



WORLD ENVIRONMENT CENTER

POLLUTION PREVENTION CENTERS WORKSHOP

January 23-26, 1995

**World Environment Center
419 Park Avenue South, 18th floor
New York, N.Y. 10016**

February 1995

DISTRIBUTION

Adrian L. deGraffenreid, Representative, United States Agency for International Development, Tallinn Estonia

Michael Kalinoski, Senior Environmental Specialist, Bureau for Europe and New Independent States, United States Agency for International Development, Washington, D.C.

Patricia A. Swahn, Acquisitions Manager, Document Acquisitions, United States Agency for International Development, Washington, D.C.

Juri Soone, Executive Director, RAS "Kiviter", Kohtla Jarve (plant report)

Mati Rillo, General Director, Rakvere Meat Processing Plant, Rakvere (plant report)

Aleksandr Brokk, Executive Director, Nakro Tannery (plant report)

Antony G. Marcil, WEC, New York

George Carter, WEC, New York

Thomas J. McGrath, WEC, New York

Romuald Michalek, WEC, New York

Thomas Pluta, WEC, New York

Anne Randmer, WEC Coordinator

James C. Stouch, P.E. Malcolm Pirmie, Inc.

(2) Files

DISCLAIMER

The opinions expressed herein are the professional opinions of the authors and do not represent the official position of the Government of the United States or the World Environment Center. This report is not for distribution without written approval from the U.S. Agency for International Development, Washington, D.C. or the World Environment Center, New York.

TABLE OF CONTENTS

	<u>Page</u>
I. Introduction	4
II. Executive Summary	5
III. Itinerary	6
IV. Discussions	7
V. Appendices	10
A. PPC Workshop Outline and Manual Table of Contents	
B. Cleaner Production Project Proposal	

I. INTRODUCTION

BACKGROUND AND PURPOSE OF TRIP

From January 23 to January 26, 1995 World Environment Center (WEC) personnel and consultants visited Estonia to conduct training for Pollution Prevention Center (PPC) personnel from Estonia, Latvia, Lithuania, and Poland in the development of PPC business plans.

The WEC team for the PPC training was Gretchen Mikeska, Project Manager and Thomas A. Pluta, Program Manager, WEC; and Richard Reibstein, consultant, Massachusetts Office of Technical Assistance.

This report was prepared by Thomas A. Pluta and includes material submitted by Richard Reibstein.

II. EXECUTIVE SUMMARY

This report describes the activities of the WEC team which conducted Pollution Prevention Center (PPC) training in Estonia.

The WEC team of Gretchen Mikeska, Thomas A. Pluta and Richard Reibstein conducted a three day training session for PPC personnel from Estonia, Latvia, Lithuania, and two centers in Poland. Participants were provided with extensive reference materials and a manual on the operation of a PPC. Preliminary business plans were reviewed and future action plans were prepared. A copy of the workshop outline and manual table of contents is attached as Appendix A.

Mr. Gulbrand Wangen, Program Manager, DNV Development, briefed WEC representative and workshop attendees on the Norwegian Cleaner Production Program (CP). CP is similar to the WEC waste minimization program and is interested in establishing cooperative programs in the Baltic Republics. The CP project proposal is attached as Appendix B.

III. ITINERARY

Monday - Thursday
January 23-26, 1995

PPC Workshop
Estonian Management Institute
Tallinn, Estonia

Wednesday
January 25, 1995

Norway Cleaner Production Program Briefing

January 23-26, 1995
Estonian Management Institute, Tallinn
Pollution Prevention Center Training

Attendees

Dr. Anne Randmer	Director, Estonian PPC
Valdu Suurkask	Technical Assistant, Estonian PPC
Nataly Ladutko	Latvia PPC
Leonardas Rinkevicius	Lithuanian PPC
Andrzej Doniec	Polish PPC @Lodz Technical University
Ela Pluska	Polish PPC @Atmotherm
Richard Reibstein	Assistant Director, Massachusetts Office of Technical Assistance
Gretchen Mikeska	Project Manager, WEC
Thomas A. Pluta	Program Manager, WEC
Toomas Pallo	Guest, Stockholm Environment Institute (January 25th only)

The purpose of the workshop was to bring PPC personnel together to provide training in the development and operation of PPCs; to develop PPC business plans; and to establish a PPC network among PPC personnel. The workshop was jointly developed by WEC and Mr. Richard Reibstein of the Massachusetts Office of Technical Assistance, Boston, Massachusetts. The workshop agenda, manual table of contents, and summary of follow up actions is attached as Appendix A.

The first day focused on the expectations of the participants, the development of mission statements, identification of appropriate roles for PPCs, and preliminary business plan outlines. The key outcomes were: (1) an understanding of the common elements and differences of the PPCs in each country; (2) the importance of understanding customer needs; (3) the need for flexibility and openness in responding to inquiries from plants.

The second day involved identification of potential clients by sector (industry, government, other organizations) and the development of program criteria to meet these client population needs. Mission statements were discussed and revised to reflect individual PPC circumstances. Major business plan elements were discussed in the context of the draft business plans prepared by some of the PPCs. Preliminary short, medium and long term schedules for the delivery of services were prepared for use as PPC planning guides. A brainstorming session on possible funding sources identified nine categories and 18 specific funding sources to be investigated. The key outcomes were the importance of "getting on site" to gain practical experience and develop a reputation for service and expertise. Mr. Reibstein indicated that "getting on site" was the single most important factor in establishing and developing the capability of his agency in Massachusetts.

The third day focused on identifying specific actions to implement PPC strategies and business plans. Key outcomes were: (1) the development of a list of post-workshop action items and completion dates; and (2) a list of proposed PPC workshops and dates. It was agreed that the PPC directors would meet again in January, 1996 in Kaunas to review their progress and exchange information and experiences on program implementation.

Mr. Reibstein summarized his impressions of the PPC personnel and their organizations as follows:

1. PPC personnel are highly motivated and knowledgeable with regard to both technical matters and the economic and political circumstances which are affecting the development of the PPCs. They have realistic expectations relative to the timely development of programs and services.

2. CEE PPCs face much more difficult economic circumstances than their U.S. counterparts. The level of interest and motivation of industries which are in the throes of rapid economic changes require their full attention to survive and to gain some level of competitive position within their country as well as in the broader emergent global economy.
3. PPCs need to focus on the delivery of programs ("getting on site") as quickly as possible consistent with their technical capabilities today. The primary emphasis should be on doing and not an inordinate emphasis on planning. The limited availability of part-time PPC personnel should be directed to service delivery.
4. WEC needs to take the lead regarding the identification and development of funding sources, with particular emphasis on initial support from government sources, e.g. eco-funds. Additional funding through other donors should be vigorously pursued. Experience and reputation are critical since successful competition for funds is often a function of being "visible". Longer term plans to become self supporting should be clearly explained to potential funding sources.
5. The importance of providing services on a confidential, non-regulatory basis by independent agencies is a critical factor in the success of U.S. PPCs. Compliance assistance provided by such agencies has benefited enforcement agencies by increasing voluntary compliance. This can be especially valuable in CEE countries where enforcement agencies may have limited staffing and technical expertise.
6. PPCs must establish good working relationships with government agencies to integrate pollution prevention into agency planning strategies related to education, technical assistance and regulatory development.

January 25, 1995

Norway Cleaner Production Program

Attendees

Gulbrand Wangen Head of Section - Environment, DNV (Norway Cleaner Production Program)
Workshop participants listed above

Mr. Wangen is a Program Manager with DNV Development. DNV is working with the Norwegian Society of Chartered Engineers (NSCE) in the *Capacity Building Program in Cleaner Production in the Baltic Countries, the St. Petersburg and Kaliningrad Area (CP)*. The program is seeking cooperating partners in this area. Mr. Wangen knew of WEC through the OECD evaluation report on waste minimization and pollution prevention programs being conducted in Central and Eastern Europe. Since there are similar goals in both programs, NSCE and DNV are seeking partners to take advantage of the strengths of both programs and provide a more effective approach to building the in country capacity for waste minimization in the Baltic Countries. This approach has merit given the increasing demands for limited resources, greater donor cooperation and avoiding duplication of effort.

Mr. Wangen described the overall CP approach, project timing and budget. A detailed description is attached as Appendix B. Lithuania has been selected for the first CP Baltic Republics program initiative. Given the experience and progress made by WEC in its the Waste Minimization Demonstration Programs and Waste Minimization Impact Projects, further discussion between WEC and CP should be continued.

NOTE: Mr. Romuald Michalek, Vice President, Technical Programs, will meet with Mr. Olav Nedenes and Mr. Gulbrand Wangen in Norway to discuss possible areas of cooperation.

APPENDIX A

PPC WORKSHOP OUTLINE

MANUAL TABLE OF CONTENTS

WORKSHOP NOTES

BUSINESS PLAN OUTLINE

PPC ACTION LIST

POSSIBLE PPC WORKSHOP LIST AND SCHEDULE



EESTI MAJANDUSJUHTIDE INSTITUUT
Sütiste tee 21 ,Tallinn EE0034 ,Eesti Vabariik

**TRAINING FOR BALTIC AND POLISH POLLUTION PREVENTION CENTER
MANAGERS**

January 23 - 26, 1995

Sütiste 21, room 84

Estonian Management Institute, Tallinn, Estonia

Program:

Sunday, January 22:

Arrivals

Dinner is available in the bar

Monday, January 23:

- 7.30 - 8.30 Breakfast
- 9.00 - 12.30 Introductions, expectations, business plan outline
Review of business plan outline
Definitions: what is a PPC, What is P2?
- 10.30 Coffee break
- Goals/objectives; mission statement.
 Sayings, anecdotes and sound bites.
- 12.30 - 13.30 Lunch (canteen)
- 13.30 - 18.00 Organization:
 Tasks; resources; action.
- 15.00 Coffee break
- Implementation:
 What works, obstacles and implementation concerns; OTA.
- 19.00 Dinner (canteen.)
Evening activity: Update Business plan. Prepare short program presentation for Tuesday.

Tuesday, January 24:

- 7.30 - 8.30 Breakfast
- 9.00 - 12.30 Presentation of Business plan. Business plan critique
- 10.30 Coffee break
- Funding alternatives. Marketing.
Measurement.
- 12.30 - 13.30 Lunch
- 13.30 - 18.00 Fitting pieces together:
Strategy; organization.
- 15.00 Coffee break
- Fitting pieces together:
Implementation.
You've been asked for help. Now what?
- 19.00 Dinner
- Evening activity: write on-site visit protocol

Wednesday, January 24:

- 7.30 - 8.30 Breakfast
- 9.00 - 12.30 Items not previously covered:
Outreach strategies; program management; regulatory agencies.
- 10.30 Coffee break
- Waste exchange;*
Presentation: on-site visit protocol.

12.30 - 13.30 Lunch

13.30 - 18.00 Funding strategies.
Checking plans for completeness.

15.00 Coffee break

Course evaluation

18.00 Lunch

Evening activity: individual consultation upon request

Thursday, January 26:

Individual consultation upon request.

Meals as on previous days.



POLLUTION PREVENTION CENTER

TRAINING MANUAL

TALLINN, ESTONIA

January 23 - 25, 1995

TABLE OF CONTENTS

Page 1.....BACKGROUND

Page 9.....GOALS, VISION, MISSION

Page 17.....SPECIFIC TASKS

Page 22.....INFORMATION GATHERING

Page 25.....INFORMATION DISSEMINATION

Page 31.....BUSINESS STRATEGY AND RESOURCES

Page 34.....MARKETING

Page 36.....PERSONNEL

Page 38.....MANAGEMENT

Page 43.....CONCLUDING THOUGHTS

ATTACHMENTS

- A Toxics Use Reduction Act, Progress Report
- B GOALS: Team work plan, company policies, NBEN by laws
- C Information Sources
- D Manual
- E Flyers and Fact Sheets
- F Articles
- G Case Studies
- H Waste Exchange
- I Workshop Materials and Speeches
- J PERSONNEL: Org chart, procedures, job descriptions, posting, performance review, interview questions.
- K Weekly Reports
- L Previsit Questionnaire and TUR regs with cost of toxics
- M Certificate of Recognition, sample letters, checklists

WHAT WE HEARD IN THE DISCUSSION ABOUT WHO YOU ARE? CHALLENGES/POSSIBILITIES

- COALITIONS (REGIONAL COOPERATION)
- RELATIONSHIPS WITH MINISTRIES (FORM AD HOC SPECIAL PURPOSE TEAMS)
- CASE STUDY SUCCESSES (START SMALL AND BUILD ON SUCCESS)
- OTHER DONOR COOPERATION (LOOK FOR HELP EVERYWHERE)
- IDENTIFY STRENGTHS AND WEAKNESSES
- CHANGING CONDITIONS (BE FLEXIBLE)
- FUNDING (FOLLOW THE MONEY - EX PHARE, WB, EBRD, EKOFUND, ETC)
- FORECASTING (LOOK AHEAD WHILE YOU ARE DOING)
- INVENTORY THE COMPETITION
- REGULATORY AND POLICY DEVELOPMENT
- INVOLVE CITIZENS
- MEASURE RESULTS

EXPECTATIONS

- HOW TO ATTRACT INDUSTRIES
(MARKETING, PUBLICITY, MONEY, VODKA)
- FUNDING FOR RECONSTRUCTION/DEVELOPMENT
(FUNDING APPLICATION, FUNDING SOURCES ASSISTANCE)
- PPC REPUTATION/CERTIFICATION
(EUROPEAN COMMUNITY, ISO)
- ACTION PLAN
(CLARIFY PPC/WEC OBLIGATIONS, TIMETABLES/SCHEDULES, \$)
- SERVICES DEFINITION
- PRACTICAL EXERCISE - GOING ON SITE; VISIT PROTOCOLS
- OFFICE MANAGEMENT
(CONSULTANT RECRUITMENT, PROCEDURES, MEASURING PERFORMANCE)
- MARKET STRATEGY/SURVEY
(ACTION/GOS, VISIBILITY, VIP CONTACTS, ENDORSEMENTS)
- PPC "NETWORKING"
(INTERNATIONAL, NATIONAL COMMUNICATION LINKS)

SOUNDBITES - ARE BRIEF AND CONCISE SUMMARIES OF KEY POINTS ABOUT YOUR PPC

- WHO WE ARE
- WHAT ARE THE BENEFITS OF PPC ACTIVITIES
- CITE ACTUAL EXPERIENCE
- LET THEM KNOW HOW TO CONTACT YOU

EXAMPLES OF WORDS WHICH SHOULD BE INCLUDED IN A SOUND BITE IF THEY REFLECT YOUR MISSION AND PURPOSE

QUALIFIERS

FREE, CONFIDENTIAL, NOT REGULATORY, ON SITE, COST EFFECTIVE, MEASURABLE, LOW COST NO COST

ACTIVITIES

TECHNICAL ASSISTANCE, TRAINING, INFORMATION, ETC.

YOU MUST KNOW WHAT YOU ARE TALKING ABOUT!

DEFINITIONS

P2 - REDUCING VOLUME AND TOXICITY BEFORE CREATING A WASTE

COMMON SENSE OF THE MEANING VS. LEGAL DEFINITION

DON'T LET DEFINITIONS GET IN THE WAY OF DOING - **GET ON SITE**

ACTION STEPS

GET YOUR FOOT IN THE DOOR; SEE WHAT THEY WANT AND ALWAYS TALK ABOUT P2

STOP/LISTEN/LOOK

- STOP - THEY ARE THE CUSTOMER
- LISTEN - FIND OUT WHAT THEY WANT
- LOOK - SEE WHAT THEY ARE DOING

SOURCE REDUCTION MODE OF INQUIRY
WHY? WHY? WHY?

YOU ARE THE LINK BETWEEN THEIR PROBLEM AND THE SOLUTION

BE CONSISTENT - STAY WHERE THEY CAN FIND YOU, CALL YOU, FAX YOU

CUSTOMERS

CATEGORIES

- INDUSTRY
- GOVERNMENT
- INSTITUTIONS/ORGANIZATIONS/RESIDENTS

CRITERIA

- DOABILITY
- WILLINGNESS
- REGULATORY COMPLIANCE
- NATIONAL STRATEGIC PLAN
- ENVIRONMENTAL EFFECTS
- ECONOMIC BENEFITS
- ENVIRONMENTAL BENEFITS
- STAKEHOLDER SATISFACTION
- PRODUCTION EFFICIENCY/RESOURCE CONSERVATION

MISSION STATEMENT

STATEMENT OF THE VISION BY WHICH YOU OPERATE OVER THE LONG TERM; LIKE THE GUIDING LIGHT

(VISION) TO CONTRIBUTE TO SUSTAINABLE DEVELOPMENT BY PROVIDING **(QUALIFIERS)** FREE, LOW COST NO COST, NON-REGULATORY, CONFIDENTIAL, ON SITE, MEASURABLE WASTE MINIMIZATION, POLLUTION PREVENTION, **(ACTIVITIES)** TECHNICAL ASSISTANCE, TRAINING, AND INFORMATION DISSEMINATION SERVICES TO *COUNTRY* INDUSTRIES, GOVERNMENT AND OTHER INTERESTED PARTIES **(BENEFITS)** RESULTING IN ECONOMIC AND ENVIRONMENTAL BENEFITS, INCREASED PRODUCTION EFFICIENCY AND CONSERVATION OF RESOURCES.

POSSIBLE PPC SERVICES/ACTIVITIES

I. SHORT TERM (0 - 6 month)

1. Information Dissemination (e.g., library, translation of documents, technology transfer)
2. On-site Assistance (e.g., P2 opportunity assessments, Eco-Management Compliance Audits)
3. Training/workshops/seminars/trade shows
4. Government Assistance (e.g., policy development, facilitator)
5. Publication (e.g., flyers, questionnaires)

II. MEDIUM TERM (6 month - 2 years)

1. FOA (Financial Opportunity Assessment)/PIAF (Project Identification and Financing)
2. Publication (e.g., case studies, manuals, educational curriculum)
3. Measurement (e.g., on-site monitoring, delivery of low cost laboratory services)
4. Information Dissemination (e.g., Internet services)
5. Certification (e.g., iso-9000)

III. LONG-TERM (2 years - ?)

1. Mediation
2. Exchanges

FUNDING SOURCES/STRATEGIES

WHAT IS THE SOURCE OF FUNDS?

WHAT ARE THE QUALIFICATIONS TO RECEIVE FUNDS?

WHAT CONDITIONS OR RESTRICTIONS APPLY?

WHAT IS THE POTENTIAL TO RECEIVE FUNDING (HIGH, MEDIUM, LOW)

WHAT IS THE TIMING? WHAT DEADLINES APPLY?

WHAT IS MY STRATEGY TO APPLY FOR FUNDS?

FLEXIBILITY IS THE KEY TO SUCCESSFUL FUND RAISING. BE PREPARED TO MODIFY YOUR RESPONSE CONSISTENT WITH YOUR MISSION.

FUNDING CATEGORIES

ENVIRONMENTAL

SPECIFIC PROGRAM OR TOPIC

BUSINESS/ECONOMIC DEVELOPMENT

EDUCATIONAL

CULTURAL

FEES

REGISTRATION

PERMITS

LEGISLATION (DEDICATED FUNDS)

POTENTIAL FUNDING SOURCES

USAID

VARIOUS COUNTRY DONORS(NORWAY, SWEDEN, DENMARK, ETC.)

MUNICIPALITIES

NATIONAL AND REGIONAL EKOFUNDS

RESEARCH ORGANIZATIONS (UNIVERSITIES)

GRANTS

LOANS (WORLD BANK, EUROPEAN BANK FOR RECONSTRUCTION &
DEVELOPMENT, ENVIRONMENTAL ACTION PROGRAM)

EUROPEAN COMMUNITY

EC PHARE

VARIOUS UNITED NATIONS ORGANIZATIONS

PRIVATE FOUNDATIONS (SOROS)

PRIVATE INVESTORS (BANKS) DIRECTLY TO PPC CUSTOMERS

GOVERNMENTAL MINISTRIES

EXCHANGE FEES

INDUSTRIAL USERS

SHARED SAVINGS

FEE FOR SERVICE (TRAINING, TECHNICAL ASSISTANCE, ETC)

BUSINESS PLAN OUTLINE

Executive Summary; includes

- Mission Statement
- Unique Service Advantage (USA)
- Present plans and future projections

1.0 Service Description

- 1.1 Service Components
- 1.2 Service Goals

2.0 Operation

2.1 Founding Organization (i.e., WEC and Atmoterm/BAS/EMI/KTU/Lodz University)

- 2.2 Key Personnel
- 2.3 Key Consultants
- 2.4 Advisory Steering Committee
- 2.5 Facilities

3.0 Strategic Plan

- 3.1 Task Plan for Service Delivery
- 3.2 Implimentation Schedule
- 3.4 Resource Allocation

4.0 Market Profile

- 4.1 Customers
- 4.2 Competitors
- 4.3 Cooperative Organizations/Partners

5.0 Financial Profile

- 5.1 Capital Requirements for Deliver Services
- 5.2 Funding Organization
- 5.3 Procing of Servicexs
- 5.4 Detail of Operation
 - 5.4.1 0 - 1 year
 - 5.4.2 1 - 2 years
 - 5.4.3 2 - 3 years

IMMEDIATE PPC ACTION ITEM LIST

	ACTION	OBSTACLES	SOLUTIONS
BAS	<ol style="list-style-type: none"> 1. PPC flyers 2. Meet with trade groups/regulators 3. Compile/organize/review case studies 	<ol style="list-style-type: none"> 1. Unrealistic customer expectations 2. Inability to make technical recommendations 3. Consultant qualifications 	<ol style="list-style-type: none"> 1. Define limits 2. Review available literature 3. Accompany on-site
KTU	<ol style="list-style-type: none"> 1. PPC flyer/questionnaire 2. Target industry, organize/deliver workshop 3. Provide policy/regulatory development consulting 	<ol style="list-style-type: none"> 1. Low questionnaire response rate. 2. Need US expert for workshop. 3. Inability to convince status people, attract competitors 	<ol style="list-style-type: none"> 1. 1% in US. 2. Assess need for outside expert. 3. Build coalitions.
EMI	<ol style="list-style-type: none"> 1. Establish advisory committee. 2. Compile case studies 3. PPC flyers/questionnaires. 	<ol style="list-style-type: none"> 1. Why a committee? 2. Ability to attract industries, serve needs with local experts 3. Unstable economic conditions 	<ol style="list-style-type: none"> 1. More is better.
Lodz	<ol style="list-style-type: none"> 1. Regional government visit to request funding 2. Seminar on P2 for universities. 3. PPC Flyer/questionnaire. 	<ol style="list-style-type: none"> 1. Office must move. 2. Funding. 3. No status. 	<ol style="list-style-type: none"> 1. Seek options within budget. WEC for 3 years; identify other sources 2. Opportunities. 3. Networking
Atmo	<ol style="list-style-type: none"> 1. Organize office/equipment. 2. Get ISO 9000 cert. Fictation 3. Develop communication strategy. 	<ol style="list-style-type: none"> 1. ISO certification costs. 2. Obtaining WEC project lists and contacts. 	

PPC ACTION LIST

REVIEW AND AMEND BUSINESS PLANS AS NEEDED BASED ON DISCUSSIONS AND HANDOUTS RECEIVED AT THE WORKSHOP. THIS SHOULD INCLUDE THE FOLLOWING:

1. MISSION STATEMENT
2. ENSURE THAT THE UNIQUE SERVICE ADVANTAGE (TECHNICAL ASSISTANCE) IS EVIDENT IN ALL ASPECTS OF THE PLAN
3. EMPHASIZE ACTION OVER PLANNING, I.E. "GET ON SITE" FIRST AND THEN DEVELOP ALL SUPPORTING ELEMENTS (INFORAMTION, TRAINING, ETC)
4. YOUR BEST PUBLICITY IS DOING AND DEMONSTRATING SUCCES

ACTION ITEM LIST FOR PPCs

1. PPC Flyer

Produce for Review by WEC: 2/17/95
Distribute Flyer to Industries: 2/27/95

2. Internet Access

Estonia: on-line
Latvia: received
Lithuania: received
Atmoterm: 2/10/95
Lodz: 2/10/95

3. Business Plans

Estonia: received, being revised 2/17/95
Latvia: received, being revised 2/17/95
Lithuania: 2/27/95; awaiting WEC budget revision
Atmoterm: 2/10/95, being revised
Lodz: 2/17/95

4. Newsletter

Estonia: 3/13/95
Latvia: 3/13/95
Lithuania: 3/13/95
Atmoterm: 3/13/95
Lodz: 3/13/95

5. Library List

Estonia: 3/6/95
Latvia: 3/6/95
Lithuania: 3/6/95
Atmoterm: 3/6/95
Lodz: 3/6/95

6. Norwegian Society of Civil Engineers Response 3/10/95

Estonia:
Latvia:
Lithuania:

POTENTIAL 1995 INDUSTRIAL SECTOR WORKSHOPS

POLAND (one workshop planned/PPC)

Copper
Iron/Steel
Food Processing
Chemical
Tanneries
Textile and dye
Pulp and Paper

ESTONIA (two workshops planned)

Food Processing (meat, dairy, beer)
Textile and dye
Furniture and Wood Processing
Oil Shale

LITHUANIA (two workshops planned)

Food Processing (meat, dairy, beer)
Textile and dye
Tanneries
Iron/steel/metal casting
Furniture and Wood Processing
Power plants

PROPOSED WORKSHOP DATES

Tannery - April 5, 6, 7, 1995; Riga, Latvia - in Russian and Latvian

Textile - May 1995, Palanga, Lithuania - in Lithuanian

Electroplating - May 1995; Tallinn, Estonia - in Russian

Food Processing (meat, dairy) - September, 1995, 1995; Tallinn, Estonia - language dependent on audience

General - "Beyond Demonstration Projects" - January 1996; Kaunas, Lithuania - in English

POTENTIAL 1995 INDUSTRIAL SECTOR WORKSHOPS

POLAND (one workshop planned/PPC)

Copper
Iron/Steel
Food Processing
Chemical
Tanneries
Textile and dye
Pulp and Paper

ESTONIA (two workshops planned)

Food Processing (meat, dairy, beer)
Textile and dye
Furniture and Wood Processing
Oil Shale

LITHUANIA (two workshops planned)

Food Processing (meat, dairy, beer)
Textile and dye
Tanneries
Iron/steel/metal casting
Furniture and Wood Processing
Power plants

PROPOSED WORKSHOP DATES

Tannery - April 5, 6, 7, 1995; Riga, Latvia - in Russian and Latvian

Textile - May 1995, Palanga, Lithuania - in Lithuanian

Electroplating - May 1995; Tallinn, Estonia - in Russian

Food Processing (meat, dairy) - September, 1995, 1995; Tallinn, Estonia - language dependent on audience

General - "Beyond Demonstration Projects" - January 1996; Kaunas, Lithuania - in English

APPENDIX B

CLEANER PRODUCTION PROJECT PROPOSAL

Capacity Building in Cleaner Production in Industry in the Baltic Countries, the St.Petersburg and Kaliningrad Area

A Prospect





Table of content

Foreword

How the Program benefits the Industry

A Brief Program Description

Objectives and Outputs

Program Organisation

Phasing of the Program

Budget and Commitments

Status of Cleaner Production Centers in
other CEE Countries



Foreword

Business and industry in Central and East European Countries (CEE) are at different stages of privatisation and restructuring. Companies have lost their traditional markets and many of them are facing a dramatic decrease in production. At the same time they strive to solve past environmental damage and to comply with new environmental requirements in a short period of time. This situation may lead to ineffective investments into "end-of-pipe solutions" and to the preservation of obsolete technologies.

In a recent report prepared by OECD on Evaluation of Industrial Waste Minimisation Initiatives in Central and Eastern Europe it is concluded that programs for training industrialists and local experts in performing economic profitable restructuring by systematic Cleaner Production (CP) Assessments should be supported. Further it is recommended to establish National Cleaner Production Centres in the CEE countries to improve dissemination of information and ensure that locally trained capacity in CP is utilised in project development.

OECD has later commissioned Økorås Olav S. Nedenes to prepare "Best Practice Guide for Cleaner Production Programs in the CEE Countries". This is a design guide for combined training of trainers, incompany

CP assessments and preparation and preparation of demonstration projects in industry. The guide will be used as the framework for the design of this program.

This prospect include a Capacity Building Program in Cleaner Production for the Baltic countries and the St. Petersburg and Kaliningrad area. The proposed Program has three phases:

- Marketing
- Implementation
- Dissemination

The Marketing Phase is funded by the Nordic Council. Depending on the outcome of this phase the intention is to prepare proposals for funding of the Implementation and Dissemination Phase. Such proposals will be submitted to the Nordic Council, the Nordic Governments or the Commission of the EU for subsequent consideration

The Program follows the successful training, assessment and dissemination approach developed by Økorås Olav S. Nedenes and implemented by the Norwegian Society of Chartered Engineers (NIF) in Poland, Czech Republic, Slovakia and from 1994 North West Russia. These programs have been funded by the Norwegian Government.

Main Contacts

Olav S. Nedenes
Norwegian Society of Chartered Engineers
Postboks 2312 Solli
0201 Oslo, Norway

Tel (47) 22 947501
Fax (47) 22947501

Gulbrand Wangen
DNV Development
Postboks 300
1322 Hovik, Norway

Tel. (47) 67577649
Fax (47) 67577474



How the Program Benefits the Industry

Experience from other CEE countries where NIF's Capacity Building Program of training of trainers, CP assessment and demonstration projects in industry have been implemented in the last four years, shows that waste generation and emissions can be reduced up to 30 per cent by education and organisational initiatives alone. With minor investments financed in local currency within the operational budget of the company, it is on some production lines possible to achieve similar reductions in the order of 50 per cent. If foreign currency is available and investments in clean technology are made significant environmental improvements can be achieved with economic pay back periods of less than 5 years.

If financial resources to restructure the industry in CEE countries are made available the overall goal of increasing the economic growth and at the same time reduce waste generation and emissions by 2/3 and energy use by 1/3 is achievable

The short term economic benefits for industrial companies joining the program will be savings in the magnitude of 3-4 times the cost of the internal man-hour for making the CP assessments and attending the training program. These savings will require no investments in clean technology and are normally obtained within one year. Every year thereafter these savings are expected to be 20-30 times the man-hour costs since the amount of work needed for follow-up activities in industry is far less.

It is recommended that in-company CP assessment should be repeated on the same production line once a year or every second year. This exercise will generate new options with potential for economic savings and reduction of waste generation and emissions.



A Brief Program Description

The Capacity Building Program is building on the experience from approximately 25 interactive training programs already implemented by NIF in Poland, Czech Republic and Slovakia. The program has the following characteristics:

Demand driven

Initial contact will be established with existing Cleaner Production Projects and qualified training institutions in the respective countries. The most qualified institution will be responsible for marketing of the program and get commitment from companies willing to participate in the training programs. An Introductory Pre Project Seminar with participation of CP advisors from abroad will be part of the marketing.

Interactive

The program follows an interactive approach offering lectures in combination with case study projects. Participants coming from industry, consultancies and universities will attend 4 plenary sessions and carry out case study work in companies applying the CP methodology.

Adaptation to the local language

The First Training Program is preferably offered in English. The Second Program is offered in combination of

English with simultaneous translation to the local language allowing participants from the First Program to practise as lecturers and CP advisors in companies. In the third and the continuing programs the CP methodology is translated into the local language with trained lecturers and company advisors from the first two programs responsible for implementation.

Networks

The training approach will ensure building of networks across industries and within branches. The approach will also facilitate exchange of information and CP advisors and lecturers between the National Cleaner Production Centers in the CEE countries

Awarding of Certificates

Successful participants who take active part in both plenary sessions and case study projects in companies are awarded certificates issued jointly by NIF and the co-operating Training Partner.

Commitments

The participants will commit themselves to take active part in future programs as part time paid CP-advisors. This obligation will be limited to a 2 years period and to a maximum of 20 days per year. Certified advisors willing to do more part time or full time advisory work, will be given this opportunity.



Objectives and Outputs

Objectives

The ultimate goal of the program is to build on existing Cleaner Production initiatives in the region and establish National Cleaner Production Centers in the Baltic countries and Regional Centers in the St. Petersburg and Kaliningrad area. The Centers should preferably have a Steering Committee with representatives of the Ministry of Environment, the Ministry of Industry and the Association or Union of Industry. The role of the CP Centers are :

- promote CP in industry
- organise CP training activities
- advise on government policies and strategies for implementing CP
- ensure funding for self financing of the Center
- store and disseminate CP information
- advise on financial sources for implementation of CP projects
- certify trained CP advisors and lecturers
- establish nation-wide CP network in industry
- take active part in the network of CP Centers in the CEE-region

Output phase 1

- Five Introduction Seminars conducted
- Minimum of 40 persons and 15 companies have signed up to participate in the First Training Program in the respective countries
- Agreement reached with qualified partners to implement phase 2 and 3 of the program
- Project proposals for phase 2 and 3 of the program have been prepared.

Output phase 2 and 3

- 120 trained local CP instructors from industry, universities and consultancies
- 40 CP case studies implemented in companies
- Significant economic savings and environmental improvements identified in the participating companies
- A National/Regional Cleaner Production Center has been established



Program Organisation

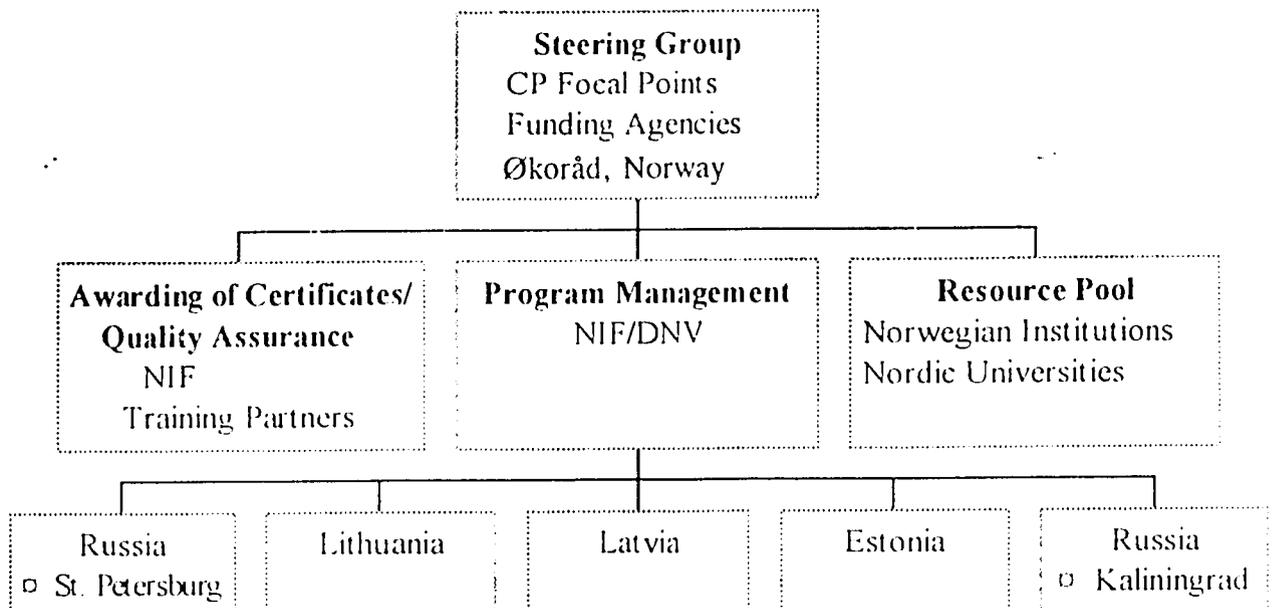
The organisational chart of the program is depicted below:

Program Management is handled by the Norwegian Society of Chartered Engineers NIF in close co-operation with Det Norske Veritas (DNV) a free-standing, independent foundation with the objective to safeguard life, property and the environment. DNV has offices in several of the CEE countries.

The Resource Pool will consist of the personnel from Norwegian institutions and consulting firms with several years experience on the NIF CP programs in the CEE countries. The Lund University of Sweden, the Aalborg University and others may also be included in the resource pool. These institutions will provide lecturers and advisors to the training programs.

Awarding of Certificates will be handled by NIF in co-operation with the approved training partners in the region. Already about 550 participants in Poland, the Czech Republic and Slovakia have received this certificate and the suggested model for awarding certificates will ensure a standard certificate for a postgraduate training in CP throughout the CEE region.

A Steering Group will be established in Phase two of the program and comprise CP focal points in the different countries and representatives from funding agencies.





Phasing of the Program

The program is split in three phases. The time schedule for the Marketing Phase is depicted below.

Phase 1. Marketing

This prospect will be sent to potential training partners in the respective countries who will be requested to confirm their commitment to participate in the program. The Program Management will visit the respective countries and negotiate agreements for conducting Introductory Preproject Seminars. The costs for these Seminars including visiting lecturers from abroad will be covered by the program.

Phase 2. Implementation

Training partners who manage to get the required commitment from participants and companies will have the obligation to

participate in the implementation of the program consisting of a First and a Second Program with lecturers and advisors from abroad

Contribution to the establishing of National Cleaner Production Centers in the Baltic Countries and the St. Petersburg and Kaliningrad area will also be part of the Implementation Phase.

Phase 3. Dissemination

To ensure cost-effective dissemination of the results new combined training and in-company assessments programs will be launched under the management of the CP Centers. The result and achievements from the CP in-company assessment projects will be collected and distributed to the industry.

Activity Schedule Marketing Phase

ACTIVITIES	January	February	March	April	May	June
Sending out Prospect	—					
Response to the Prospect						
Visit by Program Management			—	—		
Introductory Seminars				—	—	
Preparation of Project Proposals						—



Budget and Commitments

The budget for the different phases are:

Phase 1. Marketing

Training Partners in the different countries and regions who are interested to take part in the program are requested to present a budget for the local costs of a two days Introductory Pre-Project Seminar and the costs related to getting commitment from industry (15) and course participant (40) to sign up for participation in the First Training Program.

In responding to this Prospect the Training Partners should present a statement of their suitability and willingness to take part in the Program. A budget for the activities mentioned above should also be presented to the Program Management.

Phase 2. Implementation

The costs for implementation of the CP program in **one** country or **one** region is estimated at (ECU):

1st Training Program	210.000
2nd Training Program	120.000
CP Center Establishment	220.000
TOTAL	550.000

Project Proposal for the Implementation and Dissemination Phase will be prepared by the Program Management together with successful partners in the respective countries and regions.

Phase 3. Dissemination

The costs for dissemination will be decided on individual basis for the different CP centers.



Status of Cleaner Production Centers in other CEE Countries

Poland

- A NIF/NOT Cleaner Production Center has been established
- CP education has been given to 823 specialists from companies and institutions
- Professional Development Certificates awarded to 438 CP instructors. 235 instructors are attending ongoing training programs
- CP case studies implemented in 213 companies with an other 117 under completion
- Sixteen interactive training programs have been completed and five are running.

Two interactive training programs have been completed and a two new are under implementation.

Czech Cleaner Production Center
Director V. Dobeš
Politických Věznu 13
110 00 Praha 1
CZECH REPUBLIC
Fax (422) 24 21 36 73
Tel (422) 26 06 20

Polish Norwegian Cleaner Production
Program
Professor Z. Novak
Bankowe 9
40007 Katowice
POLAND
Fax (48) 32 59 65 68
Tel (48) 32 59 65 68

Slovakia

- A Slovak Cleaner Production Center has been established
- Professional Development Certificates awarded to 75 CP instructors.
- CP case studies implemented in 23 companies
- Two interactive training programs have been completed and two new are under planning.

Czech Republic

- A Czech Cleaner Production Center has been established
- Professional Development Certificates awarded to 64 CP instructors
- CP case studies implemented in 21 companies

Slovak Cleaner Production Center
Professor A. Blazej
Drienova 24
Bratislava
SLOVAKIA
Fax (427) 235 727
Tel (427) 233 356