re-grant approximately \$2,160,000. Primary financial support of \$2 million was provided by USAID. Other private and public donors have also contributed.

Support from this program is given to Slovak non-governmental, nonprofit organizations (civic associations, foundations, nonprofit organizations, associations of physical and legal

persons or citizens initiatives, etc.) that encourage active participation of citizens in public decision making processes. It is expected that projects that receive support will also contribute to the sustainability of the applicant organization and ultimately to the sustainability of the third sector. The project's website is www.tvojazem.sk/eng/index-e.htm (English) or www.tvojazem.sk/index.htm (Slovak).

B. ETP is Inspiration for Success for NGO Founder

Anna Buchta from Bielsko-Biala, the owner of a small environmental business, was inspired by the ETP courses that she took to form a new environmental NGO. She relates how she formed the Center for Environmental Education:

In August 1992, I participated in one of the first meetings organized by USAID, titled Financial Management in Small Environmental Enterprises, led by Dr Victoria M. Mikelonis. At that time, I had run my business already for three years. This three-week training course was the beginning of a process of rapid development for my company.

According to the business plan I prepared during the course, in early 1993 I organized a symposium devoted to raising both domestic and foreign funds for carrying out environmental projects. Participants were chairmen of companies from southern Poland and their employees responsible for environmental matters. ETP considered the symposium a continuation of the acquired knowledge and financed 50 percent of the costs. The symposium had far-reaching repercussions and in the press and in local radio stations that was benefited my company.

It was for me an inspiration to establish in the southern part of Poland Center for Environmental Education. In 1994, the Center was granted the status of a non-public educational entity and it was approved by the Ministry of Environmental Protection. I still run my company and the Center for Environmental Education is considered one of the best educational entities in the environmental field.

Due to my training, I started to believe that this what I am doing is—and the way in which I am doing it—is very good. I have no problems with carrying out marketing and management activities and I do not encounter personal problems, which are sometimes the most difficult ones.

C. Laying the Groundwork for EIA in the Czech Republic

A lack of knowledge about the environmental impact assessment (EIA) process and a lack of practical experience motivated ETP to organize courses in the Czech Republic focused on practical explanations and applications of the whole process. Two ETP courses on this topic were held in Northern Bohemia, one of the most adversely affected regions of the country. As a result of these courses, EIA was incorporated into the curriculum of the Environmental Faculty at Ustí nad Labem. The students are now being trained using the teaching methods and materials developed for the ETP courses. Perhaps the most significant follow-up activity has been the establishment of the North Bohemian

Center ETP for EIA. The aims of the Center are to assist experts, developers, and the public to make the EIA process more effective.

The Center is an open organization that cooperates with similar organizations and institutions in the Czech Republic, other European countries and the U.S. It shares its information databases and experiences with EIA, exchanges experienced facilitators, independently verifies EIA methods, and provides other services to Central and East European countries involved in ETP.

As a result of ETP training on EIA, a new book has been published that will serve as a comprehensive guide to Czech EIA procedures, comparing them with international EIA practice. This publication, *Principles of EIA*, is being published as a part of ETP follow-up activities. The book contains explanations of general EIA systems, understandable analysis of the Czech EIA Act, and proposals for "good quality" EIA practice. Its first run of 2,000 copies will be distributed among relevant governmental authorities, NGOs, major investors, secondary schools, and universities. The book has been prepared by the Public Environmental Assessment Center.

This publication is a response to the 1992 Czech EIA Act. This act was supposed to be the country's most important environmental law passed after 1980 because it was intended to have a strong sociological impact in the form of public participation in addition to its environmental aspects.

The act was passed in a great time changes, and therefore, has some important gaps which greatly decrease the effectiveness of the EIA process. Further obstacles to successful implementation of the act lay in the absolute lack of experience with public participation. For these reasons, the actual implementation of the EIA Act in the Czech Republic has been far from ideal. This provides a challenge to training government representatives, environmental NGOs, and entrepreneurs. The training describes internationally recognized "good EIA practice," emphasizes the positive aspects of the Czech EIA Act and promotes voluntary use of good EIA practices in the Czech Republic. The first training was provided by two ETP seminars titled EIA: Improving Development Decisions with Environmental Information offered by the Center for International Environmental Law in Washington, D.C. The training was strongly appreciated by the participants, who proposed a large number of follow-up activities, including the publication of this book.

The *Principles of EIA* is but one publication of the Public Environmental Center (PEAC). PEAC is a professional non-profit organization which aims at promoting public participation in EIA and transparent and fully independent EIA review process. PEAC provides transparent and high quality review of EIS while it focuses on three areas: the methodology of EIA, techniques for public participation, and the establishment of Local EIA Review Panels.

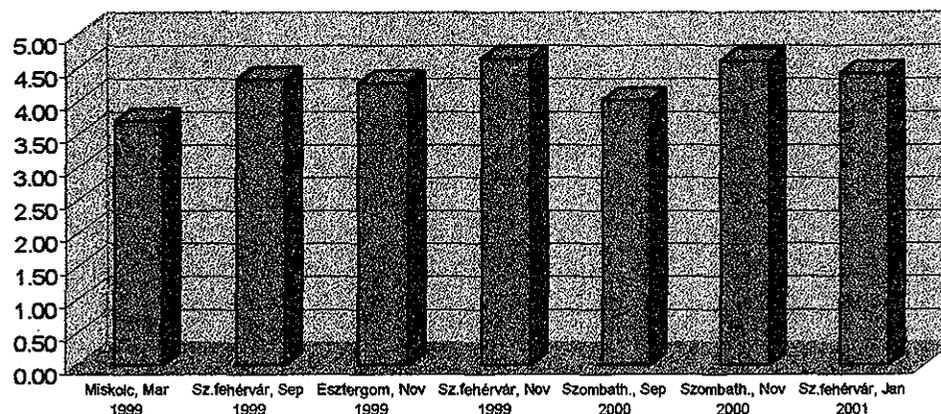
One of the most visible activities of PEAC is publication of the Czech EIA Newsletter which is distributed to 800 subscribers, most of whom are governmental bodies and EIA

experts. PEAC also maintains an extensive EIA library which is probably one of the most comprehensive sources of EIA-related information in the CEE region.

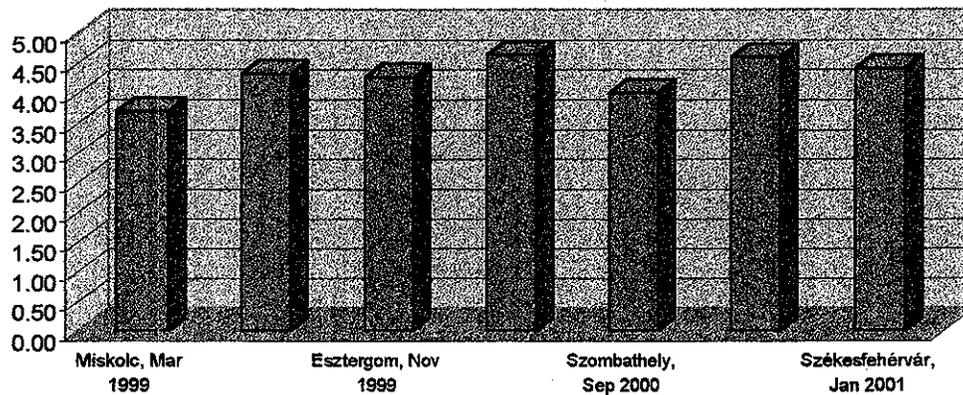
D. ETP Successor Picks up the Torch of Environmental Training

Center for Environmental Studies (CES), based in Budapest, was registered in 1993 and since the end of end of USAID has carried forward the ETP mission in Hungary. Between 1999 and 2001, CES delivered a series of hazardous waste management training courses. The six courses acquainted participants with: legal regulations pertaining to hazardous wastes both in Hungary and the European Union, expected modifications to regulations, and the knowledge and skills necessary for preparing a hazardous waste management plan. The courses were attended by 118 people, including managers of SMEs, environmental experts of larger polluting enterprises, environmental businesses providing hazardous waste disposal services for polluting industries, and officers of environmental inspectorates. The training helped participating business organizations achieve effective waste minimization, create effective management, and meet regulatory requirements. They also facilitated the partnership of businesses and administrative organizations in resolving the serious environmental problem caused by hazardous waste. The training courses were well received. The average overall satisfaction rate was 4.2 measured on a 1–5 scale. (Overall satisfaction included satisfaction with the knowledge, experienced gained from the training, the training materials, the trainers, and logistics.) The charts below show results of the satisfaction survey.

**Evaluation
of the Satisfaction of Participants with the Hazardous Waste
Management Training Courses (measured on a 1-5 scale)**



Evaluation
of the Overall Satisfaction of Participants with the Hazardous Waste
Management Training Courses (measured on a 1-5 scale)



As the results of the surveys show, it is clear that CES training has been well received and is of high quality. This demonstrates that the necessary skills and ideas imparted by ETP training have taken root and that the skill transfer has been a success.

E. Yantra River Basin Council Provides Model for Regional Cooperation

One of ETP Bulgaria's greatest achievements was establishing the Yantra River Basin Council (YRBC) in 1994, the first river basin council in Bulgaria and in the first in Central and Eastern Europe. Its purpose was to introduce a new regional approach to water management in the process of decentralization, restructuring of water companies, establishment of a market economy, and creation of new, democratic governance of the Bulgarian society. The YRBC pilot project serves as a model for defining the functions, place, structure and statute of the future basin councils in Bulgaria. The actions of the council serve to speed up the policy reform on water issues and the adoption of the new Water Law. Emphasis is made on the local identification and priority setting in water management and environmental problems and trying to solve them through public participation at regional and local level rather than at the national level.

The experience of YRBC has been of national importance since it contributed to the adoption of the National Strategy for Water Management in Bulgaria, and the new Water Law (July 1999). The YRBC serves as a model for defining the functions of basin councils in Bulgaria (four in number by law), their rights and obligations, statutes, structures, and their relationship with the national government.

River basin management is a new approach that has been successfully implemented in developed countries. It looks at the whole basin as an integrated system and is regarded as the best way of attaining the goals of sustainable development. This requires effort on

the part of all interested institutions and stakeholders to work together as partners in water management.

Under the initiative of the Ministry of Environment of Bulgaria, ETP organized the first workshop in River Basin Management in September 1993 with 31 participants representing companies, NGOs, municipalities, and regional and national government institutions. The participants at that workshop recommended that a pilot river basin council for the Yantra River be set up.

On January 20, 1994 an agreement for coordinating the establishment and development of YBRC was signed between ETP, the Ministry of Environment, the Lovech District Governor, and the National Water Council. In the following years after the establishment of the YBRC, ETP, through the ETP Foundation, organized training activities, meetings, public hearings to increase the visibility and efficiency of the YBRC.

The ETP Foundation offered continuous support for YBRC with program and policy recommendations. With ISC, the Ministry of Environment, and the National Water Council, YBRC developed projects that led to the adoption of new environmental policies related to water management and public participation in the process:

- Through enactment of the Water Law, YBRC has institutionalized the notion of water quality being managed by council member organizations;
- Development of improved water quality information in the Yantra region;
- Development of a public information program;
- Development of a proposal for streambed restoration.

Key impacts of YBRC include:

- Introduction of the river basin concept into the new draft water law as a democratic form of natural resource management;
- Codification of democratic rules of governance as a model for other river basin councils;
- Organization of two public discussions on the draft water law in support of the establishment of river basin councils as decentralized regional bodies for water resource management;
- Support for several municipalities and industrial companies in the region by the River Basin Council;
- Grants and interest-free loans from the National Fund for Environmental Protection for environmentally-friendly restructuring of their companies;
- Raising \$4.5 million for industrial projects in the Yantra River basin in the last two years.

As a follow-up to this activity, ETP Foundation recently published a policy-oriented book: *Learning from the Three-Year Experience of the Yantra River Basin Council*. The publication was distributed to participants in the public discussion on the draft water law held on November 6, 1998. More than 70 copies were given to national government officials, local authorities, NGOs, and scientific institutions. A large number of the books

were distributed to the Environmental Parliamentary Commission, the ministries, and municipal officials.

After the adoption of the Water Law in 1999 it was important to start preparation of the ordinances and regulations governing water resource management in Bulgaria and the role of river basin councils in particular. The problems to be solved are:

- How will the river basin management be implemented?
- Which are the most appropriate management structures to be applied?
- How to apply the polluter-pays principle and user-pays principle in the most efficient way?

YBRC will play an important role in helping Bulgarians from all sectors find answers to these problems.

8.3. Environmental Policy and Management

A. Creating Jobs in Gliwice

In Spring 1996 a contract was signed between General Motors Co. and the City of Gliwice that resulted in GM building a factory in Gliwice employing 10,000 people. The value of this investment in the first three years was \$450 million. The final investment will be \$600 million. Fortunately for Gliwice, an ETP alumnus who established a private consulting firm played a significant role in this important success. Wojciech Napierala, a graduate of five ETP training courses and later an ETP trainer himself, as a director of Gliwice Economic Development Agency, was one of the most important players who contributed to this agreement. Napierala convinced the authorities of Gliwice that the investment in the gmina was realistic. Next, on request from the city administration, he prepared an offer submitted by the city to GM. He also prepared detailed economic analyses necessary for future negotiations with GM and played a crucial role in convincing the leadership of GM that Gliwice was the best site for their investment. Napierala was also an active participant in negotiations on behalf of Gliwice with environmental NGOs that opposed the building of the plant. He made effective negotiations that lead to a compromise that was satisfactory for both parties. In a letter to ETP, Napierala wrote that his success in this matter owes to great deal to the knowledge gained in ETP courses.

B. Romanian City Becomes a Waste-Management Model in Central and Eastern Europe

Topoloveni is a small locality of about only 11,000 people in Argeş County. Its economic existence rests mainly on agriculture, mostly individual ownership, and little bit on public (commerce) services; industry employs only about 1,000 workers. Families live in country houses and in blocks of apartments. It is located in a small hilly area in the Argeş River Basin, along the Topoloveni River, a tributary to the Argeş River.

Only a handful of people from Topoloveni attended ETP classes (the mayor, vice-mayor, three women from city hall and the local school, and one representative from the biggest employer, an auto spare parts factory, now closed). Nevertheless, all were very enthusiastic, proud of their locality, and determined to show that Topoloveni could make a difference. They attended ETP course on Strategic Planning, Public Awareness and Involvement, Use of Environmental Information in Effective Management, Environmental Education for Youth, and Public Environmental Information. Besides being represented by these progressive and action-oriented people, the community had also the good fortune of being under the governance of an extremely dynamic and committed director of the local environmental protection agency, Ms. Anca Albu.

In this general context, these ETP attendees identified themselves as initiators of a local community environmental program for urban waste management. With support from the city government and the involvement of school children, they developed activities to increase public awareness of and involvement in waste reduction, separate collection, and recycling. They launched public fairs, celebrations, festivals, and contests with the aim of getting public's attention and support to improve waste management in their town. They built up the public's desire for a change of attitude and behavior toward environmental concerns, recycling (to save resources), and a cleaner look of their surroundings. Leaflets, guides, brochures were created for and distributed. Rewards were given to those who showed good knowledge, interest, or behavior regarding waste management.

The most successful outcomes of this effort were two-fold. First, the city initiated and carried out a feasibility study on making their land fill eco-friendly. The study was promoted to the government and approved by a governmental decision (ordinance). Because of limited funds, however, the investment was not started. The study was conducted with support from the local environmental protection agency (through its ETP attendees) and a private environmental consulting company created by an ETP attendee, Ms. Doina Sofrone from the capital city of the Argeş county, Piteşti. This entrepreneurial spirit emerged thanks to ETP courses. (The company is also a member of ANFPM, see above.) The relationship between these parties emerged within the ETP framework and has remained strong. This is the most impressive and strongest effect of ETP: creating bonds, solid relationships, and networking among participants.

Although the land fill project failed to find investment, it was replaced by an alternative: ten neighboring communities organized themselves into a consortium (represented by the Local Councils), with 55,000 inhabitants (and their respective garbage), to access funds from the EU (ISPA projects), in order to set up a collective waste deposit where waste can be collected, separated, and sorted to be transported to Piteşti and processed for recycling.

The second major outcome began at the local school where a program of separate waste collection was organized. Besides the impact of students' involvement in the process, it proved educational for students as well. They were given responsibility for such task as keeping records, controlling waste, and reporting on performance. Based on what they collected, the collecting company decided how much to reduce the schools' charges for

the waste disposal. This created savings for the schools. Not only did this provide an important lesson in environmental economics for the students, the savings went into school maintenance and improvements in their classes. Since the recycling company was better supplied with resources it put some of its profits into toys and stationery, which were given to pupils as prizes. The message that the pupils got from the school was brought to their families, too. Thus, some of them began to care about recycling. Thus, an incipient change in behavior began to emerge.

The Topoloveni project had several other outcomes and impacts as well:

- A new ferrous metals recycling company appeared on the market. The state owned one is accompanied now by a private one, Pro-Remat.
- Classes in school have been introduced with subjects related to the waste issues; written materials were distributed on this topic; special round tables and events have been organized with this aim.
- City Hall is in the process of elaborating a strategy of household waste management as a policy tool to apply and to also try fundraising for necessary investments.
- The Local Consortium, with input from the environmental protection agency, had distributed questionnaires to the mayors of the ten member communities to collect data about their communities' characteristics with respect to solid waste.
- Topoloveni approached the EU delegation for European integration for assistance in developing sister-city relationships with interested communities from other countries.
- The Women's Association (the only local NGO at present) has also taken the initiative to involve block associations in supporting the city's efforts.
- The city also created a Prognosis and Projects Department in charge of community programs and proposal writing, with the SAPARD and Ecolinks funds as their target.

All and all, Topoloveni is a small community confronted with severe limitations. They still need to learn more in the area of environmental management and citizen participation. Nevertheless, a seed has been planted there that is yielding rewarding results, because people want to fight poverty, backwardness, and marginalization. Even though ETP had only a few participants from Topoloveni, the ETP philosophy and message has been an exceptional success in this community.

C. Promoting Women in the Public Sector

Maria Rogocz, Mayor of Kalety, was one of the first women mayors of a Silesian gmina. ETP training gave her the confidence and the skills to advance in local government and make a difference for her community. She explains:

ETP training courses allowed me to achieve a huge professional success. In spite of the fact that I worked for a long time in public administration, I was timid, full of complexes, without self-confidence, and without confidence in my arguments.

I blushed from merely thinking that I could speak to a crowd. I used my knowledge for my own needs, possibly helping somebody when he asked me to do it.

I admired those ones who were able "to sell" their skills. And then, during my participation in the courses organized by you, I met a lot of wonderful people who held sometimes prominent positions. It allowed me to discover that I am not any worse than they—in our discussions and debates. The anonymity, as I hardly had known anybody, allowed me to express my views without fear that somebody would jeer at them or would tell somebody who knows me in another group of people about it.

The training course titled Leadership for the Common Good made me aware that leadership it is not merely giving orders but that it means also psychological influence on employees and that in order to achieve a desired effect—different methods should be applied to different persons.

Training in public relations gave me a wide view on ways of presenting facts, events, advertising etc., in a different way for the press and another way for radio or TV, in general—it taught me how to deal with journalists. My statements became more fluent, felicitous, and elegant.

This course, apart from many other positive sides, freed my literary skills that I use now for publishing our own, municipal, local newspaper.

This what I consider as my professional success, it is undoubtedly the fact that among 166 mayors from the Silesian Province, I am one of 8 women who hold this position.

I have been mayor for a year and it encouraged me because I had to compete for this position with men who were convinced that only they are suitable for the job.

The experiences I gained during your training courses were much more valuable than anything else I have gained till now. It gave me self-assurance, it helped me to overcome some paradigms and to believe that gender is not an obstacle in our way to professional career.

D. Creating Sustainable Development in Slovak Towns

ETP Slovakia has pioneered an impressive array of programs designed to teach and assist local municipalities and associations of towns and villages to create sustainable development plans. In so doing ETP Slovakia has put into practice key elements learned during the ETP process: cooperation across sectors and with other stakeholders, investing in human capital, and involving and building on local expertise.

The Mobilization of Citizens: Support for Integrated Development of the Rural Region of Vranov nad Topľou

Implemented in cooperation with the Association of Towns and Villages of the Vranov Region and the NGO People and Water, this two-year project aims to improve the quality of life of people living in the rural region of Vranov nad Topľou through the mobilization of social capital and the creation of suitable conditions for the development of this region. Activities are focused on four main areas: creating an integrated planning process for regional development, improving the economic situation in the region through the support of entrepreneurial activities, building the social capital of the region, and increasing the involvement of the Romani people in public affairs. The project is funded by the Carpathian Foundation.

Sustainable Community Development in Middle Spiš

This pilot project is being executed by the Office of Government of the Slovak Republic, implemented by ETP Slovakia, and supported financially and institutionally by the UN Development Program. The aim of the three-year project is to strengthen social and economic development in the Middle Spiš region, namely in the Gelnica, Levoca and Spišská Nová Ves districts. Project activities will include establishment of a Community Fund offering grants and microcredit and the social mobilization of disadvantaged people in the region through the creation of community organizations and entrepreneurial activities. The project is based on strong cooperation with local, regional, and national government offices to ensure integration at the policy level. ETP recently opened a new office in Spišská Nová Ves for the purposes of this project, although the Košice office will still be responsible for project management.

Sustainable Cities Program

This project aims to contribute to the sustainable development of cities and towns in Slovakia by creating mechanisms for implementing sustainable principles in the decision-making process in the selected Slovak cities, with an emphasis on increasing public participation in the decision-making process. It also aims to establish a sustainable cities and towns network in Slovakia. The program consists of several subprojects/training activities:

Indicators of Sustainable Development

The goal of this national project conducted in co-operation with two pilot municipalities was to select, develop indicators of sustainable development so that pilot municipalities would be able to monitor trends in city environmental, economic, and social development.

How to Involve the Public in the Sustainable Development of a City

This project (carried out in four Slovak cities: Kežmarok, Humenné, Stará Ľubovňa and Zvolen) facilitates the process of achieving sustainable change at the local level by providing city stakeholders with tools, techniques, and consultation for improving municipal management through preparation of a participatory sustainable development strategy. Eventually, the project will expand into two more cities (Kremnica and Detva).

EMS: Implementing Environmental Management Systems, ISO 14001 at the Local Level

This Slovak-American multi-partnership project involves ETP Slovakia, four Slovak cities, the Union of Towns, Cities and Villages of the Slovak Republic, and Barr Engineering Ltd., Minn., working together to achieve the goal of systematically improving municipal environmental management through implementing international standard ISO 14001 in local government management.

E. Mayor Learns Consensus Building

Mayor Henryk Swoboda attended ETP PDS training for local government leaders at University of Silesia and relates how the skills he learned proved important.

After more than a year since I graduated from the post-graduate course Restructuring of Municipal Management for Regional Sustainable Development . . . a lot of events took place that allowed me to take advantage of the skills I acquired during the studies, with quite good effect.

In 1998, we had municipal elections in which I ran for the office and I was elected as mayor and member of the County Council. Election to the County Council was particularly difficult as it was done through direct voting. Inhabitants of my constituency had a dozen candidates and they could only vote for one. When I was preparing for the election, I took advantage of the principles that we exercised with Prof. Piotr Przytula and I received almost 45 percent.

Another important task has been the reform of the educational system. The task laid down for our municipality by the Ministry of Education was particularly difficult as there was no good solution and one might expect social unrest. Thanks to what I learned from Profs. Charles Fin and Piotr Przytula, I brought several important groups [of stakeholders] into the process of establishing a new network of primary and high schools—headmasters, teachers, parents, councilors, and priests. As a result, we worked out two versions of a school network—one for the immediate need and the other one as a target. At the Municipal Council, meeting there was no discussion, the draft resolution was read and unanimously adopted.

In spite of obvious shortcomings of the adopted solution, there was no protest as everybody was sure that the adopted solution was the best one possible.

In my day-to-day work, the knowledge about negotiations and solving conflicts (provided by Prof. Tom Fiutak) was invaluable. It allows me not only to negotiate contracts in a more advantageous way and to find a way out of very difficult situations, but it also helps me understand real problems with which people come to me and to solve them.

The last point, which is the most essential for me is that due to lessons taught by Prof. Vickie Mikelonis, I have discovered what is most important for me and my place in professional life. In summary, I would like to say that ETP PDS studies organized are exceptionally useful and purposeful.

8.4. Cross-Sectoral and Cross-Border Cooperation

A. ETP-I Builds Cross Border Ties through the EMS/EMAS Project

To further sustain the mission of ETP, six ETP successor organizations from Bulgaria, Czech Republic, Hungary, Poland, Romania, and Slovakia came together to form ETP International (ETP-I), a consortium designed to implement the ETP mission in cross-border and regional settings (see also Appendix 12.1). ETP-I took several initiatives to develop project proposals over last few years. One of the most successful was to form the project Environmental-Management and Audit Scheme (EMAS) for Central and East European Municipalities as a Tool for Local Agenda 21. The goal of the project was to promote continuous improvement in sustainable development in local communities dedicated to the Local Agenda 21 Process. Coordinated by Center for Environmental Studies in Budapest, EMAS was an ambitious attempt to introduce environmental management systems (EMS) into municipalities. Altogether, the program gave 16 trainings to 278 participants. The six pilot cities, Campulung Muscel (Romania), Gabrovo (Bulgaria), Kladno (Czech Republic), Miskolc (Hungary), Puchów (Poland), and Spišská Nová Ves (Slovakia) have made significant progress in improving their environmental performance and four of the cities have adopted public statements of environmental principles as it relates to city governance. The experiment proved the ways local implementation may take shape. Agenda 21 was proposed as an international action plan for environment protection in 1992, at the United Nations Conference on Environment and Development (UNCED) that took place in Rio de Janeiro. Chapter 28 of Agenda 21 includes the mandates for local authorities to prepare "Local Agenda 21." This is a framework for local governments worldwide to engage in implementing the outcomes of UNCED. A key element in Local Agenda 21 planning is the consultation with community groups, NGOs, business, churches, and government agencies, in order to create a shared vision and to identify proposals and priorities for action.

Implementation of the project started in February 1998 and concluded in 1999. It provided a framework for the work of six coordinating organizations from six Central and Eastern European countries, local governments of 6 pilot cities, 16 environmental NGOs, local and regional environmental authorities, academic institutions, businesses, schools, youth clubs, scientific organizations, and individual experts. It gave additional momentum to the ongoing Local Agenda 21 projects of the six pilot cities. The project also helped them improve the effectiveness and efficiency of their environmental management, meet their legal obligations related to the development of local environmental policies and action plans, and provide information on the quality of the natural environment to the public. The project has promoted the success of two pilot communities, Spišská Nová Ves and Miskolc, in the competition for "The City toward EU Compliance Award." In the competition, Spišská Nová Ves was awarded the EU compliance award and Miskolc received a special award for its achievements in water management. It has also resulted in concrete environmental investment projects, and effected new city ordinances related to environmental protection.

The project also contributed to the strengthening of local self-governments and public participation in local public affairs, and thus facilitated local democracy. In addition, it strengthened the partnership of the six cooperating partner NGOs.

The Hungarian part of the project has been continued within the framework of the Cooperation for Introducing EMAS project, with the support of the EU PHARE and ECOS OVERTURE Programs in partnership with Greek and English partners. The project builds on the results of the previous EMAS project. CES continues to assist the municipality of Miskolc (as well as a major municipal company, the Miskolc Transport Company) to elaborate further stages and introduce EMAS. Thanks to these projects, Miskolc will be the first Hungarian municipality to adopt an environmental management system. The project will be concluded early 2002.

In a letter, Sorin Buta, Mayor of Campulung Muscel, the Romanian pilot city, wrote about the effect of this post-ETP program: "Following ETP Romania Foundation's interactions in our city and on the assistance provided to our municipal stakeholders, we had the opportunity to learn about new approaches in community management and the new demands and responsibilities at this level concerning environmental aspects and global problems, as well as to find out about environmentally sound governing principals, tools, and instruments."

The mayor of Miskolc, Hungary, Tamas Kobold, wrote that the project "provided a framework for governmental and non-governmental institutions and interested individuals to collaborate in a systematic process for the environmental improvement of the City of Miskolc. As a result of this project, a new local environmental policy and action program has been signed."

9. ETP Post-Diploma Studies

9.1. Overview and Background

One of the ETP activities that had the greatest impact was the introduction of Post-Diploma Studies (PDS) in Environmentally Friendly Restructuring of Industries in five of the six target countries. Given that heavy industry in the region was the major cause of environmental problems and a major handicap to economic sustainability, the need for a program that would contribute to environmental and economic restructuring through investment in human capital was obvious.

During the third and fourth years of ETP, the management of the project approached several Central and East European universities, mostly technical schools, to explore opportunities to initiate PDS programs focusing on environmental aspects of restructuring polluting industries. There was a need to focus on the institutionalization of short environmental and business training courses in the form of a PDS program that could be offered by Central and East European ETP partners after the end of the project, which was originally envisioned for 1997. After intensive preparation during winter and spring of 1994, a pilot PDS program was launched in Poland in fall 1994. The program, named Post-Diploma Studies in Environmentally Friendly Restructuring of Heavy Industry, was organized in collaboration with Silesian Technical University (STU, currently Silesian University of Technology). This activity was jointly designed and organized with the Polish partner and in collaboration with local business representatives, NGOs, and regional authorities.

The Polish PDS program met with a great deal of enthusiasm and support in the region. Based on its success, and in response to requests from other Central and East European countries, similar PDS programs were initiated in Bulgaria, Hungary, and Slovakia in 1995. A year later, in 1996, Romania joined the PDS "club." One year later, in 1997, a second Polish ETP PDS program was initiated at the University of Silesia in Katowice capitalizing the experience of all previous offerings of PDS in Poland and abroad. This program was addressed exclusively to the public sector. The Czech Technical University in Ostrava also requested a PDS program, but USAID did not offer any new funding for such an activity.

ETP PDS is a form of post-graduate studies in economic, managerial, and technological restructuring directed toward upper-level managers of the region's heavy industries as well as for interested representatives of local and regional government. The curriculum consists of 220–40 hours of instruction in business management and economics, technology, and the environment. It provides academic instruction that is both theoretical and applied. Participants in the program have been primarily chief executive officers and high-level professionals with solid technical education (usually a master's degrees in engineering) and extensive experience in heavy industry. By training these individuals to prepare for competitive business planning and economic change, PDS has produced people prepared to act as agents of change in their industries and communities.

Based on a common model, each university designed slightly different curricula and gave their programs different names to better address country and regional needs. For example, at Varna

Economic University, the PDS program was called Environmental Business Management; at the University of Miskolc the program was titled PDS in Environmental Management; in Romania at the Technical University of Cluj-Napoca: PDS in Eco-Management; and at Technical University of Košice the title was PDS in Strategic Management for Restructuring and Innovative Projects. Although the titles differed from country to country, the quality requirements for PDS programs and their graduates were in principle the same.

The PDS program was designed to build its sustainability through internships at the University of Minnesota and specific training courses for the local trainers (over 20 Central and Eastern European faculty participated in these internships), textbook publication, and a minimum of 50 percent up-front commitment of local universities to cover the costs of PDS.

In order to meet the goals of ETP, PDS had to produce visible outcomes and impacts. Central and East European academic partners were obligated to continue impact monitoring and reporting to University of Minnesota. This way, the ETP was able to make a precise inventory of program outcomes and impact.

Since the beginning of ETP PDS, there have been 18 offerings of this environmental program in five countries for the total over 450 participants. The graduates of PDS recruited from business and public sectors are usually key decisionmakers in their organizations. During their studies each participant conducted a practical field research project related to their organizations. The final findings were elaborated in a form of a PDS thesis, usually oriented toward solving practical problems of their organizations and/or region. The graduates from four Central and East European countries who completed their studies and defended their theses, have been involved in elaboration over 440 field projects (some were thesis prepared as joint projects of two participants) oriented on:

Company restructuring programs, analysis and/or evaluation	125
Environmental audits and protection or prevention plans	62
Environmental impact assessment plans	49
Analysis and programs for regional or local/municipal development	47
Waste management plans	30
Strategic plans	29
Environmental audits	28
Environmental management systems	28
Energy audits and conservation plans	24
Other environmental and management oriented topics	20
Marketing plans	12
Business plans	10

Thus the project has contributed to the environmentally sound restructuring of Central and East European economies. A rough assessment of ecologically friendly investments generated by the PDS' 1994–2000 graduates is over U.S. \$1.3 billion in both business and public sectors. An additional impact of this program has been a growing interest in establishment of PDS programs in non-ETP transition countries elsewhere in Central and Eastern Europe and the countries of the

former Soviet Union. For example, Ukrainian universities partnering with the Consortium for Enhancement of Ukrainian Management Education (CEUME) have expressed interest in developing their own PDS program.

9.2. PDS in Bulgaria

PDS in Bulgaria was conducted at Varna Economic University in 1996 under the title Post Diploma Studies in Environmental Business Management. The class consisted of 17 participants. Participants were drawn from large- and medium-sized firms. PDS courses were not offered in subsequent years due economic problems in Bulgaria. Despite this, PDS had wide-ranging effects among Bulgarian participants. They include:

- **Changes in attitude.** Participants showed a change in their way of thinking. Students with technical education began to think as managers and see problems not only from a technical standpoint but from economic and environmental points of view. Students from economics backgrounds learned to see problems from a technical standpoint as well.
- **Dissemination of knowledge.** Participants wrote on thesis topic approved by their companies' directors who also had to review the theses and their potential usefulness. This caused directors to become acquainted with environmental problems, expand knowledge, and assess the economic importance of environmental projects. Students engaged colleagues during the thesis writing process.
- **Networking.** PDS graduates have formed a PDS Graduates Club. Former participants have forum for communication and building business contacts.
- **New teaching methods.** American lecturers introduced interactive teaching methods that were met with enthusiasm and duplicated by Bulgarian faculty.

PDS graduates from Bulgaria reported the following impacts from their businesses:

- A sugar factory in Gorna Oryahovitsa received a \$2 million credit line for a waste water treatment plant.
- Two leather factories from the Yantra River Basin received a total of \$2 million in grants from the government of Denmark for reconstruction of the tanneries on an environmentally friendly basis.
- The Prima Company in Poliski Trambesh, a producer of vegetable oil, received a \$500,000 interest-free loan from the National Fund for Environmental Protection to build an industrial wastewater treatment plant.
- Several companies recorded an increase in profits, a decline in losses, a stabilization of losses, or an increase in sales.

The PDS program had the following outcomes:

- 19 theses were prepared on environmental performance of companies;
- 19 analyses and evaluations were presented;
- 12 environmental projects and programs were presented;
- 1 strategic plan, 4 business plans, and 2 marketing plans were developed;
- 17 environmental audits were conducted;

- 15 environmental impact assessments were completed;
- 5 environmental projects were undertaken.

9.3. PDS in Hungary

The joint PDS program Environmentally Sound Restructuring of Heavy Industry at University of Miskolc, Hungary, has been running since 1995. Three years later, it was the first PDS program to reach financial sustainability. The main goal of the project is to spread a new way of thinking and disseminate the practical knowledge of environmental management. The results have been impressive. ETP courses facilitated technical, environmental, economic, and institutional changes, all contributing to the successful operation of private companies. These contributions include:

- The amount of hazardous waste decreased at 23 organizations.
- Cleaner, more effective technologies have been introduced at 20 organizations.
- Use of hazardous materials decreased at 28 organizations.
- Noise emission has been decreased at 14 companies.
- Protection of wildlife protection improved at 9 organizations.
- The use of industrial water decreased at 11 companies.
- Emission of polluted water decreased at 12 firms.
- Energy consumption decreased at 18 firms.
- Lower cost have been recorded in 28 organizations due to more effective technologies.
- Decreasing logistics costs have been reported by one of the companies.
- Quality improvement was recorded at all organizations. Some companies have already received ISO certifications and the rest are preparing for it.

The PDS on environmental management in Miskolc is built into an already existing “engineer-manager” training project of the university. This program is directed to practitioners with a technical background, mainly middle and top managers of local and regional firms in order to provide them training in economics and management. The program takes four semesters. According to Hungarian regulations, this duration is required in order to issue a university diploma. As the program of ETP PDS takes only two semesters, the contracting parties agreed to integrate it into the second and third semester of the broader training project, and a separate certificate is issued for those who have successfully finished these semesters and defended their final theses. As a result of this combination, a high level of the training quality is assured, and the human, as well as financial resources of the university can be efficiently allocated. The modules of the program have been taught by partly Hungarian lecturers (university staff and practitioners) and American or other Central and East European lecturers from other PDS participant countries (minimum 30 percent).

From 1996 to 2000, 64 participants finished the PDS on environmental management in Miskolc (six of whom were women). Among the participants a wide spectrum of firms were represented from small and middle enterprises to the leading companies of the region. It was not unusual that cohort of participants to be dominated by one or two big firms, mixed with participants from other companies. A large number of participants have represented, for example, the Northeast Hungarian regional electricity distributor ÉMÁSZ; one of the big electronic appliances producer

in east Hungary, Electrolux; one of the biggest chemical companies in Hungary, TVK; but firms like the Hungarian Post and the regional water supplier company have been present as well.

The participants have been in general very satisfied with the program of the PDS, they have found it applicable in their future working practice. A key element to this satisfaction is that the majority of participants had final theses that were practical cases related to the existing environmental problems and projects of their companies. Although the nominal results of these are difficult to assess, the companies represented in the program have gone through a big change, especially in their thinking and attitude toward environmental issues. In addition to these, the project theses have directly resulted in a great reduction in harmful emissions and the use of cleaner technologies.

In summary, the American-Hungarian cooperation in PDS on environmental management have been very successful, and has been worth continuing after the completion of U.S. financial support.

9.4. PDS in Poland

A major part of ETP Poland's success was its development of Post-Diploma Studies (PDS). PDS was offered for two main audiences: business leaders and local government officials. As the forerunner of PDS programs in other ETP countries, Poland provided the model for conducting PDS. The first program at Silesian Technical University (STU) began in the fall of 1994 under the title of Post-Diploma Studies in Environmentally Friendly Restructuring of Heavy Industry. Many PDS offerings were geared to specific problem industries and went titled such as Environmentally Friendly Restructuring of the Metallurgical Industry or Environmentally Friendly Restructuring at Polish Non-Ferrous Metals Companies. From 1994 to 1999, PDS at STU served 126 participants. Now a self-sustaining program, the university's PDS program graduated 16 participants in 2000 and another 20 will graduate in 2001.

Based on participant opinions and the impact of the PDS program, the organization of PDS for top level managers of the largest industrial plants was the most important ETP contribution to the business sector. The study Environment Friendly Restructuring of Heavy Industry was established in 1994 at STU in Katowice in cooperation with the University of Minnesota.

The aim of the initiative was to support the ongoing process of restructuring in Polish industry by training top level managers. During first three years ETP's work in southern Poland focused mainly on the business sector, providing an opportunity to observe not only the development of private firms but also the progress and problems of restructuring and privatization of state-owned industries. ETP facilitated restructuring by training top-level managers (directors, presidents, and other executives). The courses were designed to support environmentally friendly restructuring of the main branches of Polish industry. In 1994 STU created a special PDS Center equipped with all necessary educational technologies.

Because STU wanted a high-quality program, ETP invited a group of American and Polish professors to teach courses, which resulted in further cooperation between STU and partner universities. The most important partner institutions were: University of Minnesota (an initiator and co-organizer of PDS), University of Pittsburgh, Oregon State University, University of Southern Indiana, Saint Cloud State University, Institut Arbeit und Technik, Silesian Technical University, University of Warsaw, Warsaw School of Economics, University of Silesia, Foundation of Energy Efficiency, Westinghouse Electric Co., and L'Ecole des Mines des Saint Etienne.

Since 1994 six runs of PDS have been completed in Poland and the seventh cohort is preparing for final diploma exams, but there is still a waiting list of business people who seek develop their management skills through PDS. This innovative initiative and unique PDS curriculum of the studies was successfully duplicated in other CEE countries. A total of 189 participants participated in PDS studies for business. All were senior managers of the biggest Polish companies: 38 (26.8 percent) were presidents or general directors, 94 (66.2 percent) were directors or board members, and the remainder were also senior managers. Participants represented 79 of Polish companies. All these companies were also on the list of 150 the most important Polish companies. Many were also on the list of 150 the most harmful for environment. Some companies, like Steelworks "Katowice," "Sendzimir," and "Częstochowa," are the biggest industrial plants in Poland.

As an example of the impact of PDS on Polish companies whose employees participated, the tables below show environmentally friendly investments by companies (internal) and in companies (external) in just the first four years of the program.

			Amounts invested in millions of US\$			
Cycle	Participants	Companies	Air/water protection	Waste management	Modern technologies	Total
1	35	21	10	25	60	95
2	24	15	12	15	41	68
3	30	21	75	55	40	170
4	15	9	8	5	24	37
5	22	16	45	30	35	110
6	16	8	15	20	20	55
Total	142	72*	165	150	220	535

Table 8: Ecological Investments in Polish Enterprises Participating in the SUT/STU PDS Program, Cycles 1–6

Industry	Participants	Companies	Amounts invested in million US\$			Total
			Air/water protection	Waste mgt. & recycling	Modern tech./ energy efficiency	
Steel & Iron	39	21	15	30	65	110
Non-Ferrous Metals	25	14	15	20	45	80
Power Engineering	65	27	125	85	95	305
Others	13	10	10	15	15	40
Total	142	72	165	150	220	535

Virtually all companies whose employees participated received other tangible benefits in the form of the development of restructuring plans, programs of environmental protection, and marketing plans; ISO 14000 certificates received; and lower costs and higher income due to new environmentally friendly and energy-efficient technology. Pollution output at many plants has dropped with evident results in improved environmental quality.

In addition, there are many intangible benefits for PDS graduates and their companies: new attitudes toward problem solving and environmental issues, dissemination of new knowledge and skills, development of new teaching methods, and involving officials from the public sector. PDS graduates from STU/SUT have formed a PDS Alumni Club to continue networking and sharing information.

Local governments were the second major audience for PDS. Following the success of PDS at SUT/STU, a similar model was developed at University of Silesia in 1997. This PDS program, however, was designed for executives of local governments and council leaders. The goal was for these leaders to gain the skills and knowledge necessary to improve democratic management and further a sustainable transition process at the gmina level. In the first year of this program, 25 participants graduated. In the second year of PDS 16 participants received a diploma after a final defense exam and presentation of individually prepared diploma work related to the urgent problems facing each locale (gmina level). As with PDS directed toward business leaders, the thesis topics for local government PDS were based on practical issues directly related to the participants' own gminas.

Based on ETP experience in training local government officials and monitoring their needs it was known that achieving better outcomes was possible when the target audience was provided an advanced form of education addressed to local leaders. Stabilization of local governments and increasing their role in decentralized administration of the country through wise strategic planning and decisionmaking has strongly increased the need for local leaders to be able to fulfill the needs for sustainable development. This was the main reason for cooperation between the University of Silesia and the University of Minnesota, which resulted in the successful development and

implementation of an advanced, full year PDS program for local government and council authorities. The University of Silesia acted as a local partner and coordinator of the studies, responsible for administration, organization of space and equipment as well as for management and data collection and course evaluation.

The main goals of PDS for local governments were:

- Strengthening the process of building democracy on the local level;
- Increasing the technical and managerial capacity of local governments;
- Facilitating the restructuring of municipal management systems.

The objectives were:

- To demonstrate how politics should be integrated with modern planning;
- To improve professionalism in management of human resources;
- To train leaders to build local leadership coordination, cooperation, and integration;
- To help in understanding the social aspects of restructuring, sustainability, and construction of an acceptance network;
- To instill techniques necessary for optimization of solutions by negotiations, elimination of stress, and better contacts with the public, as well as how to find and select sponsors;
- To upgrade knowledge in regulations and their relation to strategic planning and management of public finances;
- To provide guidelines for environmental risk assessment and environmental audits and training;
- To serve local needs;
- To help establish local conditions necessary for improving the health of the population;
- To show how public finances should be managed

The curriculum offered 12 units divided into smaller modules of 10–20 contact hours each, and was completed with individual or a group diploma work (30 hours) focused on urgently needed and as yet unaddressed local problems. All offered instruction combined necessary academic knowledge with training methodologies that used multimedia. All modules had a total of 200 hours of study and 30 hours for completion of diploma work. The two semesters courses and sessions were organized once or twice a month as two-day sessions on Friday and Saturday.

The PDS program for local government at the University of Silesia terminated after two iterations. The reason was the high tuition (about \$1,000 per person). In 1999 a far-reaching administrative reform was introduced in Poland with the addition of a third level of local government, the powiat, similar to a county. This reform ushered in very restrictive financial rules excluding support of gminas and powiats for their employees' education. Thus the financial base for the PDS-LG collapsed. Fortunately, the investment in developing the human capital of experienced professors was not lost, but was used in development of the School of Management, a new department of the University of Silesia located in the same facility in Chorzów.

Participants of the first run of PDS for local government were 27 persons: (15 men, 12 women) from following voivodships: Katowice (20), Częstochowa (2), Kraków (2), Bielsko Biala (1), Opole (1) Zielona Góra (1). Their professional positions were: mayors (5), leaders of city council (3), department directors (9), other high-level officers (8), members of city council (2). The second run was held in 1998/99. Participants were 18 persons (12 men, 6 women). This class consisted of mayors (6), directors of departments (8), other high-level officers (2), members of city council (2). Forty-three participants passed the final exams after preparation and defense of diploma theses. Their studies were practically oriented and focused on strategic plans, restructuring programs, privatization schemes, municipal financing projects, and energy audits. All topics were aimed at solving urgent local problems or on preparation of long-term development strategies.

The success of the PDS was possible only because of a well-established partnership of American and Polish staff cooperating with participants during all offered courses, which were based on examples and experience in restructuring of American firms and local governments. PDS fulfilled educational needs of both participating partners and maintained high teaching standards, as shown in detailed assessment made by PDS participants after each module.

A selection of impacts of diploma work prepared by participants for local government PDS in various communities includes:

- **Grudusk.** Creation of a long-term sustainable development strategy.
- **Katowice.** Programs created for the development of recreation and sports for the population of a large city in the heart of Silesia. Materials for further discussion used at powiat and voivodeship level.
- **Katowice.** The heart of Silesia needed better systems for transport of goods and people. A critical evaluation of existing transport system with the assessment of environmental impact of this sector was done for Katowice against a general background for the whole region, providing good materials for policy makers.
- **Knurów.** Old technology and the closing of many coal mines called for strategies for supporting the labor market. PDS graduates helped search for new possibilities of employment analysis of sectorial needs and other possibilities for local restructuring and created a model for other gminas with similar problems.
- **Knurów.** Self-assessment models for local government authorities were developed with a well-documented strategy for improved efficiency and better communication with the populace. Good ideas developed here were disseminated in other gminas.
- **Korfantów.** A program for modernization of the local education system was developed as in Poraj, but on a larger scale (for town and satellite villages).
- **Panki.** The basis for a strategic development program in the gmina was created and significant work done for acceleration of the construction of the main program.
- **Pawłowice.** Modernized infrastructure with a strategic program for gmina development.
- **Poraj.** Strategic plans developed to address problems of local education in the light of the new responsibility of local authorities in this field.
- **Pszczyna.** Strategies created for the development of tourism in this large and beautiful region of Upper Silesia.

- **Raciechowice.** Strategic program for development of sanitation of several gminas in the Raba River basin was a good example for implementation beyond the gmina level. It activated financial resources from local, national, and international sources.
- **Tarnowskie Góry.** A good example democratic procedures and successful negotiations resulted in reconstruction and revitalization of former industrial areas and building of new social and sports complexes for public use (costs ca. US \$4–5 million).
- **Tarnowskie Góry.** Created models of cooperation between gminas in solving problems of alcoholism, crime prevention, and creation of new models for helping the unemployed.
- **Tychy.** Introduced concepts of how to develop and implement an information policy in a large town as the basis for dialog with the public.
- **Żory.** Program for economic mobilization of the town and gmina created by the president of the town, but also valid for other towns with a similar structure.

Investment contributions stimulated by PDS2 participants in Silesian gminas are summarized in the table below. (Additional tables may be found in Appendix 12.4.)

Gmina	Air Prot.	Water Prot.	Waste Mgmt.	Landscape	Other	Total
Grudusk	–	–	0.15	–	0.3	0.45
Katowice	0.5	2.8	3.2	0.4	14.3	21.5
Knurów	0.15	0.2	0.15	0.1	1.5	2.1
Korfantów	–	0.1	0.1	–	0.25	0.45
Panki	–	0.1	0.15	–	0.55	0.8
Pawłowice	–	–	0.2	–	0.8	1.0
Poraj	–	0.15	0.1	–	0.35	0.5
Pszczyna	0.1	0.3	0.32	0.05	3.33	4.1
Raciechowice	–	0.2	0.1	–	0.7	1.0
Tarn. Góry	–	0.45	0.35	0.1	3.7	4.6
Tychy	0.3	0.25	0.7	0.2	4.15	5.6
Żory	–	0.25	0.2	–	2.95	3.4
TOTAL	1.05	4.8	5.72	0.85	32.88	45.5

9.5. PDS in Romania

In the 1996–97 academic year, the Technical University of Cluj-Napoca (TUCN) offered the first one-year PDS program in environmentally friendly restructuring of industry, called Eco-Management. The program was designed and has been run jointly with the University of Minnesota. The team at TUCN won the partnership with the University of Minnesota in a contest in which it competed with five other Romanian universities. Teaching is conducted by American, Romanian, and other instructors from Central and East European countries. After the successful completion of the first delivery in 1996–97, the program has been repeated every year since. A total of about 120 graduates have received joint American-Romanian certificates.

The PDS program at TUCN has had many impacts on the university:

- It provided an occasion to exchange knowledge and interest and strengthen ties with various interested parties in the institution.
- It provided an opportunity to strengthen relations with the economic sector and government institutions.
- PDS gave TUCN a chance to raise student's awareness of new professional opportunities.
- It spurred the development of a special library with up-to-date books on modern concepts of eco-management.
- It exposed TUCN faculty to teaching methods and environmental curricula of American colleagues.
- Helped the process of transforming the University's curricula and making changes in the syllabi.

Thanks to PDS, TUCN has become a leader in promoting this more complex, integrative approach among institutions of higher learning in Romania.

9.6. PDS in Slovakia

PDS in Environmentally Friendly Restructuring of Heavy Industry, started at Technical University in Košice in 1995, by three partners, ETP Slovakia, the University, and the firm VSŽ. It has been a breath of "fresh air" in the institutional and business environment in eastern Slovakia. On one hand it significantly contributed to the decentralization and modernization of adult learning at the Technical University in Košice. Currently the Center for Distance Learning operates independently of the university and runs many projects. On other hand it exposed senior managers from VSŽ (one of the largest steel companies in Europe) to Western-style adult learning with up-to-date knowledge and skill development. (VSŽ contributed 50 percent of the costs.) There were various production and management improvements implemented as a result of attending the PDS, and the recently acquisition of the VSŽ by the USX, Inc. (owner of U.S. Steel), represents a potential for capitalization of the experience gained through the PDS program.

Through the PDS program, managers in the industrial business community gained skills and exposure to management and organizational techniques, learning new professional and training skills, and obtaining more experienced with monitoring and evaluating work/making assessments. The high demand for the third year of the program reflected the quality and need for this type of continuing education. A long-term evaluation of second-year PDS students revealed that 3 projects dealt with innovative business strategies, 4 projects dealt with improvements in the management systems, and 7 projects dealt with environmental improvements. All second-year students reported 50–80 percent of their projects completed.

One of the overall impacts of the PDS program is the expansion of TUK's position in the region, with increased outreach to industry. This has allowed the pooling of academic knowledge with business experience for environmentally sound restructuring. The cooperation and networking among business and university has been strengthened through the PDS program. TUK has also

benefited from observing and participating in newer methods of training. The use of interactive exercises, role-play, case studies, and practical examples presented Slovak professors with a new perspective on academic learning and teaching. The manuals from the courses will contribute to the libraries in the region and will be integrated into regular TUK courses.

Additional outcomes of the PDS program also include the formation of a special group created in 1996 for Public Relations of PDS, to market the program and increase public and professional awareness of the program. Another group formed thanks to PDS was the PDS Alumni Club. Founded in 1996, its goal is to increase networking; monitor implementation of knowledge; organize seminars, workshops, conferences, and excursions; and find new contacts in Slovakia and abroad.

10. ETP Ph.D. Fellowship Program

To build human capital within the University Strengthening component of the program and to produce the academic leadership needed to move countries toward sustainable development, ETP developed a pre-doctoral program with the goal of helping Ph.D. candidates with an environmental focus make progress on the Ph.D. dissertations. The program provided access to current courses and publications in environmental management. Candidates were chosen in a highly competitive selection process.

The Ph.D. Fellowship was the most resource-intensive part of ETP. Over ten months in 1994 and 1995, twelve Ph.D. Fellows, two from each of the six target countries, worked hard at the University of Minnesota to expand their horizons in environmental and resource economics and environmental management. It was a challenge for them to adapt quickly to American culture and a demanding academic environment while simultaneously pursuing their doctoral research.

The program faced many hurdles but also developed many rewarding insights. The twelve Fellows represented not just average Ph.D. students but Central and East European environmental leaders with their own strong personalities and agendas. One important challenge was for them to understand that environmental economics was a key discipline for environmental engineers. It was sometimes difficult for them to go beyond their traditional technical disciplines to economics and management, areas that in the past were regarded as unimportant for engineers in Central and Eastern Europe. During their fellowships, they learned the importance of moving outside of their traditional professions and how crucial it is for contemporary engineers to understand environmental economics and management.

The Fellows invested their time and talents to study new subjects. They took the risk of crossing new frontiers in their professional development. As a result, they significantly expanded their knowledge and gained new experiences, in addition to advancing their dissertation research in important ways. They expressed a desire to change their own academic curricula and teaching methods as well as to develop joint projects with American and other Central and East European partners. In the years following their Fellowship in Minnesota, many of them did just that.

By the end of 2001, eight of the twelve Fellows will have completed their doctorates. Two former Fellows continue to pursue their Ph.D.s, while a third has deferred her research for active teaching and advocacy work related to environment education. Below are short biographies of the Fellows, follow-up information (where available), and a brief note about their research topics.

Árapád Baranyi, Hungary

Árapad Baranyi's strong background and interest in environmental economics made him an excellent choice for the Ph.D. Fellowship. He received his master's degree from Budapest University of Economic Sciences, majoring in operations management and minoring in environmental economics. He studied in the Netherlands before starting his Ph.D. work. His

research focused on the role of ethics in environmental decisionmaking, especially in how business and industry respond to the issue of pollution prevention. Since his stay in Minnesota, Baranyi has completed his Ph.D. (spring of 2001). He lectures on ethics, environmental issues, economic theory, and business issues. He has spoken to youth organizations, religious organizations, environmental and professional NGO-community, and intellectual organizations. He is a founding member of the Altern group at the Budapest University of Economic Sciences and Public Administration. The Altern group is a team of economists researching alternative economic thinking (including economics, ethics, natural environment, and social problems). He is co-author and co-editor of the group's quarterly journal *Kovasz* (Leaven). *Kovasz* has excellent reputation among Hungarian intellectuals interested in the relationship of economic, social, and environmental problems. He has also co-translated two books on the relationship of economics and social issues. Dr. Baranyi made the following comments on the impact of his ETP Fellowship:

- "My stay in the United States widened my perspectives of how I perceive the world, other people, and environmental problems worldwide."
- "I was involved in Dr. Bochniarz's research projects and in other projects including the pollution prevention roundtable (a series of workshops at the U of M); editing an ecosystem management handbook with colleagues from the U of M and with some ETP-fellows."
- "The courses I took on environmental issues, management, and ethics have usefully widened my professional scope on various aspects of human life."
- "The course on scientific writing was extremely useful enabling me to effectively write scientific papers in English (and in Hungarian)."
- "My command of and communication abilities in U.S. English became excellent."

Since completing his Ph.D. in Spring 2001, he has been a full-time employee of the Arthur Dietle International Consulting firm and teaches part-time at BUES and other universities.

Martin Dovčiak, Slovakia

Martin Dovčiak also brought a strong background to the program. Prior to his ETP Ph.D. Fellowship, Dovčiak held a master's degree in forestry from the Technical University in Zvolen, Slovakia and had spent a year in Great Britain studying forest ecology. In addition to pursuing his Ph.D. studies, he worked full time as a manager at the International Section of the Slovak Environmental Agency. His Ph.D. work focused on the spatial aspects of forest succession and composition.

Dovčiak completed his Ph.D. at the University of Minnesota in forestry in 2001. The title of his dissertation is "Spatial Patterns of White Pine Regeneration in Relation to Seed Rain, Microsite Suitability, Competing Vegetation and Resources." He has also published articles and given papers at scholarly conferences devoted to this subject. He says "I would like to have an international component in my teaching, research, and extension activities. I would like to develop a research program that could be used in order to answer practical problems of natural resource management, and that would be directly incorporated to the classroom experience of my future students. The areas that are of utmost interest to me are those of forest and landscape ecology

and forest resource management. I am especially interested in using the concepts from plant population dynamics and spatial ecology to solve problems in managing forests and cultural landscapes. I am also interested in the role of cultural values and historical context in the natural resource management in different countries.”

In looking back on his ETP Fellowship Dovčiak noted, “It is hard to pick out the most important course taken during the ETP fellowship. I found my experience from the proposal-writing course helpful in writing successful fellowship and grant applications. Other courses extended my technical expertise (e.g. GIS, Remote Sensing), deepened my specialization (e.g. Forest and Landscape Ecology), or broadened my horizon (e.g. Sustainability, and Aspects of Countries in Transition), and were instrumental to development of my Ph.D. research and future professional focus. I would say that the ability of the ETP fellows to tailor their own program of study was the strongest aspect of the ETP doctoral fellowship. . . . ETP was an excellent opportunity to learn about the organization of the U.S. university system, research, teaching and extension. It also provided me with an excellent opportunity to rethink my dissertation research and make it scientifically more rigorous. It proved to be a start-up funding for my (soon-to-be) completion of the degree within an environment with readily available professional literature sources and computer technology.”

Since the mid July he has been working at the Zvolen Technical University in Banska Stiavnica, Slovakia as a research associate at the Department of Applied Ecology. Dovčiak is in charge of developing independent research in the field of ecology and is currently a CO-PI on a research project on stability, production processes, and succession in meadow ecosystems of the Polana Biosphere Reserve, Slovakia. He is also the sole researcher on a pending UNESCO Man and Biosphere Young Investigator Award Grant: Population Dynamics of the Endangered English Yew (*Taxus baccata* L.) and its Management Implications for Biosphere Reserves of the Western Carpathians.

Dovčiak is also involved in teaching Landscape Ecology at the Academia Istropolitana Nova, Svaty Jur, Slovakia, a postgraduate institution educating in English young people from around Central and Eastern Europe in Environmental Policy.

Paulina Kirilova Filipova, Bulgaria

Like all of the Ph.D. Fellows Paulina Kirilova Filipova brought many skills and enhanced and capitalized on those skills during the program. She entered the ETP Fellowship program as a civil engineer with a background in the field of hydrotechnical construction that included the impact of dams on the environment. Her Ph.D. research examined both the economic and environmental aspects of hydroelectric projects. While in Minnesota, she was able to access many resources, including expertise from the U of M, the state Department of Natural Resources, the U.S. Environmental Protection Agency, as well as academic libraries in Minnesota and elsewhere.

Filipova continues to work on her dissertation, but is currently working in an NGO, Women’s Alliance for Development (WAD), which is developing a Leadership Training School in Bulgaria.

“We have already more than 50 training opportunities in different areas for variety of groups (4 of them in environmental training),” writes Filipova. “We are working also within a coalition of organizations in Central and East European countries and publishing a quarterly international magazine *Fair Play*, a gender and development magazine of the Karat coalition. The magazine covers different topics, for example a recent issue was about women and economy. We are covering problems, concerning the countries from our region. My organization is working also with many states and governmental institutions. The last year we launched a campaign before local elections in Bulgaria to encourage more active participation of women in the decisionmaking process.” (For more information about the results of Filipova’s NGO, sponsored by Democracy Commission of U.S. Embassy in Sofia, see the website of WAD: www.geocities.com/woalde.) Filipova also puts her ETP-learned skills to work as a trainer for WAD, offering training for NGOs, community workers, and people in different institutions in Bulgaria on topics like NGO management, public participation, gender awareness, and water-resource management.

Filipova’s ETP Fellowship greatly influenced her career: “I changed my occupation and became involved in the third sector, all the knowledge I gained about NGOs: proposal writing, fundraising, management, etc., was very helpful for me. I learned also the U.S. system of education, managing with the big information flow and not at the last place, improved my English-language skills.” Through ETP “I gained more experience in working internationally and learned a lot of things, which I am now using in my work.”

Tomáš Hák, Czech Republic

At the time of his Ph.D. Fellowship, Tomáš Hák held a master’s degree in biology and physical training from Charles University in Prague and was working at the Czech Ministry of the Environment. His Ph.D. thesis focuses on environmental risks issues and ways to set priorities for solving environmental problems.

Hák will fulfill all obligations for his Ph.D. by the end of 2001. He has received a mid-size research grant for young scientists from Charles University. He has also prepared a course on *Indicators of Sustainable Development* for a newly established faculty of Charles University, the Faculty of Liberal Arts Education, which has been just accredited. The course is designed for master’s degree studies that started in fall 2001. His future teaching responsibility will be in the area of sustainable development (with emphasis on environmental issues).

According to Hák, his ETP Fellowship showed him the importance of economics in environmental protection, the extension of the global view of the environment and sustainable development, and gave him experience with the U.S. university system. In addition to final work on his Ph.D., his future research plans include working in a small research team that will focus on environmental and sustainability indicators. The group will play an important role in reporting, establishing, and updating an information system on the environment, and being involved in international research projects.

Hák also reported that, “I have been preparing a book presenting development in quality of life and environment in the Czech Republic during 10 years of transition (1989–99). It is based on easy-to-take-in indicators and short texts. The Czech Republic is shown in wider context of three EU member states (Austria, Belgium, and Portugal) and two candidate countries (Hungary and Poland).” About his ETP experiences, Hák wrote that, “ETP has directed me toward sustainable development. Before my U.S. experience, I was more narrowly oriented on environmental protection and biology. The study considerably widened my horizons in all aspects.”

Christina Ionescu, Romania

Christina Ionescu arrived at the University of Minnesota as an ETP Ph.D. Fellow to learn more about the problems of groundwater pollution near waste disposal sites and to work on her Ph.D. thesis, which focused on those problems. Prior to coming she had received a master’s degree from the University Politehnica of Bucharest, specializing in hydroenergetics. She taught courses at that university as part of the Chair of Hydraulics and a new UNESCO Chair of Engineering Sciences that was the first UNESCO technical chair to bring together an inter-disciplinary faculty team to implement new programs based on the training needs of required by the country’s transition to a market economy.

She completed her Ph.D. in Romania in 2000 and since then has been teaching sustainable development, environmental legislation and environmental policy, fluid mechanics, and hydraulics at the University Politehnica. Notes Ionescu “We have a two years TEMPUS Program, Ecolex, which is an institutional building program from the Ministry of Industry and Trade, the Ministry of Waters, Forests and Environment Protection, and the National Water Company to train 50 managers/year on European environmental law and policy, environmental economics, green accounting and behavioral sciences.” (This program was funded with a \$250,000 grant.) Her future plans include research to develop appropriate national sustainable development indicators to assess the sustainability of Romania, issues related to EU accession in the region, and the development of a professional distance learning program on sustainable development for Romania.

When asked the most important thing she learned during her Fellowship in Minnesota, she says “Ask and you will be given! . . . ETP strengthened my ability to follow my own objectives.”

Martin Malovesky, Slovakia

Martin Malovesky was studying ecology in a Ph.D. program at Comenius University in Bratislava when he learned about the ETP Ph.D. Fellowship program. Prior to that, he had earned a master’s degree from Comenius University with research focusing on fish population ecology in the Danube River. He also studied in the environmental program at Academia Istropolitana in Bratislava. The ETP Ph.D. Fellowship gave him an opportunity to gain expertise in several aspects of natural resource management. He was particularly interested in the application of

geographic information systems (GIS) to environmental management and this formed the basis for his Ph.D. research.

Malovesky noted that his time in Minnesota “fulfilled my expectations. It definitely opened possibilities and for writing my dissertation what I learned with be very useful. . . . I have found that combining environmental science work with my ecology background give me new ideas and possibilities.”

Nicolai V. Marocico, Romania

When he entered the ETP Ph.D. Fellowship program, Nicolai V. Marocico was a lecturer at University of Suceava teaching courses on forest resources and forest products. He had received his master’s of science degree in forestry from the University of Braşov and then worked in forest resources administration. His research interests had expanded to examine the economic aspects of forest management and his Ph.D. work looked at the relationship between the economics and environmental protection of forestry policy.

In Minnesota, Marocico learned more about forestry management in the U.S., which allowed him to gain new perspectives for developing effective, sustainable policy. He also enhanced his computer skills and experience in applying them to specific forestry problems and worked with mathematical models for forecasting different policy scenarios. About the ETP Fellowship, Marocico noted that he learned many things and made new contacts. “It’s a very good training program.”

Slavinka Petrova, Bulgaria

Slavinka Petrova entered the Ph.D. program with many skills on which to capitalize. She received her master’s degree from the Higher Institute of Architecture and Civil Engineering in Sofia. She has worked as a designer of water supply systems and returned to the Institute as a research fellow where she teaches engineering courses. Her research examined the management of water supply systems, looking at new way to make those systems more effective and apply those methods to the design and exploration of new systems. Since her stay in Minnesota, Petrova has been teaching students at the University of Architecture, Civil Engineering and Geodesy (UACG), solving practical problems and preparing of expert assessments of engineering projects in the field of water supply management in Bulgaria. She recalls her stay in Minnesota as an ETP Fellow as “explicitly positive. It widened my horizons and provided me with new and effective tools for problem solving.” In addition, it introduced her to the vast potential and possibilities of computer networks.

Recently, Petrova gave up her Ph.D. plans in order to master introduction of new courses and teaching methods. She is a leader among faculty in application of the interactive teaching methods she learned in Minnesota.

Krzysztof Przybyłowski, Poland

When Krzysztof Przybyłowski entered the ETP Ph.D. Fellowship program he was already an instructor of management at the Warsaw School of Economics (WSE). He received his master's degree in economics from WSE and was a member of the Polish-American Center for Economics and Management there. He assisted with ETP's effort to share information about environmental marketing and business issues.

Przybyłowski completed his Ph.D. at WSE in 1996 as the first ETP fellow and he currently teaches marketing and management on the faculty of WSE and other Polish and Ukrainian universities. Of his time in Minnesota, Przybyłowski noted that he learned "the importance of change in business and new approaches to marketing management. . . . ETP was one of the most important factors that still drives my career."

During his stay at the University of Minnesota he developed close cooperation with Prof. William Rudelius then a faculty member at CSOM. This collaboration resulted in several joint projects, including a groundbreaking Polish textbook in marketing (published in 1998) with about 30 percent of its case studies drawn from Polish examples. (K. Przybyłowski, R. Kerin, S. Hartley, and W. Rudelius, *Marketing w Praktyce*. Warsaw: Polish-American Center for Economics and Management, WSE, 1998.) More recently, this textbook has been translated into Russian with cases drawn from Russian and Ukrainian sources. These are the first Western textbooks adapted specifically for conditions in Central and Eastern Europe and printed to Western standards. Przybyłowski's example of developing cooperation between Central and East European scholars and North American colleagues is regarded as a model for faculty in both regions.

Jindřich Tichý, Czech Republic

Before his Ph.D. Fellowship, Jindřich Tichý had already become a valued participant in the ETP program. He was an ETP course facilitator in the Czech Republic and vice dean of Environmental Faculty at J. E. Purkyne University in Ustí nad Labem. He held degrees in forestry from the Agricultural University in Brno and in plant ecology from the University of Lund, Sweden. He completed all work for his Ph.D. at Lund, but in 1995 died tragically in an automobile accident. His published research on forestry in the Czech Republic and Sweden remains as a tribute to his memory (See ETP Annual Report for Year Five, appendix F, page. 143).

Dr. Tichý was one of the hardest working and most likeable participants in the ETP Ph.D. Fellowship Program and his death was a major loss for his family, his country, and the environmental movement.

Marek Zaborowski, Poland

Already active in environmental causes prior to his Fellowship, Marek Zaborowski received his master's degree in chemistry from Kraków University of Technology and wrote his thesis on ozone measurements in Polish cities. Before joining the ETP Ph.D. Fellowship program he was also coordinator of the Polish Ecological Club. His Ph.D. research focuses on developing pollution dispersion models to monitor the impact of environmental pollutants.

During his time in Minnesota, Zaborowski completed an internship with the Minnesota Pollution Control Agency and worked with University of Minnesota faculty on air pollution modeling. "I have learned how to run models," he noted, "how to use them and implement them. I can use these tools in Poland." About his time in Minnesota, Zaborowski wrote, "This is really an investment in people. It is an investment that not only support a better environment but also an investment in future cooperation."

After his fellowship, Zaborowski returned to Kraków and based on his U.S. experience, he developed an NGO oriented on energy efficiency and conservation. He has begun to play a national role in influencing policy in these areas. He plans to complete his Ph.D. work while gaining further practical experience in energy efficiency and air pollution prevention and control.

Gyula Zilahy, Hungary

When he came to Minnesota as an ETP Ph.D. Fellow, Gyula Zilahy held a master's degree in environmental economics from Budapest University of Economic Sciences and Public Administration (BUES). His thesis focused on environmental marketing practices and how environmental issues affected companies. His Ph.D., which he completed in 2000 at BUES, is titled "The Role of Individual Motivation in the Emergence of the Energy Efficiency Gap."

"Education is one of the best things you can do for more effective management of the environment in the long run," Zilahy noted. About his time in Minnesota, he stated that, "I learned something from all my courses even though they were quite different from one another. I learned about accessing huge literature listings and collected much information, and I learned more about writing my Ph.D."

Recently, Zilahy has become a faculty member at BUES, teaching environmental economics and policy courses. In addition, he is responsible for the University extension service center introduced with UNIDO grants for clean technology. As Director of the Center for Clean Technology he manages a small staff, works with polluting and clean industries, and raises funds for the center.

11. Future Prospects

11.1. Success and Sustainability

ETP was developed as a response to the serious environmental problems facing Central and Eastern Europe as it made its transition to democracy and market economies after nearly half a century of totalitarian rule. Although the project lasted eight years (1992–2000), it continues to have an impact on the region. Like ripples in a pond, the results of ETP have spread and broadened and the many sustainable elements of the project will continue to have an impact on environmental, social, and civic realms of Central and Eastern Europe for years to come.

As this report shows, ETP's immediate outcomes can be measured in sheer numbers: in the nearly 16,000 participants trained, in the approximately \$2 billion of eco-friendly investments in companies and municipalities stimulated by ETP graduates, in the number of environmental firms and NGOs created and in the NGOs whose activities have become better managed and more effective, in the volume of ETP publications issued, in the PDS programs created, or in the number of new courses and curricula introduced at universities. Due in part to the significant role of ETP graduates in restructuring pollution-causing heavy industry, pollution output across the region has fallen, often quite dramatically (see Appendix 12.5).

ETP's impact can also be expressed qualitatively. Every evaluation of the project in each of the target countries found that participants consistently stated that ETP training introduced them to new concepts and ideas and changed their outlook on the possibilities of sustainable development. Today, ETP graduates are among the leaders of Central and Eastern Europe. Many of them hold important positions in local and national governments, in large businesses, in universities, and in important NGOs. They can also be found among the region's new entrepreneurs in small- and medium-sized firms that are developing cutting-edge products and services and generating tremendous economic activity. They have taken the lead role in forming scores of new NGOs and strengthen countless others that together have played a crucial role in rebuilding civic society as well as developing outreach and awareness on specific environmental and social issues. It is no exaggeration to say that ETP improved the lives of millions of people in tangible and intangible ways.

The success of ETP came not just in one area, but in many. It was precisely the broadness and flexibility of the program that was a key to its success. A program in just one or two countries or focused only on one sector could not have succeeded as well even with far greater resources. In the case of ETP, the various sectors reinforced and strengthened each other.

PDS has been a perfect example of this fact. Developed in response to needs voiced after the start of USAID funding, PDS was based in universities and filled a gap in the training needs of business, industry, and local government. The act of delivering that training was a catalyst for change within the universities while it built connections between participating sectors that will serve well in the future. Another important example was ETP's ability to cross national borders. "East-East" training and programs to address trans-border environmental problems helped break

down walls of mistrust and broadened the pool of expertise available to each country while addressing questions of mutual concern. It was also an important milestone in building trust in the regional pool of experts, who proved many times that they were as good as American trainers, and at the same time much more available, better able to understand common roots and local concerns, and less expensive. For ETP management it was an indication that sustainability was complete and the people of the region were ready to take on the task of ETP themselves.

This broadness of scope is also a key to the sustainability of the program. By disseminating ideas as widely, across many countries and sectors, and involving participants in the training to the greatest extent possible, ETP laid the groundwork for social consensus. Environmental concerns are too important to left to only one sector or to specialists alone, but must be integrated broadly with responses to economic, social, educational, and political needs. Only in this way can sustainable development be a reality.

Sustainability is also guaranteed by the institutionalization of the ETP mission in each of the six countries. This has shown that good foreign assistance programs, and all programs that are designed to transfer skills and knowledge, will succeed best when there is a specific and focused institution committed to continuing the goals and principles of the program. That institution must be formed by and staffed with local expertise.

Each of the ETP successor NGOs fulfills this ideal. Each is slightly different in focus and each has its own strengths and weaknesses. This is perfectly normal and healthy, since another key to institutionalization is to tailor what has been learned to local needs. Therefore, while one ETP successor NGO focuses on training or research, another focuses on development of the Third Sector. In order for ETP ideals to continue to work through these NGOs, local leadership must develop their own programs, make their own mistakes, and achieve their own successes. Help and support from outside should continue, but as ETP demonstrated already by the third year of the project, local initiative and control is crucial to long-term success.

Challenges to sustainability remain in uncertain economic conditions, the continuing pains of economic and social transition, and legal frameworks for non-profits that have sometimes been slow to respond to new conditions. Yet, thanks to ETP, the skills and networks that will allow ETP successor NGOs and ETP alumni to cope with these problems and find solutions is already in place.

11.2. Best Practices

There are many examples of good practices developed during the last ten years. Three of the most important are:

1. ETP's approach to designing, monitoring, and evaluating training systems.
2. Building sustainability from the very beginning of the project.
3. Integrating short, practical courses into a system of executive education in the form of PDS.

The ETP consortium developed a training philosophy that incorporated long-term objectives and an approach to training that involved continual evaluation and redesign. This approach was best exemplified by the design and delivery of the PDS programs. Each training was designed and conducted so that extensive development of training material in collaboration with local trainer preceded the delivery of training. This allowed for incorporation of local case and culturally specific materials and was the first stage of “training the trainers.” Following the preparation phase came the delivery phase and, then, the follow-up phase. Along with the delivery phase, ETP conducted pre- and post-testing as a survey of participants’ attitudes toward the training. The follow-up phase included longer-term evaluation (e.g., at 6, 12, and 18 months after the training) to learn which components were successful.

The follow-up phase also served an essential role in determining the design and presentation of future training and in incorporating results of training into the daily lives of participants. ETP management found that training programs were often designed and delivered during a relatively brief period and participants did not have the benefit of continued involvement with the trainers. ETP’s response to this concern was to use longer-term, evolutionary interaction with participants. Their input and ideas were used to continuously re-shape and redesign the program. ETP also provided support during the period between training activities. Work plans developed by former participants were also used as communication and evaluation tools.

Management felt that training needed to be practical, locally applicable, and delivered in local languages. In addition, it was important to involve executives as partners and potential contributors. Executives who participated in PDS programs served as voluntary instructors introducing their cases and commenting on others. The specificity of the executive education created a wonderful opportunity to integrate the process of learning and teaching from an experienced audience.

ETP–PDS was designed to begin the process of handing over all aspects of project management to local from the very beginning. Institutionalization of PDS served as an extension service for industry and local communities. Such programs were a completely new institutional innovation throughout Central and Eastern Europe. As PDS offerings continued, more and more courses were offered through the regular curricula of universities in Central and Eastern Europe. Currently, professors from the region trained through ETP programs are offering PDS courses on an on-going basis. Combined with the over 100 publications produced by PDS, this allowed the program to achieve programmatic and personnel sustainability.

From the beginning, each component of ETP was designed to reach sustainability by the end of the project and this goal was achieved step by step during the implementation. The three most important aspects of sustainability were:

- Human resource sustainability through training of trainers;
- Program sustainability through institutionalization;
- Financial sustainability through early introduction of matching contributions and co-financing.

Four of the six participating in PDS universities have moved to the stage of self-financing: University of Miskolc, Silesian University of Technology, and Technical University of Košice

(TUK), and recently the Romanian Technical University of Cluj-Napoca. The Romanian PDS has reached its financial sustainability despite the existing difficult economic situation. Unfortunately, the economic difficulties were the major reason for lack of continuity of the Bulgarian PDS that was so successful after the first offering. The PDS-LG at the Silesian University did not reach financial sustainability due to weakness in the public sector following administrative reform in 1999.

PDS proved the wisdom on integrating all components and forces into a coherent and sustainable program. Although "one-shot" trainings were often successful, participants responded more readily to a longer-term integrative approach. The key was to involve academic institutions to the greatest extent possible. As these institutions were themselves transformed through training and curriculum development, they in turn initiated change in businesses, NGOs, and local government. Investing in academic institutions yielded multiple benefits as the public has increasingly come to see them as agents of positive economic, social, and personal change.

11.3. ETP and the Future

Like all regions, Central and Eastern Europe continues to face environmental, economic, and social challenges, as the debate over EU accession and Central and Eastern European agriculture shows. The region will also face problems in the future. The answers the people and the leaders of these countries find to such challenges—today and tomorrow—will have important practical, ethical, and philosophical implications.

The experience of ETP demonstrates that the challenge to find sustainable solutions to the region's problems cannot rest only with political leaders, academics, experts, or outside donors and helpers. Each of these groups can and should be catalysts for change, but the remarkable part of ETP was how the mass of participants themselves took ownership of the program and its ideas and goals and made them their own, adapting them to local needs and conditions. ETP was an idea that arrived at the right place at the right time and it was designed that way. It is precisely this approach of allowing local people to develop their own solutions that points the way to true grassroots sustainability.

The people of Central and Eastern Europe can still learn much from Westerners and the transfer of skills, knowledge, and technology shall continue. Yet, the conclusion of the ETP project is a turning point. The Central and Eastern Europeans are no longer merely apprentices, they have become or are becoming teachers as well.

Examples of this are growing. A Czech ETP successor has already delivered trainings for NGO leaders from the newly independent countries of Central Asia. The Hungarian ETP successor, CES, is becoming a leader in developing new solutions to environmental problems and in building regional linkages. Polish experiences in restructuring economically depressed heavy industrial regions have been studied in Ukraine. ETP Foundation in Bulgaria and ETP Slovakia are sharing their experience in Macedonia and other Balkan countries. All six of the countries regularly exchange information and trainers among themselves.

From being an “importer” of new ideas and approaches to environmental and sustainable development issues, Central and Eastern Europe moved quickly to become a “re-exporter” of those ideas. It is now moving into an even more important role: that of a producer of new models, ideas, and approaches that will benefit both the region and the world. It is becoming an important and valued part of an international dialogue on the future of the planet.

In this sense, then, the ETP project has not ended. It is has just begun.



Prof. Eva Romančíková teaching at PDS, Košice, Slovakia.



Inauguration of PDS program at Technical University of Cluj-Napoca, Romania (l to r): Dr. Vilma Éri, Dr. Zbigniew Bochniarz, Dr. Dan Candea, and Dr. Mirela Miresan.

12.1. Appendix: ETP International

During the October 1995 retreat, the ETP Consortium Council decided to establish an organization to continue the ETP mission after the end of the USAID funding, ETP International (ETP-I). ETP-I began in April 1996 as an informal, non-governmental, non-profit, international association created to continue the ETP mission and serve as forum for cross-border cooperation. During the January 1998 retreat in Košice, ETP-I members decided to take the next step and transform ETP-I into a formal organization (international association) registered in Budapest (due to liberal in Hungarian NGO law). The chair duties were shifted from Boris Strečanský to Vilma Éri and the headquarters was moved from Bratislava to Budapest. Following the Košice meeting, the registration documents were filed in the Budapest Court in 1999.

ETP-I mission's is to contribute to sustainable development in Central and Eastern Europe by:

- Enhancing policies and institutions;
- Strengthening civil society;
- Improving decisionmaking capabilities;
- Raising environmental awareness.

ETP-I has an assembly (consisting of all members) and a chairperson. Assembly meetings are held at least once a year. The headquarters for ETP-I is located at the Center for Environmental Studies in Budapest. Contacts for ETP-I in each of the CEE six countries are listed below.

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**ASSESSING IMPACTS OF POST-DIPLOMA
STUDIES ON ENVIRONMENTALLY
FRIENDLY RESTRUCTURING
OF THE METALLURGICAL INDUSTRY**

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**OCENA WPŁYWU STUDIÓW
PODYPLOMOWYCH NA PRZYJAZNĄ
EKOLOGICZNIE RESTRUKTURYZACJĘ
PRZEMYSŁU METALURGICZNEGO**

Bożena BUTKIEWICZ
ENVIRONMENTAL TRAINING PROJECT FOR CENTRAL
AND EASTERN EUROPE
KATOWICE, 1995

PDS Assessment Reports: Hungary and
Poland.



Hubert H. Humphrey
Institute of Public Affairs
University of Minnesota
Center for Nations in Tran-
sition



Environmental
Training
Project
for Central and
Eastern Europe



Management and
Organization Department
at the Faculty of Econom-
ics,
University of Miskolc

**IMPACT ASSESSMENT
OF THE AMERICAN-HUNGARIAN
POST DIPLOMA STUDIES
ON THE ENVIRONMENTALLY SOUND
RESTRUCTURING OF HEAVY INDUSTRY**

Written by *Csaba HORVÁTH*
Department of Management and Organization
Faculty of Economics,
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Appendix 12.3: List of ETP Courses by Sector and Country, Years 1–7

Bulgaria

Business	
Environmental Business Management (2 offerings)	Year I
Managing an Environmental Business: Business Plan and Financing	Years, I, II, III
Introduction to Environmental Auditing	Year III
Advanced Environmental Auditing (2 offerings)	Year III
Marketing Environmental Goods and Services (2 offerings)	Year III
Sustainable Resource Management in the Company (2 offerings)	Year IV
Green Investment Opportunities (3 offerings)	Year IV
Publication of an Eco-Business Catalog	Year V
Advanced Public Relations in Business, Local Government, and Environmental Communication	Year V
NGO	
Strategic Planning and Financial Management for NGOs (2 offerings)	Year II
Identifying Funding Sources and Proposal Writing	Year III
Advanced Strategic Planning and Proposal Writing for NGOs	Year III
Environmental Conflict Management for the National Nature Protection Service	Year III
Strategic Planning, Financial Management, and Public Relations for the Bulgarian Society for the Birds	Year III
Government	
Financing Municipal Environmental Investments	Year III
Implementing and Enforcing an Effective Regional and Local Environmental Monitoring and Enforcement Program (2 offerings)	Years III, IV
Waste Disposal Management	Year III
Integrated Solid Waste Management	Year IV
Strengthening Environmental Awareness and Skills of Yantra River Business Council	Year V
Increasing Environmental Awareness among the Young Generation of the Yantra River Basin	Year V
Strengthening Democratic Governance and Increasing the Regional Impact of the Yantra River Basin Council	Year V
Advanced Public Relations Methods in Business, Local Government, and Environmental Education	Year V
Prevention of International Environmental Conflicts through Joint Transboundary Training	Year V
Sustainable Development of Municipalities in the Yantra River Region: Investment in the Future (2 offerings)	Year V
Academic/Institutional Strengthening	
Curriculum Development Workshop in Environmental and Natural Resource Economics	Year III
Post-Diploma Studies	Year IV

Promotion of Ecological Education and Culture: A Prevention Measure to Avoid Ecological Conflicts	Year IV
Final Evaluation of ETP Impact in Bulgaria	Year V
Faculty and Curriculum Development Workshop	Year V
All	
Increasing Skills for Environmental Conflict Resolution	Year III
Improved Environmental Programs through Better Information Management	Year I
Environmental Conflict Management	Year I
Environmental Impact Assessment	Year II
River Basin Management	Year II
Effective Mass Media Strategies	Year III
Risk Assessment	Year IV
Yantraclean	Year IV
Ecological Culture from Aggression to Protection of Lake Varna	Year IV
Integrated Solid Waste Management	Year IV

Czech Republic

Business	
Financial Management of an Environmental Business	Years I, II
Managing an Environmental Business: Business Plan and Financing	Years I, II
Principals of Market Dynamics (4 offerings)	Year III
Pollution Prevention for Small and Medium Sized Companies (2 offerings)	Year II
Marketing Environmental Goods and Services	Year III
Strategic Planning for Environmental Businesses	Year III
Advanced Environmental Auditing	Year I
NGO	
Strategic Planning for NGOs (6 offerings)	Year III
Developing and Implementing a Community Environmental Monitoring and Enforcement Program	Year I
Environmental Conflict Resolution (2 offerings)	Year III
Conflict Resolution Management	Year II
Governmental	
Developing and Implementing Environmental Monitoring and Enforcement Programs at the Local and Regional Level	Year II
Academic/Institutional Strengthening	
Development of Academic Curricula in Environmental Economics	Year II
All	
Environmental Impact Assessment: Improving Development Decisions with Environmental Information	Years II, V
Follow up with EIA Regional Commission	Year II

Toxic Release Inventory Workshop	Years II, V
Environmental Conflict Resolution	Years II, III, V

Hungary

Business	
Business Plan (2 offerings + follow-up)	Years II, III
Strategic Environmental Management	Year III
Environmental Marketing	Year III
Environmental Auditing (2 offerings + follow-up)	Years III, IV
Environmental Liability (2 offerings + follow-up)	Year IV
Business Management for Environmental Companies	Year IV
Meetings of the Environmental Business Club	Year IV, V
NGO	
NGO Outreach and Development (5 offerings + 10 follow-ups)	Years II, III, IV
Proposal Writing (1 offering + follow-up)	Years II, III
Promoting Environmentally-Sound Governmental Policies	Year III
NGO Conflict Resolution and Mediation	Year III
<i>Innovative approaches: Organisational development</i>	Year III
Conflict Management Training for Trainers with PDC (10 half day meetings, one per month, 3 one day meetings; 2 offerings)	Year IV, V
Non-profit Legal Management	Year V
Non-profit Financial Management	Year V
Governmental	
Environmental Liability	Year II
Municipal and Utility Financing	Year IV
Developing a Community Environmental Action Plan (+ follow-up)	Year IV, V
Public Relations for Local Governments (2 offerings)	Year V
Integrated Waste Management (2 offerings)	Year V
Academic/Institutional Strengthening	
Curricula Development	Year II
Multinational Internet Training within the Library Project	Year IV
Post-diploma Studies at Miskolc University	Year IV, V
All	
Strategic Environmental Management (1 offering + follow-up)	Year I, II
Environmental Conflict Management	Year I
Facilitating Skills	Year III
Conflict resolution, PDC (7 offerings)	Year III
Environmental Impact Assessment (2 offerings)	Year III
Legal Tools	Year III

Poland

Business	
Business Plan and Development of Financing Proposals	Year I
Environmental Auditing for Business: Introduction	Year II
Marketing Environmental Goods and Services for Small Businesses	Year II
Advanced Marketing of Environmental Goods and Services	Year II
Environmental Auditing: Technical applications	Year III
Managing an Small or Medium Size Environmental Business	Year III
Functioning of the Legal System for Environment Protection	Year III
Waste Management in Relation to the Small Business Community	Year IV
Strategic Planning for Environmental Business	Year III
Integrated Solid Waste Management	Year IV
Developing Cooperative Environ. Resolution Strategies in Silesia	Year IV
Environmental Auditing: Practical Aspects	Year IV
Business Logistics for Emerging Environmental Business	Year IV
Environmental Health and Tested Food for Upper Silesia	Year IV
Environmental Management of Restructuring for Large Enterprises	Year IV
Advertising and Public Relations in Environmental Activities	Year IV
Survival Strategies for Environmental Business	Year IV
Advanced Environmental Auditing for Copper Industry	Year IV
Evaluating Environmental Damage in the Process of Satisfying Collective Needs of Communities	Year V
Financial Management of Environmental Investments	Year V
Pollution Prevention Strategies	Year V
Environmental Health and Tested Food for Silesia	Year V
Project Management and Bidding Procedures	Year V
Introducing ISO 14000 and other International Environmental Management Systems	Year VI
Follow-Up Workshop: Environmental Management in Industry, ISO 14000	Year VI
ISO 14000 and other International Environmental Standards	Year VI
Reducing Emissions and Municipal Energy Management Strategies	Year VI
PDS "Environmentally Friendly Restructuring of Industry" (5 offerings, 12 courses)	Years IV, V, VI, VII, VIII
Business Plan for Environmental Companies and Ventures	Year VI
Local Government	
Functioning of the Legal System for Environment Protection	Year IV
The Role of Local Governments in Environmental Law in Poland	Year III
Developing an Effective Communication Strategy for Local Governments and NGO	Year IV
Integrated Solid Waste Management	Year IV
Developing Cooperative Environ. Resolution Strategies in Silesia	Year IV
Waste Management in Planning and Environmental Policy on the	Year IV

Community Level	
Environmental Health and Tested Food for Upper Silesia	Year IV
Advertising and Public Relations in Environmental Activities	Year V
Management of Environmental Investment Process in Municipalities	Year V
Evaluating Environmental Damage by Local Self-Governments in the Process of Satisfying Collective Needs of Communities	Year V
Financial Management of Environmental Investments	Year V
Pollution Prevention Strategies	Year V, VI
Strategies for Local and Regional Development	Year V
Environmental Health and Tested Food for Silesia	Year V
Project Management and Bidding Procedures	Year V, VI
Advanced Public Relations and Advertising Methods in Local Government and Environmental Communication	Year VI
Financial Management of Environmental Investments in Municipalities (advanced course)	Year VI
Environmental Prevention Policy at a Local Level	Year VI
Reducing of Low Emission and Strategies of Energy Management in Municipalities	Year VI
Advanced Public Relations and Advertising Methods for Local Government	Year VII
Strategic Planning for Municipalities	Year VII
Advanced Public Relations in Local Government and Environmental Communication	Year VII
The Role of Local Leaders in Gmina Promotion: "Leadership for Common Good"	Year VII
Environmental Audits for Municipalities	Year VII
Management of Public Finances: Effective Planning and Managing of Budgets in Gminas	Year VII
The Role of Public Information in Crisis Management	Year VII
Public Relations for Newly Elected Local Governments	Year VIII
New Legal System for Local Gvts.: Possibilities and Threats	Year VIII
PDS-LG "Restructuring of Local Governments toward Sustainable Development of the Region" (2 offerings 12 courses each)	Year VI, VII
Environmental Audits for Municipalities	Year VIII
NGOs	
Strategic Planning and Financial Resource Development For NGO	Year I
Conflict Resolution for Environmental Management	Year I
Identifying Funding Sources and Writing Proposals.	Year II
Developing an Effective Communication Strategy for Local Governments and NGO	Year III
Train Trainers to Complement NGO Strengthening	Year III
The Use of Internet for Exchange of Environmental Information	Year IV
Strategic Planning and Financial Resource Development for NGO	Year IV
Environmental Health and Tested Food for Upper Silesia	Year IV

International Conference "IOIS Meeting" + 3 Internet workshops	Year IV
Advertising and Public Relations in Environmental Activities	Year IV
Strengthening the ETP NGO Network	Year VI
Environmental Health and Tested Food for Silesia	Year V
Establishing Collaborative Network Between Local Governments, Business and NGOs for Sustainable Development of the Region	Year VII
Academic/Institutional Strengthening	
Identifying Funding Sources and Writing Proposals	Year III
Academic Curricula Development: Environ. and Natural Resources	Year V
Quality Management and Behavioral Styles: Training for Trainers	Year V
PDS for Business at the STU	Year IV, V, VI, VII
PDS for Local Governments at the Univ. of Silesia	Year V, VI, VII

Romania

Business	
Managing an Environ. Business: Business Plan and Financing	Year II
Management of Small Environmental Businesses	Year III
Strategic Planning for Environmental Small Business	Year IV
Follow-up workshops with business representatives (3 offerings)	Years III, IV
Developing a Marketing Plan	Year IV
Life Cycle Analysis	Year V
NGO	
Strengthening NGOs through Organizational Development	Year II
NGO Public Outreach, Communication, and Coordination	Year III
Identifying Funding Sources and Writing Proposals (5 offerings)	Years I, II, III
Follow-up Workshop for NGOs on I.F.S. and W.P. (3 offerings)	Years II, III, IV
TOT in Facilitation Skills	Year III
Building Local Financial and Community Support for NGOs	Year IV
How To Be a Better Leader	Year IV
Follow-up meeting with NGOs, Earth Day Brochure	Year IV
Alternative Fundraising for NGOs Institutionalization	Year V
Governmental	
Strategic Planning for Environmental Management	Year I
Developing a Regional Water Quality Plan: River Basin Mgmt.	Year II
Implementing Legal Processes for Environmental Protection at the Local and Regional Level: Environmental Permitting for EPA	Year III
Environmental Impact Assessment	Year IV
Public Participation for Environmental Policy and Program Implementation (2 stages)	Years III, IV, V
Integrated Waste Management (3 offerings)	Years III, IV
Academic/Institutional Strengthening	
Environ. Info. in Romanian Libraries, Library Project Catalogue	Year III

Using Internet for Environmental Info. and Library Networking	Year IV
Curricula Develop.: Environmental & Natural Resource Economics	Year IV
Environmental Education for Youth (2 stages)	Year IV
Proposal Writing for Research Institutes	Year II
Internships and Ph.D. Fellowships (in U.S.)	Year III
Interactively Teaching Adults	Year V
All	
Strategic Planning for Public Participation (2 stages)	Years II, III, V
Improved Environmental Programs through Better Info. Mgmt.	Year I
Environmental Mediation and Conflict Resolution (2 offerings)	Year III
Designing and Implementing a Community Environmental Action Plan (3 offerings)	Years IV, V
Lead Exposure Abatement Program	Year V
Strategic Planning and Community Leadership	Year V
PDS in Environmentally Friendly Industrial Restructuring	Year V
Prevent Transboundary Conflicts through Environmental Education	Years IV, V

Slovakia

Business	
Environmental Auditing for Industry and Government Professional	Year II
Financial Management for Small Environmental Businesses	Year II
Advanced Financial Management	Year III
Principles of Market Dynamics (3 offerings)	Year III
Managing an Environmental Business: The Business Plan and Financing Proposal (2 offerings)	Year II
Environmental Auditing II: Technical Applications	Year II
Developing a Marketing plan for Environmental Businesses	Year III
Environmental auditing III: Agricultural Applications	Year IV
Developing Strategy for Environmental Business	Year IV
NGO	
EIA: Public Participation Training for NGOs	Year III
Innovative Approaches to Strengthening Environ. NGO Interaction	Years III, IV
Heavy Metals: Training of Activists	Year III
Strategic Planning & Mgmt. of Financial Resources for NGOs	Year II
Strategic Planning & Financial Management for NGOs (4 offerings)	Year II
Professional Development Internships in Minnesota	Year IV
Using the Internet for Beginners from Slovak Environmental NGOs	Year IV
Current Legal Framework for NGO Sector in Slovakia	Year IV
Improvement of Environmental Data Management in Košice area as a Tool for Strengthening of Environmental Awareness	Year IV
Building Strong NGOs	Year IV
Public Relations for NGOs	Year IV

Technical Assistance of Local Initiatives (3 offerings)	Year V
Strengthening Environmental NGOs (3 offerings)	Year V
Human and Institutional Development of the ETP Operations	Year V
Crisis and Risk Management for Environmental NGOs	Year VI
Effective Planning for NGOs and Local Government	Year VI
Workshop of Community Initiatives	Year VI
Accounting and Tax Consultations for Environmental NGOs	Year VI
Single Entry Accounting and Tax Training for Environ. NGOs	Year VI
Project Design and Management for NGOs and Local Governments	Year VI
Business Skills for NGOs	Year VI
Increasing Legal Awareness of Environ. and Public Interest NGOs	Year VI
Strategic Planning for Public Sector Institutions	Year VI
Presentation Skills for Leaders from Environmental NGOs	Year VI
Training of Trainers	Year VI
Governmental	
Implementing the Environmental Action Program	Year III
Environmental Liability Workshop	Year II
Developing a Community Environmental Action Plan (2 offerings)	Year IV
Communication Strategies, Negotiation, and Conflict Resolution (5 offerings)	Year IV
Waste Management	Year IV
Financing Municipal Environmental Investments	Year IV, V
Technical Assistance of Local Initiatives (three offerings)	Year V
Effective Communication and Conflict Resolution for Local Gvt.	Year VI
Financing Environmental Projects on the Municipal Level	Year VI
Developing a Vision for Liptovsky Hradok: Local Action Plan	Year VI
Sustainable Cities Training	Year VI
Effective Communication & Conflict Res. for Local Government	Year VI
Financing Environmental Projects on the Municipal Level	Year VI
Sustainable Cities Training	Year VI
Environmental Impact Assessment: Improving Development Decisions with Environmental Information	Year II
Academic/Institutional Strengthening	
Developing Academic Curricula: Environmental and Natural Resource Economics	Year III
Developing Academic Curricula in Environmental Business (jointly with Czech Republic)	Year II
Multinational Internet Training within the Library Project	Year IV
Environmental Curricula Development	Year IV
Institutional Development of ETP Operations	Year IV
Professional Development Internships in Minnesota	Year IV
PDS in Environmentally Friendly Restructuring and Strategic Mgmt. of Industrial Companies at Technical University of Košice	Year V

Environmental Case Studies	Year VI
Conf. of International Society of Information Specialists	Year VI
Human Health Risk Assessment	Year VI
PDS in Environmentally Friendly Restructuring and Strategic Management of Industrial Companies	Year VI
All	
Building Regional Capacity for Solving Environmental Conflicts	Year III
Environ. Monitoring & Enforcement on Local & Regional Level	Year II
Using Information for Effective Environmental Management	Year II
Intensive Management Training in Strategic Planning and New Business Development	Year III
Strategic Planning for Effective Environmental Business Mgmt.	Year III
Institutional Tools for Air Quality Management	Year IV
Human and Institutional Capacity Building for Pollution Prevention in Eastern Slovakia	Year IV
Implementing Effective Regional and Local Legal Processes for Environmental Protection	Year III
Waste Minimization Strategies and Reuse	Year IV
Environmental Monitoring of Hornad River	Year V
Public Participation for Improvement of Municipal Waste Disposal	Year V
Analysis of Training Needs in the Environmental Sector	Year V
Risk Assessment for Toxic Elements in Food Chain and Animals	Year V
Conflict Resolution and Protection of Flood Plain of Morava River	Year VI
How to Design Sustainable Settlements	Year VI
Activating Human Potential in Upper Torysa Region	Year VI
Training of Bicycle Trail Activists	Year VI
Decentralization of Forest Management in National Parks	Year VI
Workshops for Park Managers and Users of National Parks	Year VI
Training of Trainers in Environmental Management Systems	Year VI

Appendix 12.4. Statistical Tables Showing ETP-LG Impacts

12.4.1. Eco-Friendly Investing in Bulgarian Municipalities

Activity	Location	BL	Financing	USD	Date
Construction of water treatment plant	Gorna Oryahovitsa	55,000,000	Low-interest loan	\$300,000	1996
Air cleaning equipment thermoelectric power plant	Gabrovo	20,000,000	Low-interest loan	\$280,000	1996
Cleaning sites of building refuse	Strazhitsa	4,063,000	Grant	\$20,000	1996
Air cleaning equipment for municipal water and sewage treatment plant	Gabrovo	2,103,000	Grant	\$10,500	1996
Water and sewage treatment plant at thermal unit of Dynamika Factory	Dryanovo	10,000,000	Low-interest loan	\$30,000	1996
Construction of water and sewage treatment plant, Sevco Co.	Sevlievo	15,000,000	Low-interest loan	\$10,000	1997
Industrial waste water collector	Lyaskovets	500,000	Grant	\$20,000	1994
Construction of water and sewage treatment plant	Tryavna	10,880,931.21	Grant	\$57,000	1996
Administrative & laboratory center of regional environmental inspectorate	Veliko Turnovo	81,038,435.80	Grant	\$400,000	1996
Water and sewage treatment plant	Sevlievo	2,000,000	Low-interest loan	\$30,000	1994
Investor control of laboratory center, regional environmental inspectorate	Veliko Turnovo	536,000	Grant	\$3,000	1997
Cooperation in project proposed by Vremena newspaper		200,000	Grant	\$3,000	1995
Installation of filter press at municipal water and sewage treatment plant	Veliko Turnovo	2,500,000	Grant	\$40,000	1994
Completion of water treatment plant	Stambolovo	3,000,000	Low-interest loan	\$48,000	1994

Activity	Location	BL	Financing	USD	Date
Construction of water treatment plant at car wash	Veliko Turnovo	626,000	Low-interest loan	\$10,000	1994
Paying off credit used for construction of air cleaning equipment	Gabrovo	3,500,000	Low-interest loan	\$53,000	1994
Administrative laboratory complex at regional environmental inspectorate	Veliko Turnovo	835,440	Grant	\$12,300	1995
Company for construction products	Gorna Oryahovitsa	1,025,314	Grant	\$15,000	1995
Construction of water treatment plant	Strazhitsa	9,500,000	Grant	\$150,000	1995
Cleaning of building refuse	Strazhitsa	1,540,000	Grant	\$22,500	1995
Construction of water and sewage treatment plant, Sevco Co.	Sevlievo	20,000,000	Low-interest loan	\$300,000	1995
Assembly of air cleaning equipment at municipal water and sewage plant	Gabrovo	1,000,000	Grant	\$15,000	
Continuing construction of main collector	Dolna Oryahovitsa	1,000,000	Grant	\$15,000	1994
Purchase of flotation equipment for water treatment plant	Polski Trambesh	20,000,000	Low-interest loan	\$153,000	1996
Completion of water and sewage treatment plant at swine farm	Stambolovo	12,000,000	Low-interest loan	\$80,000	1996
Reconstruction of water treatment plant for sugar factory	Gorna Oryahovitsa	68,000,000	Low-interest loan	\$455,000	1996
TOTALS		345,013,481		\$2,532,300	

12.4.2. Eco-Friendly Investments in Polish Gminas Inspired by ETP Graduates

Table 11: ETP-Inspired Eco-Friendly Investments in Silesian Gminas, 1997						
Amounts invested (in million US Dollars)						
Gmina	Air protection	Water protection	Waste mgmt.	Land rec.	Other	Total
Bielsko-Biała	14.0	4.1	4.2	–	0.3	22.6
Bytom	3.6	5.2	–	–	0.60	9.4
Dąbrowa Górnicza	4.75	–	0.70	–	9.55	
Czeladź	–	2.65	0.80	0.70	–	4.15
Jaworzno	0.20	5.40	–	–	–	5.60
Katowice	2.80	4.50	2.35	–	0.90	10.55
Legnica	0.35	0.45	0.75	0.25	–	1.80
Raciborz	2.80	3.20	3.00	–	–	9.00
Ruda Śląska	0.40	2.00	3.00	0.40	–	5.80
Siemianowice	3.20	–	–	–	–	3.20
Świętochłowice	0.60	2.10	1.40	0.60	2.10	6.80
Sosnowiec	2.50	2.30	1.30	0.30	–	6.40
Tarnow. Góry	0.90	2.10	1.60	0.30	–	4.90
Bolesław	1.80	0.40	0.50	0.90	–	3.60
Chrzanow	2.60	2.00	–	–	0.90	5.50
Ledziny	0.80	1.30	0.30	–	–	2.40
Łaziska Górne	–	0.40	0.80	–	–	1.20
Nowa Sól	–	2.25	0.40	–	–	2.65
Wodzisław Śląski	3.70	8.00	–	–	0.35	12.05
Brzeszcze	0.20	3.00	–	–	0.25	3.45
Bojszowy	0.80	1.40	–	–	–	2.20
Dobczyce	0.65	0.65	–	–	0.30	1.60
Miasteczko Śląskie	0.55	–	0.90	–	0.60	2.05
Radoszowy-Wieprz	–	0.60	–	–	0.60	1.20
TOTAL	31.39	50.95	17.30	4.18	6.00	110.82

**Table 12: ETP-Inspired Eco-Friendly Investments in
Silesian Gminas, 1998**

Amounts invested (in million US Dollars)						
Gmina	Air protection	Water protection	Waste mgmt.	Land rec.	Other	Total
Bielsko-Biała	14.15	4.0	4.1	0.1	0.3	22.65
Bytom	3.5	5.4	–	–	2.2	11.1
Dąbrowa Górnica	0.55	0.35	0.4	–	0	1.3
Czeladź	0.5	4.1	–	–	–	4.6
Jaworzno	0.8	1.15	–	–	–	1.95
Katowice	3.4	–	–	–	–	3.4
Legnica	0.3	3.45	–	–	–	3.75
Tychy	0.1	1.0	0.2	–	–	1.3
Ruda Śląska	1.9	1.2	–	–	–	3.1
Świętochłowice	0.1	–	0.15	0.3	–	0.55
Sosnowiec	1.8	0.8	0.5	–	–	3.1
Mikolów	–	–	6	–	0.1	6.1
Wodzisław Śląski	3.5	7.5	–	0.7	–	11.7
Tarnowskie Góry	0.8	1.0	–	–	0.2	2.0
Baborów	–	0.55	–	–	–	0.55
Bobrowniki	0.8	–	0.9	–	–	1.7
Bolesław	0.7	0.1	0.4	–	–	1.2
Bukowno	0.15	0.75	–	0.30	–	1.2
Dobczyce	0.35	0.2	0.2	–	–	0.75
Jastrzebie Zdrój	0.5	0.1	0.1	–	0.1	0.8
Kłucze	0.25	0.7	–	–	–	0.95
Knurów	0.4	3.5	–	–	–	3.9
Kobior	0.7	0.6	–	–	–	1.3
Łaziska Górne	–	0.4	0.1	0.2	–	0.7
Nowa Sól	0.1	0.1	0.2	–	–	0.4
Pilchowice	0.1	0.8	0.25	–	–	1.15
Pszczyna	–	0.15	0.45	–	–	0.6
Skoczów	–	0.45	–	–	–	0.45
Miasteczko Śląskie	0.3	0.6	0.5	–	–	1.4
Psary	–	0.1	0.4	–	–	0.5
Rajcza	–	0.1	–	0.15	–	0.25
Sosnicowice	0.1	0.15	0.1	–	–	0.35
Żory	0.2	0.1	–	0.1	–	0.4
TOTAL	36.05	39.4	14.95	1.85	2.9	95.15

Table 13: ETP-Inspired Eco-Friendly Investments in Silesian Gminas, 1999

Gmina	Amounts invested (in million US Dollars)					
	Air protection	Water protection	Waste mgmt.	Land rec.	Other	Total
Bielsko-Biała	4.3	4.2	0.6		0.4	9.5
Bytom	0.1	0.3	0.2	0.2	–	0.8
Dąbrowa Górnicza	0.7	0.6	–	0.1	0.2	1.8
Czeladź	0.5	1.45	0.65	–	0.1	2.7
Jaworzno	0.9	0.85	1.25	–	–	3.0
Katowice	1.15	7.6	3.25	0.8	0.8	13.6
Zawierce	0.2	2.7	2.4	–	–	5.3
Tychy	3.0	4.5	2.9	1.0	0.2	11.8
Ruda Śląska	8.0	0.7	–	–	–	8.7
Świętochłowice	1.2	0.3	0.2	0.1	0.2	2.0
Sosnowiec	1.9	1.8	0.6	–	0.4	4.6
Myślowice	0.85	1.3	–	0.2	0.25	2.6
Wodzisław Śląski	1.0	7.5	1.0	–	0.5	10.0
Pszczyna	0.9	2.7	0.6	–	–	4.2
Tarnowskie Góry	2.2	6.5	–	0.5	1.4	10.6
Radziechowice	–	0.4	0.6	–	–	1.0
Mierzecice	0.1	0.3	0.1	–	–	0.4
Bolesław	–	–	0.6	–	0.2	0.8
Bukowno	0.5	0.6	–	–	0.2	1.3
Poraj	–	0.3	0.2	–	0.1	0.6
Jastrzebie Zdrój	–	0.2	0.2	0.4	0.1	0.9
Klucze	0.4	–	–	–	0.2	0.6
Knurów	0.6	0.3	0.35	0.25	–	1.5
Kobior	–	0.4	–	–	0.2	0.6
Łaziska Górne	1.2	0.2	0.2	0.1	0.2	1.9
Pawłowice	–	0.4	0.5	–	–	0.9
Panki	–	0.15	0.05	–	–	0.2
Korfantów	0.1	0.3	0.1	–	–	0.5
Grudusk	–	0.5	0.2	–	–	0.7
Psary	–	1.1	0.5	–	–	1.6
Kalety	0.1	0.1	0.1	–	–	0.3
Bojszowy	0.4	1.4	0.4	0.2	0.1	2.5
Bolesław	0.1	0.15	0.05	–	–	0.3
TOTAL	30.4	49.8	17.9	3.85	5.75	107.7

Appendix 12.5: Central and Eastern European Environmental Indicators

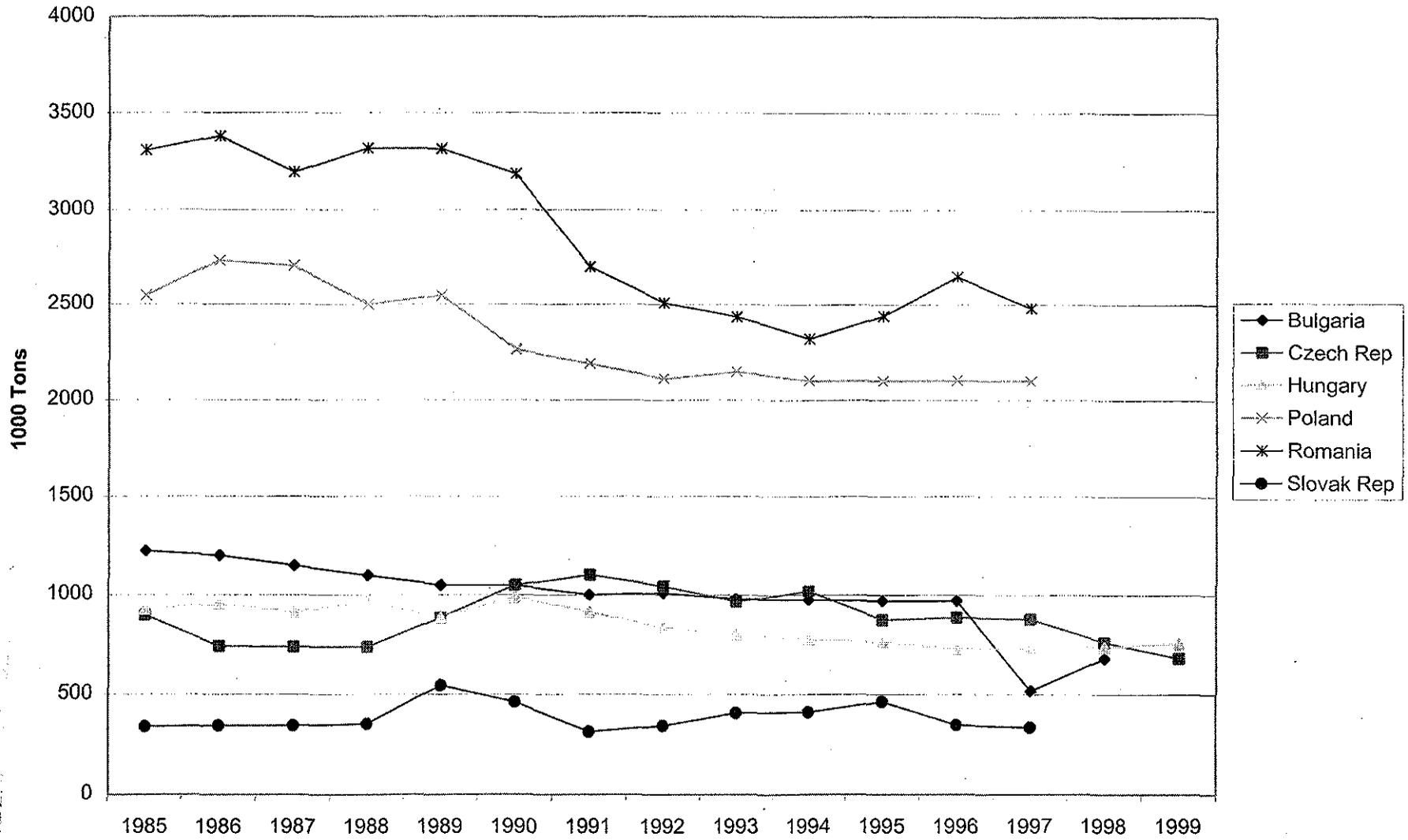
During the last years of communist rule and at the start of the transition, Central and Eastern Europe produced very high levels of pollution. This was due to reliance on outdated heavy industry, inadequate pollution control, and a poorly developed civic society that had limited information about environmental issues. Thanks to the restructuring process of Central and Eastern European economies, introduction of new legislation and much stronger enforcement, market-based economic incentives, and development of strong public pressure, mostly from NGOs and municipal governments—a process in which ETP graduates played an important role—output of some of the most significant pollutants has dropped in all six ETP countries. In many cases, the declines have been dramatic.

The following graphs provide an indication of the progress that has been made and the progress that has yet to be made. They include:

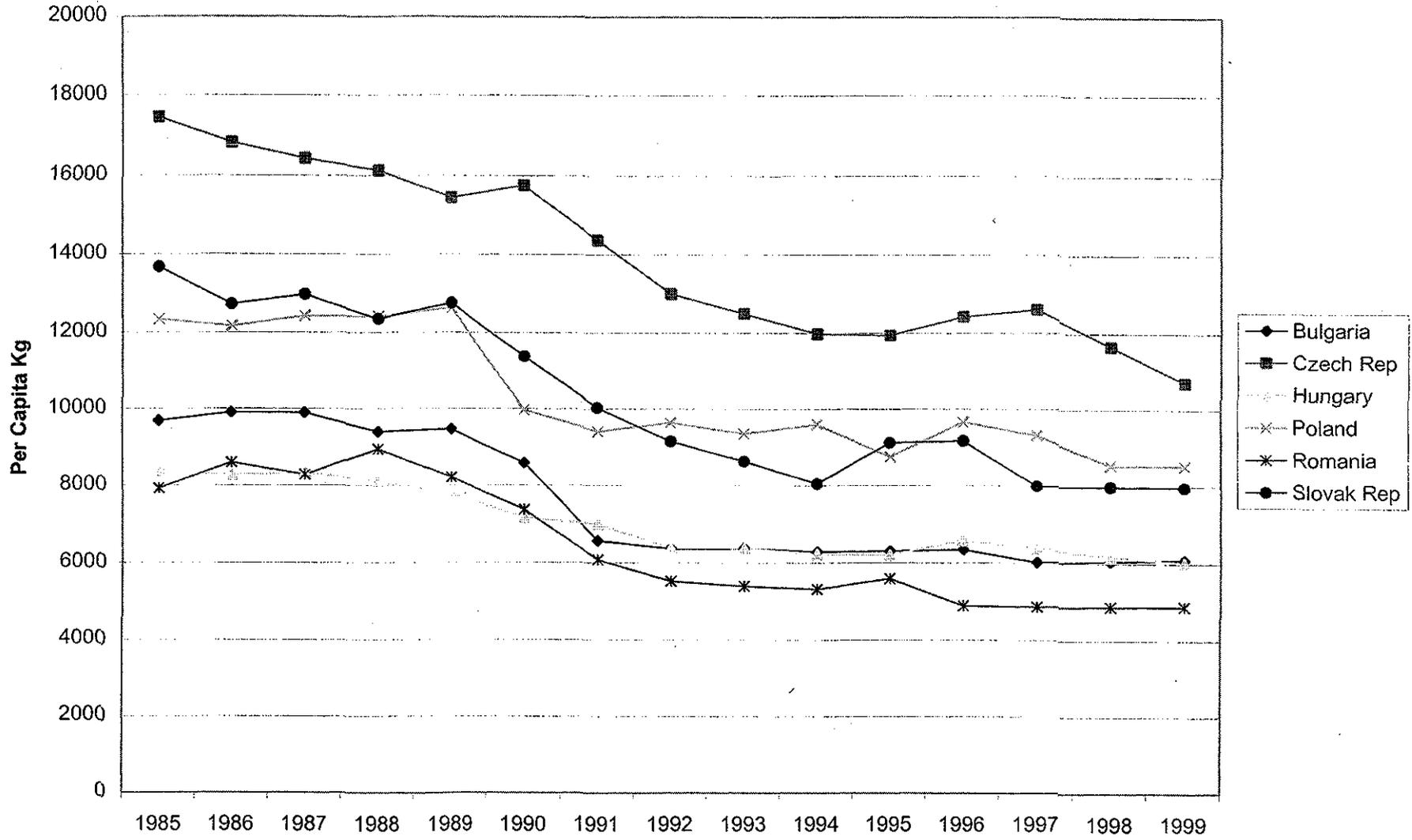
1. Total CO₂ Emissions of the CEE Region
2. Per capita CO₂ Emissions of the CEE Region
3. Total SO₂ Emissions of the CEE Region
4. Per capita SO₂ Emissions of the CEE Region
5. Total NO₂ Emissions of the CEE Region
6. Per capita NO₂ Emissions of the CEE Region

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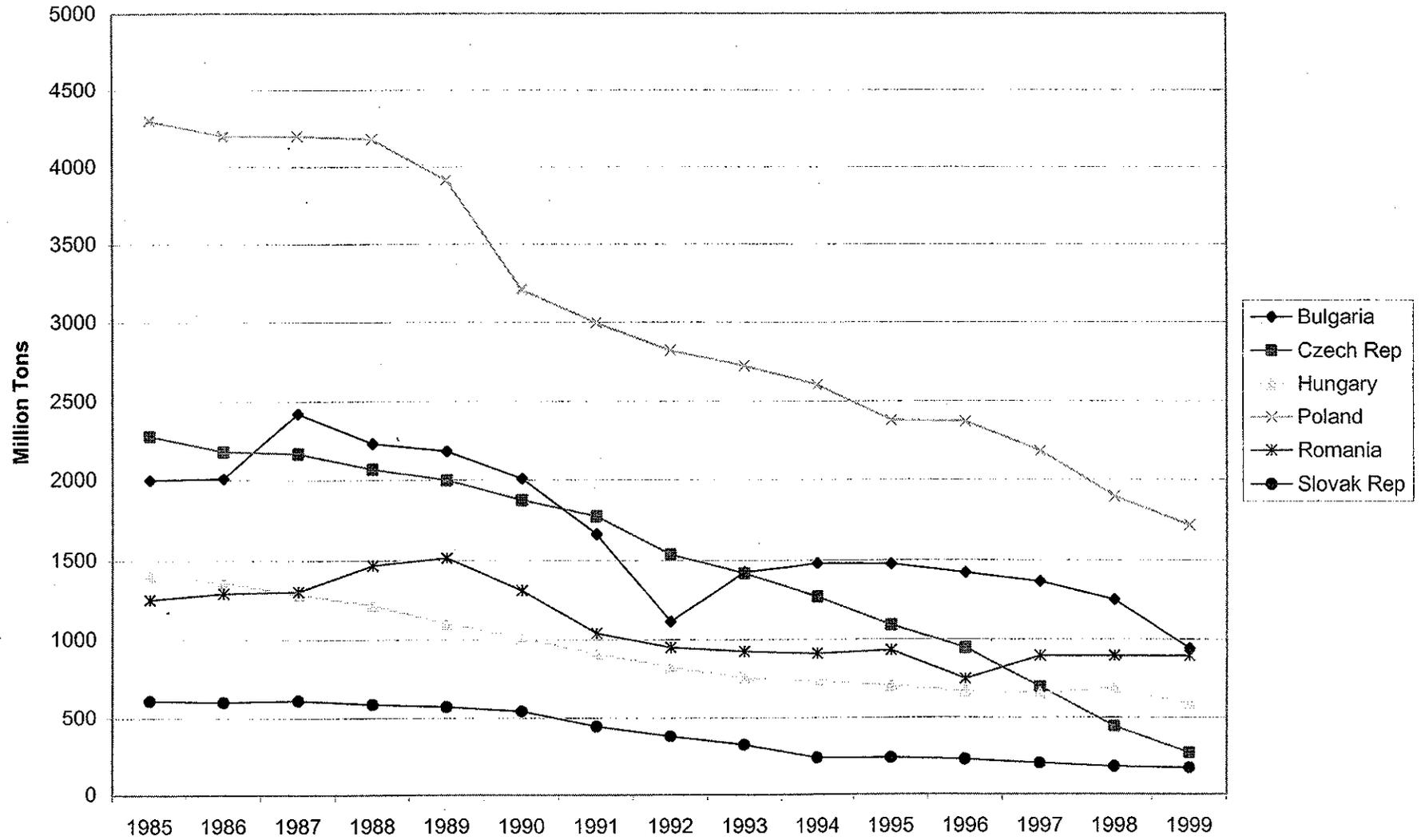
Total CO Emissions of the CEE Region



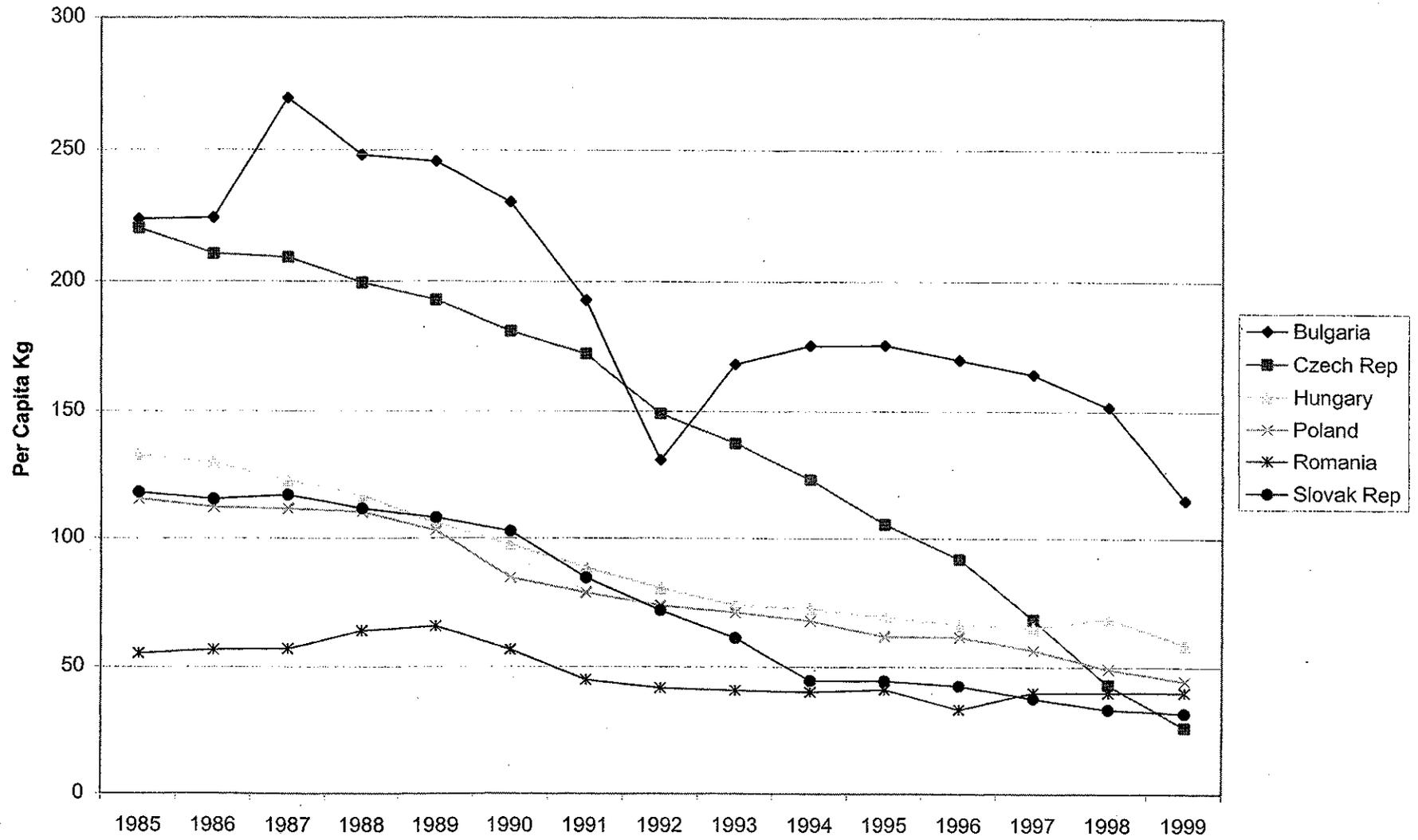
CO2 Emissions Per Capita



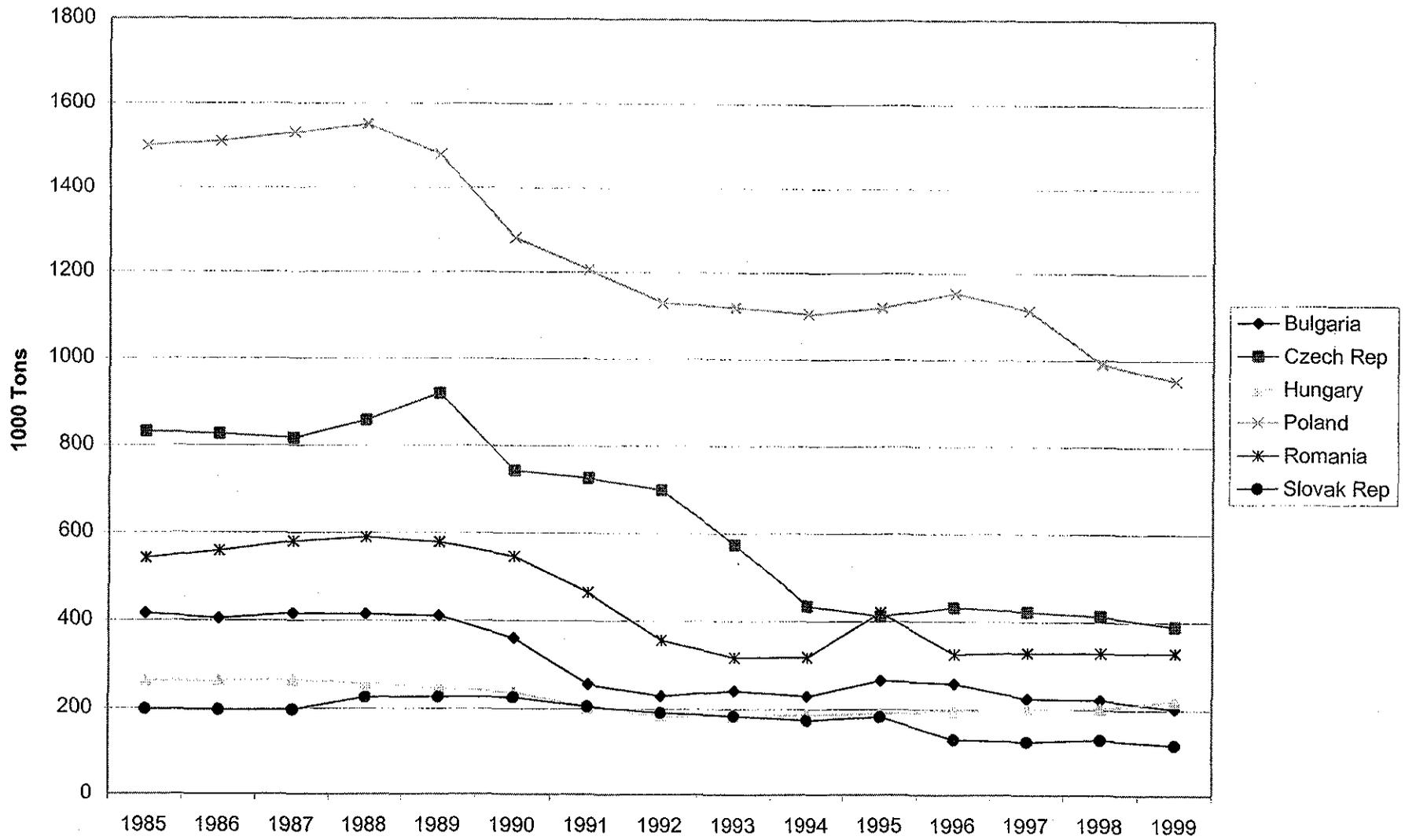
Total SO2 Emissions of the CEE Region



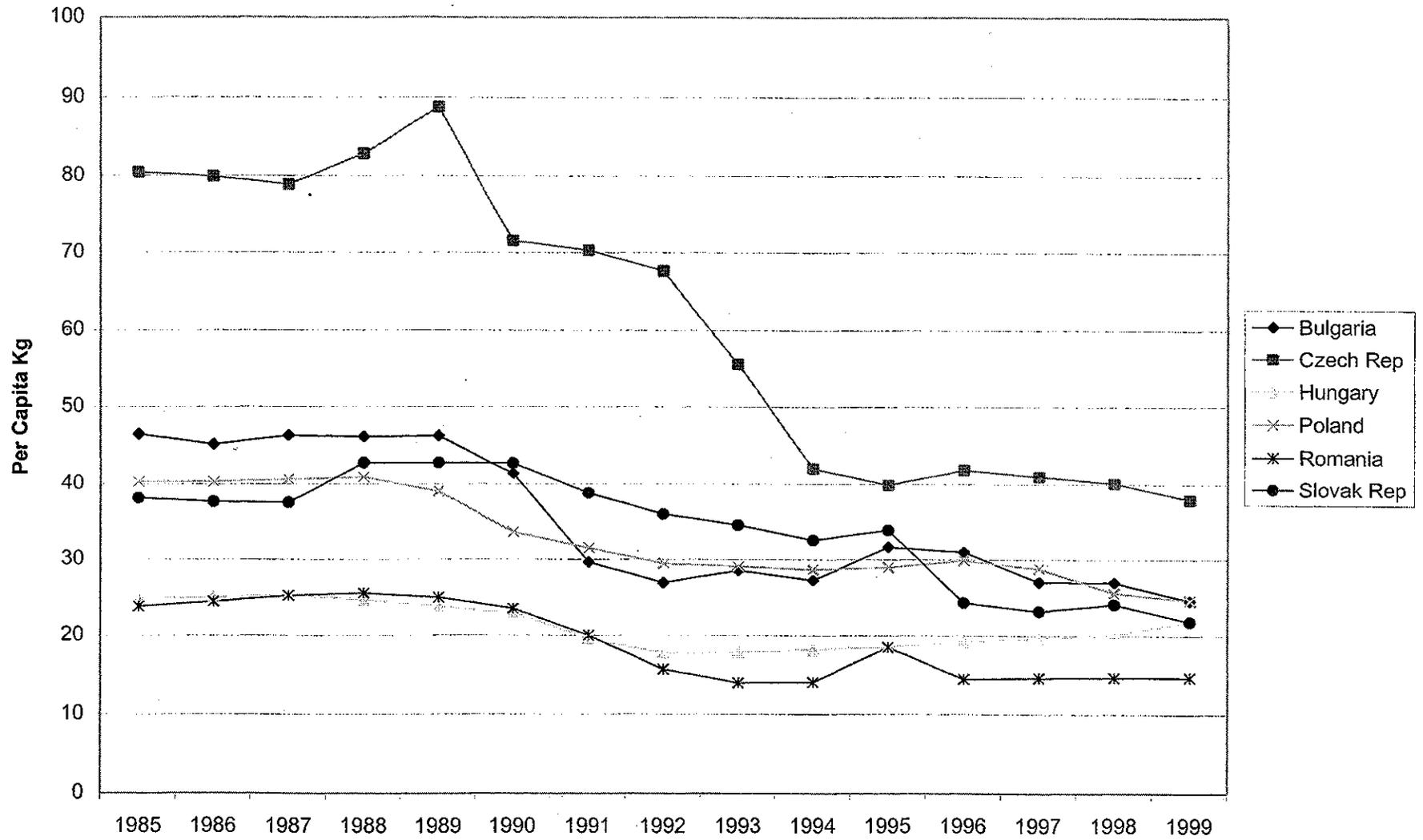
SO2 Emissions Per Capita



Total NO2 Emissions of the CEE Region



NO2 Emissions Per Capita



12.6. Appendix: Sources on ETP

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Center for Nations in Transition: <http://www.hhh.umn.edu/centers/cnt>

ETP Romania: <http://www.etpromania.com>

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Hungarian Clean Production Centre: <http://hcpc.bke.hu>

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Regional Environmental Center for Central and Eastern Europe: www.rec.org

Silesian University of Technology: <http://www.polsl.gliwice.pl/>

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