WORLD ENVIRONMENT CENTER

ECONOMIC RESTRUCTURING

Energy Efficiency and Pollution Prevention

WORKPLAN FOR ROMANIA

FY '97 FUNDING

USAID/WEC COOPERATIVE AGREEMENT NO. ANE-0004-A-00-0048-00

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WEC ECONOMIC RESTRUCTURING PROGRAM FOR ROMANIA

INTRODUCTION

WEC is in the fifth year of its cooperative agreement (CA) with USAID. The program is successful because of its acceptance and implementation by Romanian companies. The primary reason for its acceptance is the cost savings with resultant environmental benefits achieved by the companies.

During its economic transition to a market economy, Romania has experienced major disruptions which have resulted in many companies operating at 30% of their capacity. Realistic assessments of the economic conditions at almost all Romanian companies show that most lose money. The need for the managers and workers to break from the old way of thinking and operating in a centrally planned economy to that needed to survive in a market economy is great.

This need is amplified when the damage to the environment caused by inefficient operations at most Romanian companies is factored into the analysis. However, companies will not spend their limited resources solely on environmental improvement. Their top priority is to make the company profitable, and then, they would address their environmental problems.

The WEC program has demonstrated to Romanian industry and government, that with little to almost no expense on their part, the companies could realize cost savings with reduced pollution and improved energy efficiency using their existing technology. Also, and most important to the WEC program, is bringing a cultural change in how Romanian managers and workers think and operate their companies. This change in thinking ensures the sustainability of the program long after the USAID funding is finished. An example which vividly demonstrates this is a policy statement contained in the 1996 Annual Report of Arpechim, one of Romania's largest companies.

S.C. Arpechim S.A. management statement of strategy regarding the environmental protection

"ARPECHIM S.A.'s competitiveness can be achieved, both now and in the future, by a complete change in our employees' mentality regarding the matter of MINIMIZING LOSSES AND RESIDUES, as well as through a better and more efficient control of the material and energy resources, thus contributing to a cleaner, less polluted atmosphere.

Romania, alongside the other Central and East European countries, is involved in an environment rehabilitation programme. ARPECHIM is one of the first 8 units selected by WEC (World Environment Center) for a prioritary implementation of the Losses Minimizing Programmes, having a positive impact both upon the processes yield and the environment.

These programmes are followed up by USAID, through WEC."

It appears that this example shows that the objectives of the USAID program for the region are being attained.

CONTRIBUTION OF EUROPE AND NIS BUREAU ECONOMIC RESTRUCTURING OBJECTIVE

The benefits to the companies participating in the WEC program will contribute to the Bureau for Europe and New Independent States Economic Restructuring Objective by:

A. Promoting Economic Efficiency:

- Reducing pollution at the source, saves raw material for production, reduces the need to purchase additional raw material and improves the plant's operating efficiency and production.

- Assists large polluting industries in their transition to a market economy by demonstrating that market based fees and fines and market based natural resource prices will exceed the cost of implementing pollution prevention programs resulting in natural resource conservation.

- Reduces the amount of funding required to control pollution because waste minimization will decrease the quantities of waste generated.

- Reduces losses to the economy from worker health care costs associated with pollution and safety problems within the industry and the surrounding community.

- Reduces energy use and water consumption.

B. Improves the Profitability of the Company:

- Improves company practices and procedures which result in an elimination or decrease in energy loss or the generation of waste.

- Increases cost benefit awareness by training employees that waste is lost money.

- Money saved from energy conservation and waste minimization projects can be used for projects which generate greater savings which ultimately will be used to buy state-of-the-art clean technology.

- Enables the company to become more competitive through improved operating and production efficiencies which will increase sales.

- Instills pride in the employees which motivates them to operate more effectively.

C. Promotes Privatization:

- Trains industrial managers in western management techniques which enables them to show their ability to function in the private sector.

- Waste minimization techniques assist managers in assessing current and past environmental liability. This helps the government and management establish a realistic value of the company which enhances its attractiveness to western investors.

D. Promotes U.S. Investment and Technology:

- Energy conservation and waste minimization projects have established a close working relationship with U.S. consulting firms and require the use of U.S. monitoring equipment. The program demonstrated the capability of industrial services and products to a broad range of companies and could generate investments by Romanian industries in U.S. products and services.

E. Promotes Democratic Principles:

- The USAID funded WEC program is based on a team approach to problem solving and requires all team members to treat each other as an equal regardless of his/her position in the company and accept everyone's input as an important contribution.

OBJECTIVES OF WEC PROGRAM

The objective of the WEC economic restructuring program is to transfer U.S. private sector technology and techniques through a "hands-on" demonstration project with training and U.S. equipment. This has built in-country capability to independently conduct Waste Minimization which will measurably reduce pollution, provide economic benefits, reduce worker and citizen exposure to toxic compounds and conserve natural resources through the use of low-cost and no-cost techniques.

Romanian consulting firms and Romanian managers and other companies in the area where the plant is located have been invited to participate in the program thereby helping to directly build in-country capability and, thus, broadening the impact of the demonstration projects.

While the project is in progress, it is publicized in that region and stimulates other industrial plants to seek information about the programs and/or obtain help from the U.S. and the Romanian consulting firms and Romanian managers which are involved in the projects.

The waste minimization and energy conservation program has demonstrated that a more efficient use of natural resources will result when market oriented principles, i.e., cost benefit, are applied to pollution problems. This program has provided an opportunity for U.S. consultants and pollution equipment manufacturers to demonstrate their services and products which could lead to increased private investment by U.S. companies. For example, at the large Sidex Integrated Steel Mill in Galati, WEC has supplied a U.S. made Variable Frequency Drive to be used in the dust collection system which will help conserve energy and reduce the discharge of emissions. The equipment cost $22,000. Sidex is confident of the success of the demonstration project and has budgeted to purchase an additional 15 variable frequency drives. Over the next five years, it contemplates purchasing 200 more variable frequency drives.

Through its workshops, which are administered by the Pollution Prevention Center (PPC), WEC is spreading the program throughout Romanian industry. This is explained in more detail in the PPC section of the workplan.

HISTORY OF PROGRAM

The first year of the Cooperative Agreement was spent conducting environmental audits and information gathering. To keep USAID and its other donors informed of our activities, WEC has written a monthly activity report and broadly distributed it since November 1990.

In the second year, we expanded our environmental audit program and conducted "How To Do An Industrial Audit" workshops.

WEC also did programs in the urban sector, i.e., municipal waste collection and disposal. As USAID refined its program and coordinated it with other donors, WEC was requested to focus its program in the industrial sector only. Among other activities, we worked with factories whose discharged effluents ultimately reached the Danube River. These audits assisted the WASH program by identifying low cost measures to reduce industrial discharges into tributaries feeding the Danube River. This, in turn, could reduce the size of the waste water treatment facilities needed to treat effluents entering the Danube River.

The third and fourth years were spent on introducing and implementing waste minimization programs (WM) which were a logical next step after our audit programs. The first part of the WM programs is the waste minimization demonstration projects (WMDP).

WASTE MINIMIZATION PROCEDURES

The following steps comprise the waste minimization demonstration projects:

1. A reconnaissance visit is made to a plant by a team consisting of WEC staff, a process specialist and consulting engineers. During the trip, processes will be selected jointly with the plant management. Following the selection, based on the consulting engineer and process specialist's experience, an approximate estimate will be made of potential economic savings and pollution reduction which should be realized by the implementation of the consultant's recommendations. During this visit, organization, logistics, and a time schedule of the project will be established. The type of necessary monitoring equipment to be supplied by WEC will also be identified.

   A Waste Minimization Management Committee is formed consisting of managers from operations, maintenance, environmental, and other key plant departments. The objectives of this group is to ensure that the appropriate resources are committed to the project within the enterprise and supervise the WM project.

2. Starting the project: following review and evaluation of the collected data by WEC, the consultants and process specialist, and after supplying the monitoring equipment, a team consisting of WEC staff and the consultant travels to the plant to start the project. WEC and the consultant conduct an orientation meeting for the Waste Minimization Management Committee at the plant and give a demonstration of the use of the equipment, discuss the objectives of the program and the necessary

steps for its implementation.

A Memorandum of Understanding is prepared incorporating the objectives, the procedures to be followed, and the structure of the project. A commitment to subsequently continue waste minimization projects on their own will be signed at the commencement of the project by the General Director of the company and the Vice President of WEC.

The consultant works with the plant waste minimization team, reviews with the team the use of the information in their overall waste minimization program, help log results and is available for advice.

3. Conducting the project: While plant personnel continue the work, the consultant and WEC staff monitor and provide consultations during the project. The consultant prepares interim field reports and a final report. However, the consultant will be available to make emergency trips, if necessary. On the consultant's final visit, prior to project close out, he/she receives feedback on the overall program and make any adjustments that may be required.

4. Concluding the project: WEC staff, the consultant and the representatives from USAID participate in a meeting at the conclusion of the project. WEC arranges for media coverage of the close out ceremony which draws attention to the successes of a waste minimization project.

   The continued use of the WEC supplied equipment is transferred to the participating company. Following USAID procedures, ownership can be transferred at the conclusion of the cooperative agreement. As agreed to in the Memorandum of Understanding, the company begins implementing waste minimization programs as an integral part of the company's operations.

DESCRIPTION OF THE WASTE MINIMIZATION IMPACT PROGRAM

The objective of the Waste Minimization Impact Program (WMIP) is to build upon the success of the Waste Minimization Demonstration Projects (WMDP) and expand that concept throughout the various industries of each country in Central and Eastern Europe. This is now being accomplished by:

- Training programs sponsored by WEC;
- Activities of WEC's Pollution Prevention Centers;
- WEC's in-country coordinators;
- Ministries of Environment and Industry of each country; and

- USAID Missions.

The companies in the impact program are developing their own programs based on study tours of industries in the U.S. and two workshops presented in their own country. At the conclusion of these workshops, WEC requested that the participating companies accomplish three assignments:

- Issue a policy statement on waste minimization from the General Director;
- Prepare a company-wide waste minimization program by identifying waste minimization teams for appropriate sections of their plants; and
- Initiate the program by having one team identify five small projects that could be completed within ninety days.

An important aspect of the WMIP is that factory workers are being educated to the importance of small projects, i.e., ones that may produce only a yearly saving of $500 and contribute to a minimum reduction of pollution. However, these small projects are important because hundreds of these small projects can be accomplished at minimal or no cost in a very short time frame. When these small projects are totaled at year-end, the cumulative results can be impressive.

To date, nine major companies have initiated 31 projects in the waste minimization impact program. Over 100 additional companies expressed strong interest in participating in the program. WEC through the PPC, is identifying suitable companies for inclusion and has selected 15 more. For details, please refer to the next section of the workplan.

STATUS OF PROGRAM

Working through the PPC, we will continue to expand the waste minimization program now underway in the chemical sector to the entire industry. We will also conduct energy conservation and environmental management systems programs.

The steps we are taking to spread WM throughout the industry are:

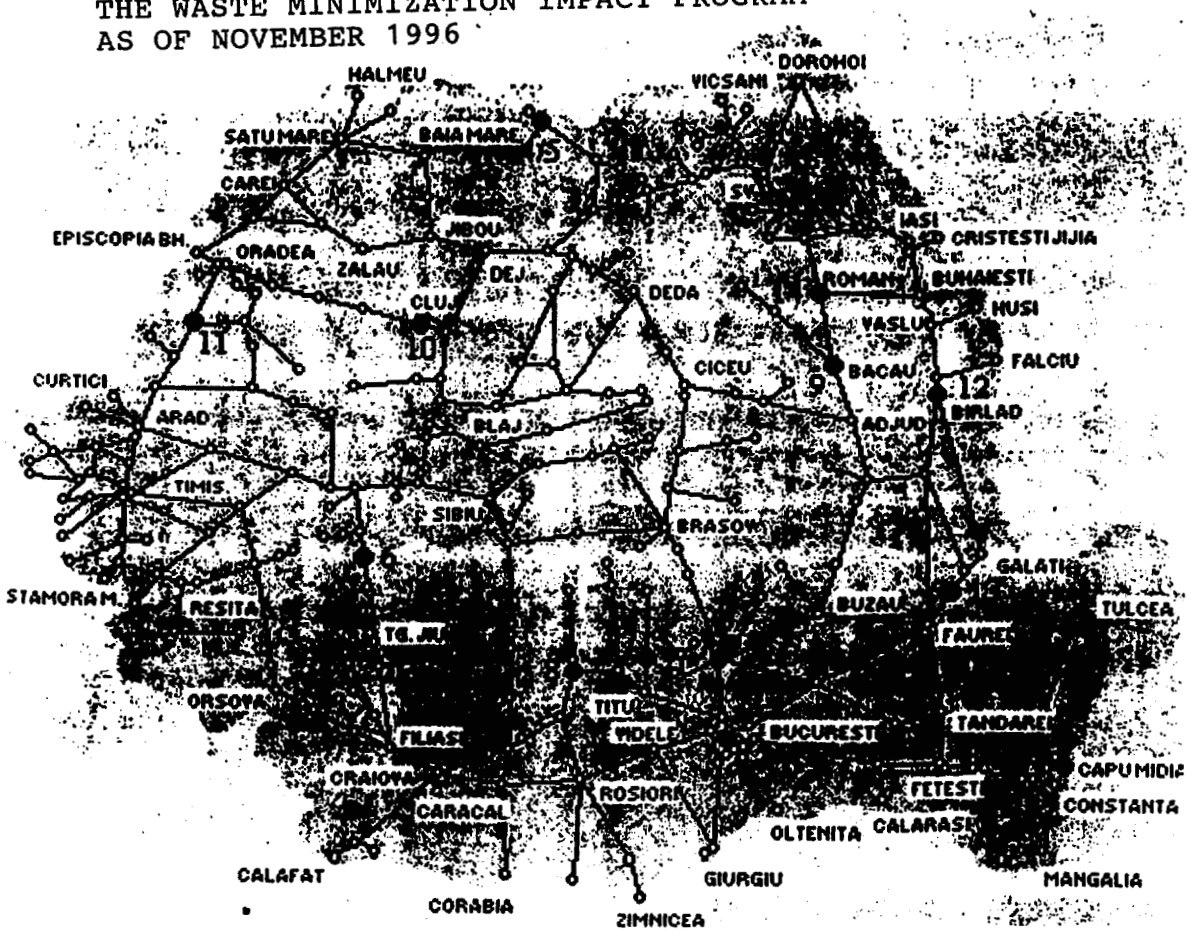
1. Waste minimization demonstration projects (WMDP) in the chemical sector are completed. Equipment and consultants were supplied.

   The positive results from these projects are being used to inform other companies about the environmental and economic benefits of waste minimization. The participating chemical companies were presenters at a seminar attended by over 500 people from all types of manufacturing companies.

2. Waste Minimization Impact Program (WMIP). Building upon that successful seminar, a second seminar, also organized through the Pollution Prevention Center, was held. Over 100 attendees paid to attend and agreed to participate in the program. Preparations are in progress to send WEC specialists to visit the participating companies to assess their progress in implementing the waste minimization program.

   A significant cost advantage of the WMIP is the fact that it is introduced to companies through training and it does not require U.S. consultants or monitoring equipment to be supplied by WEC. Therefore, the potential number of companies which can participate in the program is much larger.

ADDITIONAL COMPANIES PARTICIPATING IN THE WASTE MINIMIZATION IMPACT PROGRAM AS OF NOVEMBER 1996



1	BUCURESTI	GUMOFLEX S.A. BUCURESTI	Rubber Products
2	PRAHOVA	RULMENTI GREI S.A. PLOIESTI	Heavy Bearing Producer
3		REAL S.A. PLEASA	Refractory Materials
4	MARAMURES	SIGMOB S.A. SIGHETU MARMATIEI	Wood Processing
5		SIGSTRAT S.A. SIGHETU MARMATIEI	Wood Processing
6	HUNEDOARA	SIDERMET S.A. CALAN	Metallurgical Industry
7	DAMBOVITA	UPET S.A. TARGOVISTE	Oil Industry Equipment
8	ARGES	AUTOMOBILE DACIA S.A. PITESTI	Automobiles Industry
9	BACAU	AEROSTAR S.A. BACAU	Aeronautic Industry
10	CLUJ	CLUJANA S.A. CLUJ NAPOCA	Leather Industry
11	BIHOR	PERTOLSUB S.A. SUPLACU DE BARCAU	Oil Industry
12	VASLUI	FEPA S.A. BARLAD	Pneumatic Equipment
13	BRAILA	DUNACOR S.A. BRAILA	Textile Industry
14	NEAMT	PETROTUB S.A. ROMAN	Steel Pipe Producer
15	CONSTANTA	FERTILCHIM S.A. NAVODARI	Chemical Industry

POLLUTION PREVENTION CENTER

To sustain the program implemented by WEC under its Cooperative Agreement with USAID, it established Pollution Prevention Centers in each country. The purpose of the PPC is to provide a central location for technical assistance in waste minimization practices and other environmental management programs to industry. Technical assistance available from PPCs is in the form of library materials, workshops and seminars, on-site consultant services, and direct mailings of published waste minimization and environmental management materials.

The main current activity of the PPCs is to extend waste minimization programs to industries and provide them with needed information and technical assistance, resulting in reduced waste generation and discharge to the environment, as well as cost savings. They will accomplish this by:

- Being proactive, by providing technical assistance in the implementation of the waste minimization projects, their monitoring, assessment and reporting;
- Cooperating with industrial companies by assisting them in identifying pollution sources using WEC supplied environmental monitoring equipment;
- Promoting the methods of pollution prevention by organizing training courses, technical workshops, and publishing activity, the target group being practitioners - specialists, educators, and undergraduates.
- Retrieval, acquisition, classification, and compilation of information on pollution prevention using electronic media, data bases, international organizations, and technical publications, and a subsequent information mediation to other agencies and organizations;
- Implementing environmental projects, for example, waste minimization programs at industrial facilities;
- Conducting workshops for executive managers of industrial plants in environmental protection and how to implement cost-effective environmental programs;
- Conducting training programs in environmental management;
- Providing a library of pollution prevention information;
- Providing assistance to industry to access international, environmental information;
- Providing information and contacts with similarly oriented non-governmental, and other organizations worldwide; and
- Providing translation and distribution of the technical information connected with pollution prevention activities.

All of the preceding activities are now being performed to some extent by the PPC.

The PPC is responsible for the Waste Minimization Impact Program (WMIP), coordination and implementation of waste minimization seminars and workshops, and coordination and implementation of environmental management system workshops. The PPC Executive Directors work closely with the WEC in-country coordinator to implement these activities which include: direct mailings to industry and government participants; follow-up with program participants; and coordination and scheduling with U.S. experts visiting WMIP participants.

Environmental monitoring equipment and technical training on the operation of this equipment has been provided to the PPCs. This allows the PPCs to provide a technical service to industry that is unique from other organizations. By providing this environmental monitoring service as well as the presentation of technical workshops and seminars, the PPCs are in the position to generate revenue to assist them in becoming sustainable organizations.

The benefits of the WEC PPCs are that they:

- Maintain an independent and non-advocacy position;
- Integrate environment, economics, energy and education;
- Establish and promote partnerships among industry, government, and non-governmental organizations;
- Promote no-cost and low-cost waste minimization activities and assisting industry in implementing the procedures;
- Serve as a bridge for the exchange of information and expertise among industry, government and non-governmental organizations;
- Provide training and technical cooperation programs staffed by local experts; and
- Exchange information with environmental organizations and consulting firms abroad.

The WEC PPCs have formed a close relationship with each other thereby strengthening their network of pollution prevention resources in Central and Eastern Europe. Representatives from the five PPCs attended meetings together to discuss business strategies and development plans in March and September 1996. The agendas for these meetings are included in Appendix A. These meetings provided the opportunity for PPC Executive Directors and in-country coordinators to exchange ideas and action plans. All five PPCs will meet again in the United States during the week of April 6, 1997. They will visit several U.S. state sponsored PPCs. These joint meetings will continue throughout the life of the cooperative agreement.

Representatives from the PPCs also attended the "Fourth High Level Seminar on Cleaner Production" sponsored by the United Nations Environment Programme and hosted by the Government of the United Kingdom in Oxford, England, September 25-28, 1996. The PPCs were invited to participate in the Environmental Management Systems Train-the-Trainer Seminar.

Future activities which the PPCs are contemplating, in addition to the completion and implementation of existing responsibilities are:

- Conduct Environmental Management System Workshops;
- Conduct Environmental Impact Assessments;
- Respond to specific industry demands and requests;
- Conduct Energy Conservation Workshops; and
- Cooperate with other funding institutions to obtain additional funding.

The overall strategic plan in the development of the WEC PPCs has been for the PPCs to develop relationships with companies in their respective countries. These relationships will aid in the national and industrial recognition of the PPC as an organization that not only provides a service, but also will provide continuity in the pollution prevention/environmental management process for industries.

PPC OPERATIONAL PLANS

The PPC has developed an operational plan. A more formalized plan consistent for all PPCs will be developed at the April 1997 PPC meeting. However, we believe it's sufficient to note that all are striving in an organized manner to achieve sustainability.

The Pollution Prevention Center (PPC) continues to strive for sustainability by implementing waste minimization and pollution prevention activities with industry and working with other organizations to develop future funding support. They have become an integral vehicle for promotion of the World Environment Center's (WEC) Waste Minimization Impact Program, and provide a central location for technical assistance in waste minimization practices and other environmental management programs to industry. Their fee collection for workshops, seminars, environmental monitoring services, and technical services will provide a revenue source that is essential for their survival. Their ability to cooperate with other donor organizations, non-governmental organizations and industry makes them an important component of environmental management in industry in Romania.

The path for sustainability has been identified, and the PPC is implementing its plans for institutionalization in Romania.

The fiscal year 1997 budget for the PPC is:

Salary	$42,444
Operations	40,500
Domestic Travel	10,000
Total	$92,944

PPC HISTORY, BUSINESS PLAN AND ACTIVITIES

WEC entered into an agreement in November 1994 with the General Association of Romanian Engineers (AGIR) to host a PPC. AGIR has members from all engineering disciplines which form local branches and is affiliated with the International Engineering Societies.

In February 1995, WEC decided to move toward establishing an independent PPC outside the General Association of Romanian Engineers as originally planned because of organizational difficulties. This independent PPC was established with the concurrence of the Romanian government and achieved legal status as an independent Romanian foundation in August 1995. Mr. Vladimir Gheorghevici, formerly with the Ministry of Industry, was selected as the Executive Director of the PPC.

Business Plan

September 1966 - September 1997

- Main mission, continuing to develop PPC's means for the PPC's future financial self efficiency.

- Goals and objectives:

1. Continuing market assessment and description for realistic positioning of PPC.

    1.1 Identify actual level for different type of services demand

    a. library (books, magazines, technical reports, conference proceedings, case studies, catalogs a.s.o.)
    b. data bank with specific information (emission factors, technology descriptions a.s.o.)
    c. environmental programs (waste minimization, environmental management technological achievement description)

d. technical assistance for the permitting procedure of the industrial plants (field measurements with portable monitoring equipment, environmental balance, impact assessment studies)
e. "clearing house" system for cleaner production

1.2 Reliable partners and clients: industrial plants

1.3 Identify income sources and sponsors

a. Direct services to industrial plants on behalf of other foreign partners (UNEP, BERD, JICA, others - worldwide): training workshops/seminars; expertise for assessment of the most suitable options regarding "law-waste"/"non-waste" technologies and where advisable "best available technologies", organizing exhibitions with technologies and services;
b. Competitors: designing institutes, private consulting companies, other NGOs;

1.4 PPC best offer;

1.5 Contacts (mail, fax, phone, direct contacts)

a. Plant managers and experts
b. Government representatives
c. Foreign organizations and companies (USA, Canada, Great Britain, France, Austria, Denmark, The Netherlands, Sweden, Finland, Japan, Switzerland)

1.6 Presentation documentation

a. PPC's objectives, activities, services offer, list of the Romanian industrial plants interested in PPC's services offer;
b. list of foreign organizations and companies with potential availability to assist PPC, including cooperation activities for the use of the Romanian industrial plants;

1.7 Differentiates for PPC

a. Increased Added Value through good management of available resources (information, associate experts, logistic, domestic and foreign contacts, funds a.s.o.)
b. Continuous training of the PPC staff
c. Reliable information and contact system
d. High professional quality associate consultants
e. Law overhead costs and law reimbursing rate for technical

equipment (as many of the equipment can be obtained through donations or at convenient costs)
f. Good responsiveness and fast access to the industrial plants

1.8 Alliances

For services:
- independent/associate consultants
- private consulting companies
- companies interested in environmental projects

For marketing:
- independent/associate consultants

1.9 Client Survey:
- By telephone, fax, mail, e-mail, direct contacts
- Workshops/Seminars
- Advertising directly to companies (presentation brochures)

2. Estimated resource requirements.

2.1 Offices:

a. Rent, utilities, cleaning, accidental repairing
b. Adjusting internal telephone system
c. Adjusting locking system of the doors for the PPC's patrimony security
d. Improving working lighting system and ventilation (desk lamps, high power fans)

2.2 Equipment:

a. Two personal computers for data bank work and Internet connection, taking into account the actual configuration of the permanent staff
b. Upgrading the existing personal computers for an efficient use of the working time
c. One laser printer as a stand-by
d. Software for working share and communications, bearing in mind the copyright law issued 1996
e. Portable monitoring equipment, for different air and water pollutants: SOX, NOX, CO, waste oil products in water, dust, heavy metals and other pollution indicators: COD, CBO_5, soluble O_2, NH_3, NO_3, NO_2, necessary to ensure the technical support for the permitting procedures

3. Staff

3.1 Permanent:

a. Director
b. Deputy Director or main assistant
c. Assistant for communications (with industrial plants and foreign organizations and companies), documentation
d. Assistant for bookkeeping, communication and library
e. Assistant for technical issues (PC - network management, data bank, monitoring equipment operation)

3.2 Part time:

a. Attorney, expert bookkeeper
b. Physicists, chemists
c. Experts for economic and financing
d. Environmental engineers (air-water-soil)
e. Expert engineers - for technologies

3.3 Expenses:

a. Rent, utilities, cleaning, general maintenance
b. Communications (telephone, fax, mailing, e-mail, Internet)
c. Printing, copying, brochures making
d. Materials (stationers, office accessories, different materials for cleaning and repairing, decoration materials)
e. Marketing (inquiring questionnaires, presentation materials a.s.o.
f. Training for permanent staff (monitoring equipment operation, WM training, environmental management, impact assessment projects, technical and financial evaluation, offers drafting a.s.o.)
g. Wages and social costs
h. Fees
I. Travel
j. Office supply, meetings, protocol, advertising
k. Car use, taxi and parking

The Romanian PPC is implementing the WEC WMIP Program and has conducted the following:

- Waste Minimization Seminar - June 13-14, 1994, 50 participants represented 8 major chemical and petrochemical companies and government officials

- Follow-up Waste Minimization Seminar - December 7, 1994, 70 participants

- Environmental Consultant Seminar - October 5-6,1995, 16 companies representatives, fee charged for participants

- Industry-wide Waste Minimization Seminar - November 14, 1995, 475 participants represented 162 companies, consulting firms, government agencies and NGOs

- Waste Minimization Seminar - February 28-29, 1996 in Bucharest, 51 companies represented, fee charged for participants

All fees collected are deposited into a special reserve fund.

The PPC has received a TVA 1000 analyzer for Volatile Organic Compounds. This environmental monitoring instrument is available for industry use and technical service. Subsequently, it will receive portable water samplers and flow meters.

FINANCIAL STATUS OF PROGRAM

As of November 30, 1996, there is an unspent balance of $625,000. Of this amount, $247,000 is WEC program funding. The remaining funds are for program evaluation, Environmental Action Program, WEC overhead and salaries. It should be noted that due to efficiencies we will be able to use some of the salary budget for programs and help close an anticipated deficit.

Mr. Richard J. Hough, USAID Representative, in 1995 requested WEC to initiate an air monitoring program in Pitesti. Although there were no funds budgeted, the USAID Representative said he would "pencil in" $500,000 for WEC in FY '97 and an additional $500,000 in FY '98. It was understood that this was not guaranteed and subject to the approval of the new USAID Representative.

Mr. Hough felt an urgent obligation to fulfill a four year old promise of assistance to the regional EPA director and believed WEC could provide the required assistance in a short period of time.

In response to this request, WEC initiated a program involving the large refinery and the city of Pitesti whereby WEC established a working committee of

representatives from the regional EPA and Arpechim, the refinery, to discuss, agree and implement an improved air monitoring program.

Details of the project have been provided in previous reports. Suffice to write is that the regional EPA and Arpechim are harmoniously cooperating in developing the improved air monitoring program.

WEC is providing information about the Texas Natural Resources Conservation Commission cooperative air monitoring program between local EPAs and refineries in Texas because of the similarity of the programs. The Pitesti regional EPA appreciates this type of input because the involvement of the local U.S. EPA gives the Pitesti officials more assurance about implementing a program similar to the Texas program.

WEC has requested the Texas Natural Resources Conservation Commission to provide staff to visit Pitesti and WEC is reasonably confident it will send a representative.

The Pitesti air monitoring estimated cost for consultant's fee, equipment and travel is	$ 70,000

THE REMAINING PROGRAM FUNDING IS BUDGETED AS FOLLOWS:

• PPC Operations (includes trip to U.S.)	66,000
• Environmental Management Systems Workshop (includes presenters' fees, travel, preparation and presentation)	17,000
• WEC staff travel	16,000
• Monitoring Equipment for PPC	25,000
• WEC specialist follow-up visits to companies participating in the Waste Minimization Impact Program Two specialists visiting three companies @ $7,000 per trip x 6 trips	42,000
• Waste Minimization Program at Dascia includes demonstration project, training and overall plant assessment (note: Dascia has agreed to donate a portion of the first year's savings from the demonstration project to the PPC)	80,000
Sub total	316,000
WEC overhead @ 28%	88,000
Total	$404,000

There is a projected shortfall of $157,000 which WEC hopes to partially make up by shifting funds from the WEC salary budget.

FY '97 FUNDING REQUEST

WEC is submitting its FY '97 funding request which is designed to achieve USAID objectives through the program that will be administered by the PPC.

Deficit for current operations	$100,000
• PPC Operations	100,000
• WEC specialist for follow-up visits to companies implementing the waste minimization program. Two specialists per visit of three companies @ $7000 x 4 visits	28,000

WEC proposes introducing an Energy Conservation Program in eight major chemical companies. An energy conservation workshop would be held. Attendees at this workshop would be given assignments to implement an energy conservation program. The energy conservation assignment would require the use of U.S. made monitoring equipment to identify where energy savings could be found. A major benefit of an energy conservation program, in addition to the economic benefits, is the reduction of the emission of greenhouse gases into the atmosphere thereby helping the U.S. program to reduce global warming. Unlike the waste minimization impact program which can be done without monitoring equipment, an energy conservation program needs monitoring equipment. Waste can be seen with its air emissions, waste material on land or effluents in the water. Lost energy cannot be seen and needs monitoring equipment to document the loss.

• Energy Conservation Workshop	16,000
• Equipment for follow-up to workshop for energy efficiency program. 10 companies @ $5,000 each	50,000
• WEC specialist for follow-up visits to 10 companies developing an Environmental Management System based on the workshop to be presented in the Spring of 1997. Two specialists visiting two companies per week @ $6,000 x 5 trips	30,000
• Using the air monitoring program at Pitesti as a model,	

	select another city for a similar program. The Pitesti model could be used as an example for all Romanian cities in how to implement an improved air monitoring program which could help the local industry and municipality comply with the new Romanian environmental law	80,000
•	WEC salaries	115,000
•	Staff travel	32,000
•	Direct program cost	28,000
	Sub Total	579,000
	WEC Overhead @ 28%	162,000
	Total	$741,000

The proposed funding can be reduced to meet a $500,000 level by postponing the air monitoring program and reducing the number of companies in the energy conservation and reducing the follow-up programs for waste minimization and environmental management systems to FY '98.

PUBLICITY

Experience has shown that publicizing the results of the program at appropriate times increases awareness of the program throughout the country; stimulates additional interest in the program; and creates a positive image of the PPC, USAID, the participants and WEC.