

ENVIRONMENT

Summary Project Fiche

Project n°: LI9805.02

Title: Implementation of EU requirements in air, water and waste sectors and extension of environmental financing possibilities to private sector

Location: Plungė, Varėna, Vilnius and other cities

Objectives:

The overall objective of this project is to address Accession Partnership recommendations on development of monitoring capacities and implementation of approximation programmes by improving the quality of the environment through the implementation of the municipal waste management system in Plunge, the construction of the wastewater treatment facility in Varėna and the modernization of air monitoring and laboratory practices to comply with EC standards and support the Lithuanian Environmental Investment Fund.

Description:

Activities foreseen in the project can be divided into four components: solid waste management in Plunge, wastewater treatment in Varena, air monitoring and Lithuanian Environmental Investment Fund.

First component. Plungė city has one municipal waste landfill, which is located in the Pėmaitija National Park. This landfill is in critical situation: it does not meet environmental requirements and is filled to its capacity. Therefore, there is an urgent need to establish a new landfill, which meets Community requirements. The site for the new landfill has been already selected and some initial works took place. However, due to lack of financial resources all activities have been stopped. The following activities are proposed for the implementation of W.M.S in Plungė:

- review of the detailed design, preparation of tender documents,
- construction works,
- purchase of equipment and installation,
- starting, staff training, final evaluation.

Second component. Varėna district is situated in Alytus county. The biggest Lithuanian river Nemunas and its tributary Merkys flows through the Dzūkija National Park and collects water from numerous rivulets and streams. Near the Lithuanian-Polish border on the Nemunas riverside is the town of Druskininkai well-known as recreational area. The discharge of insufficiently treated water from Varena has an important negative impact on environmental attractiveness of the economy and of the region. About 80 - 100 kg of mineral nitrogen and 90 kg of organic material (according to BOD) enter into the Dėreznycia and Merkys rivers daily. This pollution rate is extremely high for the small-yielding river Dėreznycia. This highly polluted river belongs to the Nemunas river basin and thus increases pollution of the numerous Nemunas ichtiological reserves. The reconstruction of Varena WWTP would have positive environmental benefits through:

- reduction of untreated wastewater discharges to the Merkys/Nemunas basin and to the Baltic Sea;
- protection of Dzūkija National Park and its ichtiological reserves as well as border regions of Poland;
- promotion of sound international tourism.

The sewage treatment equipment in Varėna was installed in 1976. It consists of a mechanical part and filtering fields. The capacity of the treatment equipment is 3000m³/d. The efficiency of the filtering fields is not more than 40%. This component will include the following activities:

- preparation of tender documents
- construction works
- purchase of equipment and installation
- starting up, staff training, final evaluation

Third component. Most of the currently used monitoring equipment is more than 20 years old and does not comply with new requirements and measurement standards. The project would continue activities started under a Phare 97 project and will complete the establishment of the required air monitoring system and assuring the quality of the control of the emissions into the atmosphere and water. Following activities are foreseen:

- development of equipment list,
- preparation of tender documents and technical specifications,
- purchase of equipment and installation,
- training.

Fourth component: Environmental Investment Fund was established in 1996 as a joint effort of Phare, USAID and the Lithuanian Ministry of Environmental Protection. Phare provided support not only for the institutional set-up of the Fund, but contributed with seed money for initial capitalisation. This Fund is foreseen to be the main institution in providing soft loans to the municipalities and industries for the implementation of environmental projects. The Fund is operating in close co-operation with banks and is foreseen to act as revolving facility. However, the initial period until the Fund will be able to cover its operational expenses will take 4 to 5 years. During this period the Fund needs support not only in terms of capital for investment projects but also for institutional operations. The following activities are foreseen in this project:

- preparation of pipe line of projects to be financed from the Fund,
- preparation of project documentation according to Phare requirements,
- financing of identified projects.

Institutional framework:

The Environmental Investment sub-programme has been designed to have 4 components and each component is independent. They focus on the implementation of EC requirements in air, water and waste sectors and extension of environmental financing possibilities to private sector: Solid waste management in Plungė; Wastewater treatment in Varėna; Upgrading state air monitoring system; and extension of the financing possibilities to private sector through strengthening of the Lithuanian Environmental Investment Fund (LEIF) under the overall coordination of the Environmental Protection Ministry.

For project preparation and management activities, close co-operation will be sustained with the Lithuanian Environmental Investment Fund (LEIF) as well as with other institutions-beneficiaries involved in the implementation of the investment projects (including counties and municipalities). The Ministry will assist in making contacts with other government and municipal institutions.

Budget:

	Investment	Institutional Building	Total PHARE	Recipient*	IFI* (NIB)	TOTAL MECU
Component 1	0.45	0.05	0.50		0.459	0.959
Component 2	0.7	0.05	0.75		0.734	1.484
Component 3	0.72	0.03	0.75			0.780
Component 4	0.70	0.05	0.75			0.800
Totals	2.57	0.18	2.75		1.193	4.023

* In case of co-financing only

Implementation arrangements:

The CFCU will make all tendering and contracting procedures. The MoEP will develop ToRs.

The responsibility for the technical implementation will lie with:

For first component - municipality of Plungė

For second component - municipality of Varėna

For third component - Joint Research Centre

For fourth component - Lithuanian Environmental Investment Fund

The Ministry of Environment (MoE) will establish and lead the Steering Committee to supervise the implementation of the project activities and nominate a Project manager who will be directly responsible for the co-ordination with other activities. The Ministry will provide all available information, which can be important for implementation of the project activities.

Implementation schedule:

	Start of tender	Start of project activity	Completion
	June, 1998	December, 1998	March, 1999

Equal opportunity:

There will be no discrimination between men and women during the project tendering and implementation.

Environment:

EIA will be carried out for Plunge landfill and Verena WWTP according to national laws. The construction of landfill and reconstruction of WWTP will have positive impact on environment, in particular, on water quality.

Rates of return:

The IRR are still being finalised and information will be available by mid-1998.

Investment criteria:

One of the main investment criteria for the above investment project is to form a financial package on co-financing basis (catalytic criteria). Thus, implementation of solid waste management system in Plungė and construction of wastewater treatment plant in Varėna are envisaged to be co-financed from Phare and Nordic Investment Bank (NIB) as well. Phare financial contribution as well as foreseen financing from local sources (for example, envisaged allocation from the state nature protection fund) plays a catalytic role in forming a total financing package of the project. Another investment criteria for the above investment project is to ensure sustainability in relation to the recommendations presented in Agenda 2000 and Accession Partnership documents. After implementation of the investment projects, all components will be fully implemented and will be able to start functioning. The third investment criteria - competition - will be ensured through open tendering.

Conditionality and sequencing:

There are no special conditions to be implemented prior to the start of the project. All components of the project will be implemented in parallel according to the schedules presented. Resources of the project could be moved to strengthen activities in another component, if unforeseen reasons don't allow the implementation of activities in all components as originally foreseen.

Annex 1			Programme name: <i>Environment Investments</i> and number: LI9805	Date of drafting: 10 of April, 1998
LOGFRAME PLANNING MATRIX for the project fiche: Implementation of Community requirements in air, water and waste sectors and extension of environmental financing possibilities to private sector			Contracting period expires: Oct 2000	Disbursement period expires: Oct 2001
<i>Project Number: LI9805.02</i>			Total Budget: 4.023 (MECU)	Phare contribution: 2.75 (MECU)
Wider Objectives	Indicators of Achievement*	How, When and By Whom Indicators Will Be Measured	Assumptions and Risks	
<ul style="list-style-type: none"> Support implementation of the Lithuanian National Environmental Strategy through investment into water and waste sectors, support of private sector in environmental investments Improve quality of the environment Address Accession Partnership recommendations on implementation of approximation programmes in water and waste sectors as well as development of monitoring capacities 	<ul style="list-style-type: none"> Quality of recipient waters in Varena district improved Solid waste management practices in Plunge district Improved More environmental projects undertaken by private sector Air monitoring programme implemented 	<ul style="list-style-type: none"> Steering Committee - each quarter Municipalities of Varena and Plunge - after implementation of the project Environmental Protection Ministry and Joint research Centre- after implementation of the project 	<ul style="list-style-type: none"> Design documents are prepared Cofinancing is ensured Lithuanian environmental investment fund is operational and has project pipeline prepared Municipalities are committed and have resources for project implementation 	
Immediate Objectives	Indicators of Achievement*	How, When and By Whom Indicators Will Be Measured	Assumptions and Risks	
<ul style="list-style-type: none"> Construct wastewater treatment plant in Varena restore biodiversity of Dereznycia and Merkys rivers Construct solid waste landfill in Plunge Improve solid waste management practices in the region Implement programme of regional and local environmental quality control Extent of environmental financing possibilities for private sector to comply with Community requirements Identify and (co-) finance small and medium sized projects with a clear environmental benefit 	<ul style="list-style-type: none"> Wastewater treated to standards in Varena city landfill in operation in Plunge At least three environmental investments projects supported in private sector Air monitoring system in line with Air framework directive requirements 	<ul style="list-style-type: none"> Steering Committee - each quarter Municipalities of Varena and Plunge - during and after implementation of the project Environmental Protection Ministry and Joint research Centre- after implementation of the project Lithuanian Environmental Investment Fund - after implementation of the project 	<ul style="list-style-type: none"> Tender documents and technical specifications for works and purchase of equipment are prepared Cofinancing for wastewater treatment plant and landfill construction is ensured PHARE 1997 support for the implementation of Monitoring programme is going according to schedule Project pipeline in the Fund is prepared, projects ready to be implemented 	
Outputs	Indicators of Achievement*	How, When and By Whom Indicators Will Be Measured	Assumptions and Risks	

<ul style="list-style-type: none"> • Technical specifications of equipment and other documents necessary for investment • Establishment of the new municipal landfill in Plunge city • Reconstruction of Varena WWTP • Training for the local operational staff • Establishment of the required air monitoring system, including the procurement of all necessary equipment • Financing of at least three environmental projects from Environmental Investment Fund 	<ul style="list-style-type: none"> • Wastewater treatment plant and landfill constructed • Plant and landfill operators trained • Monitoring equipment purchased • Funding from LEIF is available 	<ul style="list-style-type: none"> • Municipalities of Varena and Plunge - during and after implementation of the project • Environmental Protection Ministry and Joint research Centre- after implementation of the project • Lithuanian Environmental Investment Fund - after implementation of the project 	<ul style="list-style-type: none"> • Tender documents and technical specifications for works and purchase of equipment are prepared • Cofinancing for wastewater treatment plant and landfill construction is ensured • PHARE 1997 support for the implementation of Monitoring programme is going according to schedule • Project pipeline in the Fund is prepared, projects ready to be implemented
Inputs	Indicators of Achievement*	How, When and By Whom Indicators Will Be Measured	Assumptions and Risks
<ul style="list-style-type: none"> • International long term and short term experts • Local experts • Funds for equipment 	<ul style="list-style-type: none"> • Funds are allocated as foreseen in project budget • Number of high quality experts involved 	<ul style="list-style-type: none"> • Tender evaluation team - during evaluation of the proposal • Steering committee - each quarter • Varena and Plunge municipalities - after preparation of investment related documents and delivery of equipment • Joint Research Centre - after preparation of list of monitoring equipment and delivery of equipment 	<ul style="list-style-type: none"> • Qualified company is selected and commits required staff • Local experts are available • Funding is sufficient to implement goals • Sub-contractor(s) is available for supply of the equipment

* Must be **quantified** and **measureable**

	TASK NAME	DURATION	98 Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	99 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	Technical Assistance Project																										
2	Tender																										
3	Define project	4 weeks	****																								
4	Prepare ToR	6 weeks		****	**																						
5	ToR approved	2 weeks			**																						
6	Launch tender	0 weeks				Jun 01																					
7	Prepare proposals	6 weeks				****	**																				
8	Tender evaluation	2 weeks					**																				
9	Award contract	2 weeks									**																
10	Project implementation										**	**															
11	Project mobilisation	4 weeks									**	**															
12	Advance payment	0 weeks										*															
13	Start date	0 weeks										*															
14	Start-up meeting	0.2 weeks										*															
15	1st Phase (Inception)	6 weeks									**	****															
16	1st tranche payment	0 weeks											**														
17	2nd Phase (incl. tendering)	23 weeks												****	****	****	****	**									
18	2nd tranche payment	0 weeks																**									
19	3rd and final Phase	30 weeks																**	****	****	****	****	****	****	****		
20	3rd tranche payment	0 weeks																			**						
21	Final review and evaluation	4 weeks																							****		
22	Final tranche payment	0 weeks																								**	
	CASHFLOW (thousand Ecu)											40		100				1000				610				1000	

Annex 4

COMMITMENT (CONTRACT) SCHEDULE									Drafting date: April '98
Sub-project: LI9805.02									Planning period: 1998
Programme Title: Environment investments									
Projects: Expected Contractual Commitments (Quarters)									
				Planned					Allocation
	I 98	II 98	III 98	IV 98	I 99	II 99	III 99	IV 99	Cost estimate MECU
Plunge landfill				0,500	0,500	0,500	0,500	0,500	0,500
Varena WWTP				0,750	0,750	0,750	0,750	0,750	0,750
Monitoring				0,750	0,750	0,750	0,750	0,750	0,750
Environmental Investment Fund				0,750	0,750	0,750	0,750	0,750	0,750
TOTAL				2,750	2,750	2,750	2,750	2,750	2,750

DISBURSEMENT (PAYMENT) SCHEDULE									Drafting date: April '98
Sub-project: LI9805.02									Planning period: 1998
Programme Title: Environment investments									
Projects: Disbursement (Payment) Schedule Quarters									
				Planned					Allocation
	I 98	II 98	III 98	IV 98	I 99	II 99	III 99	IV 99	Cost estimate MECU
Plunge landfill					0,250	0,500	0,500	0,500	0,500
Varena WWTP					0,250	0,250	0,750	0,750	0,750
Monitoring					0,500	0,750	0,750	0,750	0,750
Environmental Investment Fund					0,750	0,750	0,750	0,750	0,750
TOTAL					1,750	2,250	2,750	2,750	2,750

ANNEX 6

LI 9805.02

Environment Investments:

- Project 'Cleaning of the domestic waste dump in Plunge', which will serve the districts of Plunge. The feasibility study is under preparation.
- 'The construction of the effluent cleaning equipment in Varena'. The Baltic Consultancy Group carried out the feasibility study with a 150,000 Lt. grant from the Lithuanian Nature Fund.
- 'Monitoring Air Pollution'. The activities, which have started according to Phare 1997 Programme, will continue. There are plans to further develop air monitoring system and systems to assure the quality of the atmospheric and water pollution control.