

ISPA Measure No:
2002/LT/16/P/PE/012

Annex 1

FINANCING MEMORANDUM

of

**Agreed between the European Commission and
the Republic of Lithuania**

**Concerning the grant of assistance from the Instrument for Structural Policies for
Pre-accession to the following measure**

**Waste Management in Vilnius Region
located in Vilnius
in Lithuania**

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FINANCING MEMORANDUM

The European Commission, hereinafter referred to as "the Commission", acting for and on behalf of the European Community, hereinafter referred to as "the Community" represented by the Commissioner for Regional Policy, Mr. Michel Barnier, for the Commission

on the one part, and

The Government of Lithuania, hereinafter referred to as "the beneficiary"

on the other part,

HAVE AGREED AS FOLLOWS:

Article 1

The measure referred to in Article 2 below shall be implemented and financed out of the budgetary resources of the Community in accordance with the provisions set out in this Memorandum. The measure referred to in Article 2 below shall be implemented in line with the General Conditions annexed to the Framework Agreement signed between the Commission and the beneficiary and supplemented by the terms of this Memorandum and the provisions annexed hereto.

Article 2

Identification of the measure

The Instrument for Structural Policies for Pre-accession shall contribute, by way of a grant, towards the financing of the following measure as described in Annex I:

Measure number: 2002/LT/16/P/PE/012

Title: Waste Management in Vilnius Region

Duration: **Start date:** The date of signature of the financing memorandum by the Commission

End date: 31 December 2007.

Location: Vilnius

Group

Article 3

Commitment

1. The maximum public or equivalent expenditure which may be taken into account for the purpose of calculating assistance shall be € 20,930,000;

2. The rate of Community assistance granted to the measure is fixed at 50 % of total public or equivalent expenditure as indicated in the financing plan in Annex II;
3. The maximum amount of assistance from the Instrument for Structural Policies for Pre-accession is fixed at € 10,465,000;
4. An amount of € 8,372,000 is committed from the 2002 budget under budgetary line B7-020. Commitments in respect of subsequent instalments shall be based on the initial or revised financing plan for the measure, subject to the state of implementation of the measure and to budgetary availability.

Article 4

Payments

1. Community assistance shall cover payments on the measure for which legally binding commitments have been made by the beneficiary and for which the requisite finance has been specifically allocated. These payments must relate to the works described in Annex I.
2. Payments made before the date of signature of financing memorandum by the Commission shall not be eligible for assistance from the Instrument for Structural Policies for Pre-accession.
3. The measure described in Annex I and payments by the body responsible for the implementation of the measure shall be completed no later than 31st of December 2007.

The report required for the payment of the final balance should be submitted not later than 6 months after this date.

4. The advance payment is fixed at € 2,093,000, which shall be transferred as follows:
 - An amount of € 1,046,500 is paid out after signature of this memorandum by the beneficiary;
 - The remainder is paid out following the signing of the contract indicated in the procurement plan under Annex I.a as contract 2 by the beneficiary .

Article 5

Respect of Community law and policies

The measure shall be carried out in compliance with the relevant provisions set out in the Europe Agreements and shall contribute to the achievement of Community policies, in particular those concerning environmental protection and improvement.

Article 6

Intellectual property

The Beneficiary and the authority responsible for implementation mentioned in Annex I point 3 shall ensure that they acquire all necessary intellectual property rights to studies, drawings, plans, publicity and other material made in conjunction with planning, implementation, monitoring and evaluation of the project. They shall guarantee that the Commission, or any body or person delegated by the Commission shall have access and the right to use such material. The Commission will only use such material for its own purpose.

Article 7

Permits and authorisations

Any type of permits and or authorisations required for the implementation of the measure must be provided by the competent authorities of the Beneficiary in due time and in accordance with national law.

Article 8

Specific conditions related to the measure

Without prejudice to the general provisions specified in Annex III the Community grant for the measure is subject to the following conditions:

1. Condition on the assumptions and the status of the assets:

The Commission reserves the right to revise the amount of the assistance for ISPA set out in Article 3 if, within five years of the date of the completion of works, the operating conditions (tariffs, revenues, etc.) vary significantly relative to the original assumptions made in determining the level of the grant and/or there is a substantial modification:

- a) affecting the nature of the operation or its implementing conditions, or giving to a private or public body an undue advantage; and
- b) resulting either from a change in the nature of the ownership of any part of the financed infrastructure, or a cessation or material change in the operating arrangements.

The beneficiary country shall inform the Commission of any such change, and shall seek the ex-ante agreement of the Commission to these changes.

2. Condition on viability:

The Community grant for the measure is subject to the authorities concerned making available sufficient resources in order to ensure the effective operation and maintenance of the assets.

3. The second advance payment referred to in Article 4 point 4 second indent will be subject to the Commission receiving evidence that the regional waste management company referred to in Annex I of this Memorandum has been duly constituted.
4. Before acceptance by the European Commission of the Final Report, the Final Beneficiary must confirm that a plan for disposal of sewage sludge in accordance with Article 14 of the Urban Waste-Water Treatment Directive (91/271/EEC of 21 May 1991) has been developed and implemented.

Article 9

The implementation provisions described in the Annexes to this financing memorandum form an integral part of it.

Non-compliance with the conditions and implementation provisions shall be dealt with by the Commission according to the procedure stipulated in Annex III.1. Section VIII.

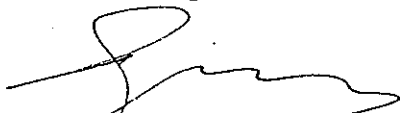
Article 10

The authentic text of this financing memorandum is the present document as signed hereunder.

Done at VILNIUS

18-04-2003

For the recipient




D. Grybauskaitė
National ISPA
Coordinator

Done at Brussels, [...]

17-12-2002

For the Community



M Barnier
Member of the European Commission



List of Annexes

Annex I Description of measure

Annex II Financing plan

Annex III

Annex III.1 ISPA Financial Implementation provisions

Annex III.2 Provisions governing eligibility of expenditure for measures assisted by ISPA

Annex III.3 Model for Payment Claims, for reporting on financial and physical progress and request for modification

Annex III.4 Agreement on minimum requirements for financial control applicable to ISPA assisted measures

Annex III.5 Agreement with respect to irregularities and recovery of sums wrongly received under ISPA

Annex III.6 Information and Publicity requirements

Description of measure
(summary)

Commission code No: 2002/LT/16/P/PE/012

1. **MEASURE TITLE**
Waste Management in Vilnius Region
2. **AUTHORITY MAKING THE APPLICATION (National ISPA Co-ordinator)**
 - 2.1. Name: Ministry of Finance, Financial Assistance Department
 - 2.2. Address: J. Tumo- Vaižganto 8a/2; LT-2600 Vilnius
E-mail: r.krisciunas@finmin.lt
3. **AUTHORITY RESPONSIBLE FOR IMPLEMENTATION (AS DEFINED AT SECTION II (2) OF ANNEX III.2)**
 - 3.1. Name: ISPA Implementing Agency under the Ministry of Environment
 - 3.2. Address: Juozapaviciaus 9-610, 2600 Vilnius
E-mail: ISPA.tuminas@aplinkuma.lt
4. **FINAL BENEFICIARY (in case it is a different body from the authority mentioned under 3)**
 - 4.1. Name: Vilnius County Waste Management Centre
 - 4.2. Address: Gedimmo Avenue 37, LT-2001 Vilnius
E-mail: vaatc@takas.lt
5. **LOCATION**
 - 5.1. Beneficiary country: Lithuania
 - 5.2. Region: Vilnius

6. DESCRIPTION

6.1 Background

Vilnius County has some 900,000 inhabitants and cover an area of close to 10,000 km². 2/3 of the population live in Vilnius city. Outside the capital the population density is well below the average for county with the districts of Salcininkai, Sirvintos and Svencionys as the least densely populated. Other districts and municipalities are Trakai, Elektrenai, Ukmerge and Vilnius district. The 2nd largest city is Ukmerge with some 30,000 residents. Other urban centres are small with populations between 6,000 and 15,000.

The municipal authorities are responsible for waste management within their respective jurisdictions. In all some 30 companies, most of which municipally owned, collect and transport municipal solid waste (MSW). A large number of these companies are responsible also for landfill operation. In some parts of the county, rural areas in particular, no collection service is offered and residents dispose of their waste directly at dumpsites or small landfills.

The average collection rate in the rural areas of the county is currently estimated at around 40 pct. against 87 pct. in urban areas yielding an aggregate 84 pct. collection rate. In Vilnius city collection efficiency is assessed at well above 90 pct. The rural areas account for only some 7 pct. of the approximately 245,000 t of MSW generated in the county.

Separate collection of recyclables takes place on a very limited basis and in Vilnius city only. Pre-sorted recyclable waste is taken to a materials recovery facility for further sorting and partial processing. Baled paper is sold to one of 3 paper mills in the country. Plastic is crushed into pellets or baled for use in the plastic industry. Glass waste may be recycled at 2 glass plants. However, the actual recycling of glass is very limited as the glass collected is insufficiently sorted and of variable quality.

All landfills in Vilnius County are municipally owned and operated. The county has 119 operational dumpsites and small neighbourhood landfills (of 2ha and less in area) where residents do their own waste disposal. At some of these sites waste collection companies dispose of their waste as well. Waste management activities are limited to the occasional moving of waste blocking entrance roads and to incidental compaction of waste. None of the sites are equipped with environmental protection measures and there is no monitoring of e.g. leachate generation.

This applies also to the medium size landfills serving the larger towns. Only the Kariotiskes landfill serving Vilnius city has any environmental protection measures or waste management equipment and even here, samples have shown that groundwater is affected by the waste. It should therefore be closed by the end of 2005.

6.2 Main components of the measure:

The overall scheme includes the following actions. Those marked with '*' are included in the current application.

- 2002: establishment of regional waste management centre (VAATC)*
- 2003: start of activities of VAATC *
- 2003: expansion of separate collection of paper and plastic
- 2003: set-up of new facilities for the sorting of paper and plastic waste, unless the existing facilities, in their current form or expanded, can meet demands
- 2004: expansion of separate collection of glass waste
- 2005: opening of regional sanitary landfill (first section) with a volume of 1.7m m³ *
- 2005: final closure of approximately 125 existing dumps and landfills *
- 2005: start of rehabilitation of old dumpsites and landfills *
- 2005: start of operation of civic amenity sites *
- 2005: start of operation of drop-off centres for communities without collection services and to replace dumpsites and neighbourhood landfills*
- 2006: waste collection achieved in all urban areas for 90 pct. of the inhabitants of the county
- 2006: collection of recyclable packaging waste meets national targets
- 2006: separate collection of recyclables to reach regional targets, which are fixed as percentage of MSW: for paper and cardboard 4 pct., for glass 2 pct. and for plastic 1 pct.

In the medium term, the following steps are foreseen:

6.3 Implementation and operation

The initiating phase of the measure comprises the formal establishment and registration of the regional waste management centre, VAATC. Vilnius County set up the centre in 2001 as a public institution but during the course of 2002 VAATC will be transformed into a municipally owned closed joint stock company. Its rôle is to organise, monitor and facilitate the waste management process. It is expected that collection will continue to be organised at municipal level while VAATC will own and be responsible for the operation of the assets created by this investment.

The major landfill, to be constructed in the Elektreniai area, will have a capacity of 7 million tonnes over 20 years, requiring a capacity (after compaction and covering) of approximately 9.5 million cubic metres. Leachate will be collected and pumped to the nearby waste water treatment plant of the town. The landfill will be isolated from its surroundings by ditches to keep both infiltration out and leachate and run-off in. Ten wells will be sunk downstream, and one upstream, to monitor the quality of the groundwater. Gas discharges will be collected and flared off until the quantity is sufficient for cost-effective electricity generation.

6.4 Longer term developments

2007: introduction of separate collection of biodegradable (organic) waste from households

2007: construction of regional composting plant for separately collected organic waste

2009: construction of 2nd section of regional landfill with a volume of 1m m³

2010: waste collection from all residents of Vilnius County

2010: separate collection of recyclables to reach 6 pct. of MSW for paper and cardboard, 3 pct. for glass and 2 pct. for plastic

2010: separate collection of biodegradable waste increased such that only 75 pct. of amount of biodegradable waste disposed of in 2000 will be disposed of at the regional landfill

2011: completion of rehabilitation of all old dumpsites and landfills

Depending on the results of feasibility studies, targets are the construction and operation of a regional incinerator and/or a regional biogas plant.

Separate collection of biodegradable waste is to increase and other methods of waste treatment such as incineration to be applied such that 50 pct. of the amount of biodegradable waste disposed of in 2000 will be go to the landfill in 2013. In 2020 the corresponding target has been set at 35 pct. of the 2000 bio-waste amounts.

Additional sections of the regional landfill with a volume of some 6m³ will be constructed in the period 2012-2024. The final closure of this landfill is planned for 2024.

7. OBJECTIVES

7.1 Overall objective

The overall objective of the measure is to provide for an environmentally sound, cost-effective and affordable regional waste management system covering Vilnius County that complies with the requirements of national waste management legislation and relevant EU Directives.

7.2 Directive specific Priorities:

The relevant Directives and Regulations in the context of the measure are the following:

- Directive 75/442/EEC (Waste Framework Directive) as amended by 91/156/EEC;
- Directive 91/689/EEC on framework for hazardous waste as amended by 94/31/EEC
- Directive 99/31/EC on the landfill of waste;
- Directive 94/62/EEC on packaging and packaging waste;
- Directive 96/61/EC on integrated pollution prevention and control (IPPC Directive); and
- Regulation 259/93/EEC on waste shipment.

The measure will contribute to the implementation of all the above-mentioned directives and regulations. In particular as regards the landfill directive, receipt of waste at landfills not fulfilling the requirements of the directive will cease well before 16 July 2009. The only landfill in Vilnius County in operation at the end of 2005 will be directive compliant. The VAATC established as part of the measure will be the driving force behind the contributions of the county to the fulfilment of the packaging waste and landfill directives with respect to recycling/recovery of packaging waste and the share of biodegradable waste for landfill respectively through initiating e.g. the separate collection of such waste and the set up of a regional composting plant.

7.3 Environmental Objectives:

The main targets of the measure are to:

- close dumpsites and neighbourhood landfills and replace these sites by civic amenity sites (CAS) and drop-off centres as follows:

Municipality	No. of sites to be closed	CAS	Drop-off centres
Salcininkai	12	2	12
Sirvintos	18	1	17
Svencionys	30	2	18
Trakai	15	1	12
Elektrenai	7	1	6
Ukmerge	20	1	19
Vilnius district	17	2	16
Vilnius city	0	2	0
Total	119	12	100

The CAS will provide for the disposal of recyclables, bulky, garden and hazardous waste from residents. The drop-off centres will serve to replace the local dumpsite for inhabitants of small villages. Also, drop-off centres are set up in communities where door-to-door collection of waste is not financially feasible. The precise locations of CAS and drop-off centres will be determined by municipalities in their spatial plans and following the Lithuanian detailed planning requirements.

- close 5 operational town landfills located in Salcininkai district (2), Sirvintos, Trakai and Ukmerge, and close the large Kariotiskes landfill located in the Trakai district; and
- construct a regional landfill in Elektriniai municipality complying with national and EU requirements.

The reduction of the very considerable number of dumpsites and small-size landfills to only one, sanitary landfill will reduce also the waste disposal related pollution of the surroundings, in particular its impact on the ground water, very considerably. The 125 dumpsites and landfills in operation are currently estimated to lead to leachate infiltration into the soil at an amount of close to 350,000 m³ per year. The amount of COD released into the environment is assessed at some 5,200 t annually. Closure of these landfills through application of simple or extensive covers is estimated to reduce leachate generation to some 64,000 m³/year. The COD load should go down even more considerably to the order of 125 tonnes annually. Over the years this load is apt to be reduced even further. As the leachate generated at the new landfill will undergo treatment there will be no infiltration into the soil. The amount of COD released will be at most some 8 tonnes per year. All in all then, the measure results in a reduction of leachate infiltration by more than 4/5 and of COD load by some 97 pct.

7.4 Organisational and financial priorities:

A priority is to set up and develop an inter-municipal waste management company, the Vilnius County Waste Management Centre (VAATC), which is to be the central organisation within regional waste management and the intermediary to ensure compliance with waste legislation and regulations. The VAATC is expected set up in late 2002. The responsibilities of the company will comprise implementation of the proposed measure, ownership and operation of the new landfill, organization of initiatives for waste reuse and recycling, collection of waste tariffs and assistance for the outsourcing of waste collection services in the county.

7.5 Physical Indicators

Physical Indicator	Unit	Volume
Civic amenity sites and drop-off centres		
Construction of CAS	no.	12
Upgrading of existing CAS	no.	2
Construction of drop-off centres	no.	100
Closure of dumpsites and small landfills		
Site investigations	no.	5
Landfill areas covered	ha.	71
Dumps and neighbourhood landfills closed	no.	119
Town landfills closed	no.	5
Closure of Kariotiskes landfill		
Application of top cover	ha	19
Installation of gas collection system	no	1
Construction of new landfill		
Access road repairs	km	2.25
Construction of new access roads	km	2.9
Construction of reception area	no.	1
Earthworks 1 st landfill section	ha	8.8
Laying of bentonite mats	1000 m ²	44
Installation of bottom liner	ha	8.8
Installation of leachate drainage system	m	4,850
Installation of gas collection system	no.	1
Installation of gas utilisation unit	no.	1
Surface wastewater collection flume	m	740
Fencing of site	m	2,240

8. WORK SCHEDULE

8.1 Anticipated timetable of the measure:

	Start date	Completion date
Feasibility study	10/2001	04/2002
Economic analysis	10/2001	04/2002
Financial analysis	10/2001	04/2002
Environmental impact assessment	02/2002	05/2002
Tender documents *)	02/2003	09/2004
Design *)	05/2003	11/2004
Land acquisition	11/2001	06/2002
Construction	11/2003	09/2005
Operational phase:		
- drop-off centres and CAS	10/2004	n.a.
- regional landfill (1 st section)	04/2005	04/2009

*) all works of the measure are foreseen tendered as design and build contracts

9. MAIN ELEMENTS OF FINANCIAL ANALYSIS

The estimated project costs are presented in the table below:

No.	Expenditure category	Estimated cost
1	Project preparation and design	1,128
2	Site preparations CAS and drop-off centres	680
3	Containers CAS and drop-off centres	424
4	Closure of dumpsites and small landfills	4,107
5	Closure of Kariotiskes landfill	5,403
6	New landfill	8,031
7	Project supervision and support to VAATC	1,161

The following table summarises the assumptions and results for the first four years of operation and the last year of analysis.

	2005	2006	2007	2008	2022
	1000 tonnes	1000 tonnes	1000 tonnes	1000 tonnes	1000 tonnes
Waste collected	238.1	249.4	265.6	280.5	373.0
Percent change	6%	5%	7%	6%	0%
Waste collection rate	89%	90%	93%	95%	100%
	EUR/m ³	EUR/m ³	EUR/m ³	EUR/m ³	EUR/m ³
Landfill fee (excl. VAT)	6.84	6.92	7.99	9.09	6.31
	EUR	EUR	EUR	EUR	EUR
Household tariff/capita/mo. ex VAT	0.75	0.81	0.87	0.96	1.30
	EUR m	EUR m	EUR m	EUR m	EUR m
Waste revenues	9.0	9.9	11.6	12.9	23.9
Operating costs before depreciation	8.2	9.1	9.8	10.7	21.4
Cash flow from operations	-0.4	0.3	1.1	1.7	2.8
Debt service costs	0.4	0.5	0.5	1.0	0.5
Cash holdings	0.0	0.7	1.7	2.8	25.4
	times	times	times	times	times
Debt/Funds from operations	17.6	21.0	6.1	3.9	0.0
Debt service cover ratio	-	2.4	2.8	2.0	4.8

It is anticipated that waste collected increases steadily both in response to increased consumption and as a result of the extension of collection services. However, after 2008 quantities collected are expected to level off as recycling and reuse of waste become more important.

The data presented indicate that the affordability ratio, at present at an average level of just under 1% of household income, should not rise above 1.1% during the lifetime of the project. This is because increase in waste consumption is very closely linked to income so the shift to a measured charging system will protect the poorest as well as recovering pollution-related charges from the population as a whole.

The relatively healthy projections overall mean that the ISPA grant will be limited to 50% of eligible costs. Loan finance will be arranged by the Housing and Urban Development Foundation, drawing on loans from IFIs to the Government of Lithuania.

10. ENVIRONMENTAL IMPACT ANALYSIS

The project is classed as an Annex I project in the sense of the EIA Directive 85/337. An Environmental Impact Assessment was conducted during 2002 on the basis of two possible sites. Public meetings were held at each of the municipalities concerned and it became clear that one of the possible sites, at Širvinta, would engender certain problems in access and acceptability. The other proposed site, at Elektrėnai, posed no such problems and approval was subsequently given by the competent authority.

11. COST AND ASSISTANCE (IN €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
20,930,000		0	20,930,000	10,465,000	50

12. INVOLVEMENT OF IFIs

Other.

13. PROCUREMENT PLAN

The works will be implemented according to the provisional procurement plan appended an Annex I.a.

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Provisional Procurement Plan

Tender N°	Description of works and services to be tendered	Type of contract (works, supplies or services)	Provisional month of launch of tender (month/ year)
1	Project preparation and design	Service	01/12/02
2	Site preparations CAS and drop-off centres	Works	01/01/04
3	Containers CAS and drop-off centres	Works	01/01/04
4	Closure of dumpsites and small landfills	Works	01/08/04
5	Closure of Kariotiskas landfill	Works	01/08/04
6	New landfill	Works	01/02/03
7	Project supervision and support to VAATC	Service	01/12/02

The specific terms for the award of contracts will be made available in the Official Journal of the European Communities and/or the Internet.

ANNEX II

FINANCIAL PLAN (based on commitments from EU budget)

Title of measure: Waste Management in Vilnius Region
 ISPA No: 2002/LT/16/P/PE/012

Year	Total Cost 1 =2+3	Non Eligible Cost 2	Eligible Cost							
			Total 3 =4+5+6+7+8+9+10	ISPA 4 5 6 (%) =5/6	Central Government 7	Regional Authority 8	Local Authority 9	Private Sector 10		
2000	-	-	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	8.372.000	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-
non annualised	20.930.000	-	20.930.000	-	2.093.000	-	-	-	-	-
Total	20.930.000	-	20.930.000	100	10.465.000	50	10.465.000	-	-	-

Euro

Load from Other	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-
(%)	-	-	-	-	-	-	-	-	-	-
=11/12	-	-	-	-	-	-	-	-	-	-
7.580.000	7.580.000	0	7.580.000	100	-	-	-	-	-	-