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IS STRUCTURAL MEASURES FUNDING FOR **MUNICIPAL
WASTE MANAGEMENT INFRASTRUCTURE** PROJECTS
EFFECTIVE IN HELPING MEMBER STATES ACHIEVE EU
WASTE POLICY OBJECTIVES?



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IS STRUCTURAL MEASURES FUNDING FOR MUNICIPAL WASTE MANAGEMENT INFRASTRUCTURE PROJECTS EFFECTIVE IN HELPING MEMBER STATES ACHIEVE EU WASTE POLICY OBJECTIVES?

(pursuant to Article 287(4), second subparagraph, TFEU)

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CONTENTS

Paragraph

	GLOSSARY
I-IV	EXECUTIVE SUMMARY
1-13	INTRODUCTION
1-9	MUNICIPAL WASTE MANAGEMENT IN THE EU
10-13	EU STRUCTURAL MEASURES CO-FINANCING OF MUNICIPAL SOLID WASTE INFRASTRUCTURES
14-19	AUDIT SCOPE AND APPROACH
20-68	OBSERVATIONS
20-34	HAVE MUNICIPAL WASTE MANAGEMENT INFRASTRUCTURES BEEN SUCCESSFUL?
23-28	WASTE MANAGEMENT PLANTS WERE EFFECTIVE TO VARYING DEGREES BUT THOSE RECEIVING UNSORTED WASTE UNDERPERFORMED
29-34	ALMOST ALL INFRASTRUCTURES MET ENVIRONMENTAL REQUIREMENTS, BUT MORE THAN TWO THIRDS OF LANDFILLS LACKED THE REQUIRED FINANCIAL SECURITY FOR CLOSURE AND AFTER-CARE COSTS
35-44	HAVE EU WASTE POLICY OBJECTIVES BEEN ACHIEVED AT REGIONAL LEVEL?
37-38	INCONSISTENT DATA REPORTING
39	THE GENERATION OF WASTE INCREASED IN SIX OF THE REGIONS SAMPLED
40-42	ONLY ONE QUARTER OF THE REGIONS SAMPLED SIGNIFICANTLY INCREASED THEIR SEPARATE COLLECTION RATE, REDUCED THEIR RELIANCE ON LANDFILLING AND CONTRIBUTED TO MEETING EU TARGETS
43-44	ILLEGAL DUMPS WERE ERADICATED IN HALF OF THE REGIONS BUT WASTE WAS GENERALLY LANDFILLED WITHOUT ANY PRIOR TREATMENT
45-68	WERE MEASURES PUT IN PLACE TO MAXIMISE THE EFFECTIVENESS OF EU FUNDING?
47-54	THE LEVEL OF IMPLEMENTATION OF INFORMATION, ADMINISTRATIVE AND ECONOMIC SUPPORTING MEASURES VARIED SIGNIFICANTLY AMONG THE REGIONS SAMPLED
55-60	WHEN APPROVING OPERATIONAL PROGRAMMES OR PROJECTS, THE COMMISSION DID NOT ENCOURAGE THE IMPLEMENTATION OF SUPPORTING MEASURES
61-68	WEAKNESSES WERE NOTED IN THE EU WASTE REGULATORY FRAMEWORK AND EU GUIDELINES

69–77 CONCLUSIONS AND RECOMMENDATIONS

70–72 PERFORMANCE OF MUNICIPAL WASTE MANAGEMENT INFRASTRUCTURES

73–74 EU WASTE POLICY OBJECTIVES AT REGIONAL LEVEL

75–77 MEASURES PUT IN PLACE TO MAXIMISE THE EFFECTIVENESS OF EU FUNDING

ANNEX I — WASTE MANAGEMENT SYSTEM FROM WASTE SOURCE TO FINAL DISPOSAL

ANNEX II — STRUCTURAL MEASURES ASSISTANCE EARMARKED FOR WASTE MANAGEMENT PROJECTS

ANNEX III — LIST OF INFRASTRUCTURES SELECTED FOR THE AUDIT

ANNEX IV — RATES OF ASSISTANCE GRANTED COMPARED TO RATES THAT TAKE INTO ACCOUNT THE LEVEL OF COVERAGE OF OPERATING COSTS BY HOUSEHOLDS

REPLY OF THE COMMISSION

GLOSSARY

Administrative measures: In this report, measures adopted through legislation which require waste producers, waste managers and/or municipalities to observe certain requirements such as implementing a permit and inspection system for waste management facilities, establishing separate collection of waste at source or complying with quality standards in the production of compost.

Biodegradable waste: Any waste that is capable of undergoing anaerobic or aerobic decomposition, such as food, garden waste, paper and cardboard.

Cohesion Fund: Financial instrument designed to strengthen economic and social cohesion by financing environment and transport projects in Member States with a per capita GNP of less than 90 % of the EU average.

Economic measures: In this report, measures designed to provide incentives for selecting less damaging options for the management of waste in accordance with EU waste policy (for example recycling instead of landfilling). These include 'pay as you throw' tariffs as well as waste disposal taxes.

Effectiveness: Measure of the relationship between the results obtained and the objectives set.

European Regional Development Fund (ERDF): Financial instrument designed to promote economic and social cohesion between the regions of the EU. ERDF interventions are mainly implemented through operational programmes and single programming documents encompassing a large number of projects.

EU-27: The 27 Member States of the European Union.

EU-12: Member States which have joined the EU as part of the accessions of 2004 (10 Member States) and 2007 (two Member States).

Information measures: In this report, measures concerning the provision of information intended to encourage good waste disposal practices on the part of the public to contribute to the effectiveness of waste management policy. Awareness-raising campaigns and educational strategies are two examples.

Instrument for Structural Policies for Pre-Accession (ISPA): Financial instrument to assist the candidate countries in the preparation for accession. It provides assistance for infrastructure projects in the EU priority fields of environment and transport. After accession, ISPA projects turned into Cohesion Fund projects.

Leachate: Any liquid percolating through the deposited waste.

Municipal waste: Waste collected by or on behalf of municipal authorities and disposed of through the waste management system. The bulk of this waste stream is from households, though 'similar' wastes from sources such as commerce, offices and public institutions are included. Municipal waste is composed, for example, of biodegradable material, paper, plastics, glass, metals, textile, etc. (*source:* Eurostat).

Operational programme: A document approved by the Commission, which takes the form of a coherent set of priorities comprising multiannual measures encompassing a large number of projects.

'Polluter pays principle': According to this principle, the costs of waste management shall be borne by the original waste producer or by the current or previous waste holders (*source:* waste directive).

Programming period: The multiannual framework within which structural measures expenditure is planned and implemented.

Structural measures: In this report, interventions from the European Regional Development Fund (ERDF) and from the Cohesion Fund.

Waste disposal tax: An economic measure designed to increase the cost of landfilling and in some cases also of incinerating and therefore to provide an incentive to recycle. The tax, paid per tonne of waste disposed, is charged on top of landfill and/or incineration fees.

Waste tariff: Price charged by municipalities to households for the collection, treatment and disposal of waste. Waste tariffs can be calculated in different ways by municipalities (e.g. square metres of apartments or houses, number of persons in households, consumption of drinking water, weight or volume of waste generated, etc.).

EXECUTIVE SUMMARY

I.

In 2010, each EU-27 citizen generated on average approximately 500 kg of municipal waste, which if not collected, treated and disposed of properly, can cause negative environmental impacts. However, proper waste management can lead to an improvement of the use of resources as municipal waste is a source of raw materials. As a result, the EU has introduced common standards and targets in the form of directives for the management of municipal waste and co-finances waste management infrastructures in specific regions.

II.

The Court's audit focused on EU co-financing of municipal waste management infrastructures and examined whether the funding was effective in helping Member States achieve EU waste policy objectives. The Court assessed directly the performance of 26 sampled waste management infrastructures and reviewed the achievement of EU waste policy objectives as well as the implementation of supporting measures in the eight regions where the infrastructures were located. The role of the Commission was also examined.

III.

The Court concluded that, although in almost all the regions selected some improvements in the management of waste were observed, the effectiveness of structural measures funding for municipal waste management infrastructures was hampered by the poor implementation of supporting measures:

- (a) The performance of the co-financed infrastructures was highly dependent upon waste collection strategies. Concerning landfills, waste was deposited without adequate treatment and in general insufficient financial amounts were put aside to cover closure and after-care costs.

EXECUTIVE SUMMARY

- (b) The reporting on the achievement of EU targets was hampered by the reliability of data, making monitoring by the Commission difficult. Although in almost all regions some improvements in waste management were observed, per capita waste generation increased in six of the eight regions audited. In the two regions which contributed to the achievement of EU targets, biodegradable waste was collected separately and landfill taxes more widely implemented resulting in a reduction of the reliance on landfilling. Waste was generally landfilled without adequate treatment.
 - (c) The effectiveness of EU funding was not maximised due to the weak implementation of supporting informative, administrative and economic measures. The implementation of these supporting measures was not a condition for receiving an EU grant. Weaknesses were also noted in the EU waste regulatory framework and EU guidelines.
- IV.**
The Court recommends that:
- (a) Member States should focus on waste management infrastructures treating waste previously segregated at source and ensure that landfills treat waste before disposal and possess a sufficient financial security to cover closure and after-care costs. The Commission should request the implementation of these recommendations from the Member States before granting EU financial support.
 - (b) Member States should set up reliable and complete waste management databases and the Commission should test the reliability of the statistics received from the Member States. The Commission, the Parliament and the Council should consider linking EU financial support to the achievement of EU waste policy objectives.
 - (c) Member States should implement information, administrative and economic measures to support the co-financed infrastructures. In particular, Member States should pay greater attention to public participation and adherence, focus on separate collection implementation including biodegradable waste when cost effective and implement a landfill tax as well as incentives via tariff to encourage waste prevention and recycling. The Commission should request the implementation of these recommendations from the Member States before granting EU financial support; reduced rates of assistance should be applied when the 'polluter pays principle' is not applied.
 - (d) The Commission should improve the EU waste regulatory framework and EU guidelines. In particular, the Commission should propose waste prevention targets, clarify the concept of treatment before disposal, consider the opportunity to develop with Member States EU quality standards for compost and provide appropriate guidance and disseminate best practices in relation to the methodology to be used to estimate closure and after-care costs of landfills.

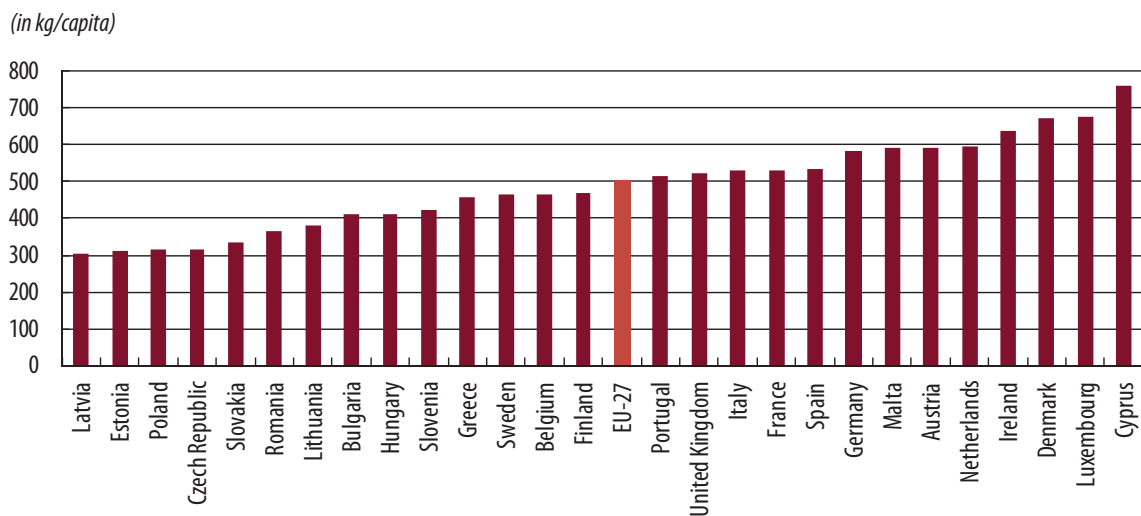
INTRODUCTION

MUNICIPAL WASTE MANAGEMENT IN THE EU

1. European society has grown wealthier over the last decade, with increased levels of consumption and production. In 2010, each EU citizen generated on average 502 kg of municipal waste, ranging from 304 kg in Latvia to 760 kg in Cyprus (see **Figure 1**).
2. Municipal waste, if not collected, treated and disposed of properly, is a threat to public health and can cause negative environmental impacts on air (by means of greenhouse gases), soil (via leachates due to illegal dumping or poorly controlled landfills) and water (through water coming into contact with waste and entering aquifers or surface water), as well as problems with odours.

FIGURE 1

PER CAPITA MUNICIPAL WASTE GENERATION IN 2010 BY MEMBER STATE



Source: Eurostat.

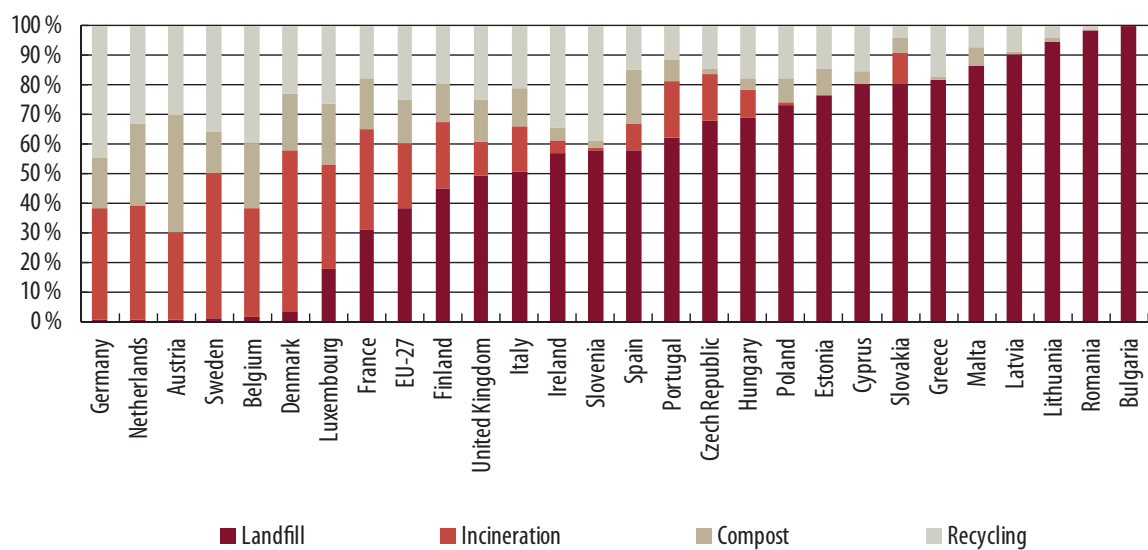
3. Proper waste management can lead to an improvement in the use of resources as municipal waste can be a source of raw materials. Paper, cardboard, metals, glass and plastic can be recycled, and biodegradable waste transformed into nutrient-rich compost to be used in agriculture as a soil improver. What remains can be incinerated (energy recovery) or disposed of in landfill.

4. A diagram of the main elements of municipal waste management is provided in **Annex I**. The following types of infrastructures, together with the collection of waste (separate or non-segregated at source), make up the typical municipal waste management system:
 - (a) sorting plant: a facility intended to segregate recyclables such as paper and cardboard, glass, packaging and metals, through manual sorting belts and/or automatic processes such as air flow or optical separators;
 - (b) composting and anaerobic digestion plants: facilities designed to treat biodegradable waste. Composting plants perform an aerobic biological process to convert biodegradable waste into a stable granular material which can be applied to land as soil improver whereas anaerobic digestion plants apply chemicals to aid the decomposition process. Here, in the absence of air, bacteria acts on biodegradable waste to convert it into a digest and methane-rich biogas to be used to produce energy;
 - (c) mechanical biological treatment plant: a facility combining sorting with a form of biological treatment such as composting or anaerobic digestion. The mechanical treatment stage separates the biodegradable and dry parts of the waste and in some cases segregates recyclables. Then the biodegradable matter undergoes a biological treatment;
 - (d) incinerator: a plant intended to burn waste with or without energy recovery;
 - (e) landfill: a site for the disposal of waste materials which are deposited into or on to land.

5. Landfilling remains the dominant waste management option in most EU Member States, even if energy recovery and especially recycling have gained importance in recent years (see **Figure 2**).
6. In order to reduce the negative impact of municipal waste on the environment and public health and to promote a more efficient use of resources, the EU has introduced general principles and common standards and targets in the form of directives, for the management of municipal waste.

FIGURE 2

MUNICIPAL WASTE TREATMENT IN 2010 BY MEMBER STATE



Source: Eurostat.

7. The framework of EU waste policy was established in the directive of 15 July 1975¹. According to this directive, EU waste policy is based on the promotion of prevention, re-use and recycling of waste. If waste generation cannot be prevented, as many of the materials as possible should be recovered, preferably by recycling, with landfill only used as a last resort. It also introduced the 'polluter pays principle'. The 2008 waste directive² further developed these principles by establishing a compulsory five-step waste hierarchy pyramid (see **Figure 3**).
8. The waste directive was complemented by a number of specific directives for waste treatment operations (landfilling³ and incineration⁴) or specific waste streams, such as packaging⁵ or electrical and electronic equipment⁶. These directives set quantitative targets to be met by Member States in terms of percentage of biodegradable waste diversion from landfill, packaging recycling and recovery rates and separate collection of electrical and electronic equipment waste. Deadlines to comply with targets were extended for some Member States to take into account their starting situation in terms of waste management (see **Table 1**).

¹ Council Directive 75/442/EEC of 15 July 1975 on waste (OJ L 194, 25.7.1975, p. 39), amended in 1991 by Council Directive 91/156/EEC of 18 March 1991 (OJ L 78, 26.3.1991, p. 32) and subsequently codified by Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 (OJ L 114, 27.4.2006, p. 9), which was repealed by Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 (OJ L 312, 22.11.2008, p. 3).

² Directive 2008/98/EC.

³ Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste (OJ L 182, 16.7.1999, p. 1).

⁴ Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste (OJ L 332, 28.12.2000, p. 91), repealed by Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (OJ L 334, 17.12.2010, p. 17).

⁵ European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste (OJ L 365, 31.12.1994, p. 10), amended by Directive 2004/12/EC of the European Parliament and of the Council of 11 February 2004 (OJ L 47, 18.2.2004, p. 26) and by Directive 2005/20/EC of the European Parliament and of the Council of 9 March 2005 (OJ L 70, 16.3.2005, p. 17).

FIGURE 3

WASTE HIERARCHY PYRAMID



Source: European Court of Auditors.

9. The effectiveness of waste management policy can be improved through supporting measures such as the running of information and awareness campaigns, the redesigning of administrative procedures or the putting in place of financial incentives or disincentives. Sometimes these are required by regulation, such as the need to adequately inform consumers, but in other cases, they are the result of experience gained in the management of municipal waste, such as the implementation of a waste disposal tax or the separate collection of biodegradable waste.

⁶ Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (OJ L 37, 13.2.2003, p. 24), amended by Directive 2003/108/EC of the European Parliament and of the Council of 8 December 2003 (OJ L 345, 31.12.2003, p. 106) and by Directive 2008/34/EC of the European Parliament and of the Council of 11 March 2008 (OJ L 81, 20.3.2008, p. 65). This directive was recast by Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) (OJ L 197, 24.7.2012, p. 38).

TABLE 1

TARGETS TO BE MET BY MEMBER STATES

Directives	Targets
Landfill directive	<p>General target: Biodegradable municipal waste going to landfills must be reduced to 75 %, 50 % and 35 % of the total amount of biodegradable municipal waste produced in 1995, by the end of 2006, 2009 and 2016 respectively.</p> <p>Specific target for Portugal and Romania: Deadlines are the end of 2010, 2013 and 2020 respectively.</p>
Packaging directive	<p>General target: By the end of 2008, 60 % as a minimum by weight of packaging waste must be recovered and between 55 % as a minimum and 80 % as a maximum recycled. Moreover, the following minimum recycling targets for materials contained in packaging waste must be attained: 60 % by weight for glass, 60 % by weight for paper and cardboard, 50 % by weight for metals, 22,5 % by weight for plastics and 15 % by weight for wood.</p> <p>Specific target for Portugal: By the end of 2005 the recovery of packaging waste should reach 50–65 %, and 25–45 % by weight of the totality of packaging materials contained in packaging waste should be recycled (with a minimum of 15 % by weight for each packaging material). The 2008 general target should be achieved by 2011.</p> <p>Specific target for Romania: The 2008 general target must be met by 2013 with intermediate targets.</p>
Electrical and electronic equipment waste directive	<p>A rate of separate collection of at least 4 kg on average per inhabitant per year of electrical and electronic equipment waste from private households must be achieved by the end of 2006.</p> <p>Specific target for Romania: A rate of separate collection of at least 2, 3 and 4 kg on average per inhabitant per year of electrical and electronic equipment waste from private households must be achieved by the end of 2006, 2007 and 2008 respectively.</p>

Source: EU waste directives.

EU STRUCTURAL MEASURES CO-FINANCING OF MUNICIPAL SOLID WASTE INFRASTRUCTURES

- 10.** In specific regions, Member States may request EU financial support for infrastructures in the field of municipal waste management through the European Regional Development Fund (ERDF) and the Cohesion Fund (CF). During the 2000–06 programming period, 4,6 billion euro was earmarked from these funds for urban and industrial waste infrastructures. For the 2007–13 period, the EU contribution to waste infrastructures will increase to 6,2 billion euro, of which around 70 % will be in the EU-12 Member States. EU earmarked amounts by Member State for both programming periods are provided in **Annex II**.
- 11.** Co-financed infrastructures are implemented under shared management, with the Commission bearing the ultimate responsibility for the implementation of the EU budget⁷. During the 2000–06 programming period, in addition to the approval of operational programmes, the Commission approved the applications submitted by Member States for all Cohesion Fund projects and for ERDF projects whose total cost exceeded 50 million euro (major projects). For the 2007–13 programming period, apart from the approval of programmes, only projects which have a cost in excess of 50 million euro have to be approved by the Commission⁸.
- 12.** Two directorates-general of the Commission⁹ have a significant role in the area of municipal waste:
- (a) DG Environment is responsible for EU environmental policy in the field of waste management. It is required to monitor the implementation of the related legislation (such as the achievement of specific targets) and is consulted by DG Regional and Urban Policy when examining the quality of operational programme proposals and major projects¹⁰;
 - (b) DG Regional and Urban Policy is responsible for the EU budget in the area of regional policy, under which waste management infrastructure projects can be co-financed.
- 13.** During the 2000–06 programming period, structural measures mainly co-financed the following types of waste management infrastructures: sorting plants (see **Picture 1**), composting and anaerobic digestion plants (see **Picture 2**), mechanical biological treatment facilities, separate collection systems and landfills (both the construction of new ones and the closure and rehabilitation of old ones) (see **Picture 3**). These types of infrastructure are expected to contribute to the achievement of EU waste policy objectives of diverting biodegradable waste from landfills and increasing recycling rates (see **Box 1**).

⁷ Article 17(1) TEU and Article 317 of the TFEU.

⁸ From 1 January 2007 to 25 June 2010 the amount was 25 million euro in the case of the environment.

⁹ Another directorate-general, Eurostat, is responsible for coordinating the European Statistical System and providing relevant statistics to other Commission services. The DG is the main provider of waste statistics of which the main user is DG Environment.

¹⁰ During the 2000–06 programming period DG Environment was also consulted by the regional policy DG in the case of Cohesion Fund project applications.

BOX 1

EXAMPLES OF WASTE MANAGEMENT INFRASTRUCTURES CO-FINANCED BY THE EU

A sorting plant in Portugal (Resitejo), with a capacity of 9 000 tonnes per year, aimed at recuperating packaging waste and paper and glass previously segregated at source in a group of municipalities. The recyclable materials, sorted manually, were sold to recycling operators and residual waste was conveyed to an adjacent landfill site. The cost of the project eligible for EU assistance was 2,28 million euro, with 1,71 million euro of ERDF co-financing.

In Romania, a composting plant (Râmnicu Vâlcea) intended to treat biodegradable waste collected separately from households as well as green waste from municipal parks and to transform it into compost. With a capacity to treat 14 400 tonnes of waste per year, the plant was designed to contribute to the diversion of biodegradable waste from landfills in line with the landfill directive targets. The infrastructure was part of an integrated waste management project costing 14,67 million euro for which EU assistance amounted to 11 million euro.

A project in Spain (Alt Empordà) consisted of the enlargement of a landfill with a capacity of 1 167 603 m³ as well as of the improvement of the existing cells in terms of gas and leachate collection and treatment in order to reduce the environmental impact of the site. The cost of the project was 5,71 million euro, 4,57 million euro of which came from the Cohesion Fund.

Picture 1 — Sorting plant**Picture 2 — Composting plant****Picture 3 — Landfill**

AUDIT SCOPE AND APPROACH

- 14.** The main objective of the audit was to assess the effectiveness of structural measures funding of municipal waste management infrastructures in helping Member States achieve EU waste policy objectives.
- 15.** The Court addressed the following three questions:
- Have municipal waste management infrastructures been successful?
 - Have EU waste policy objectives been achieved at regional level¹¹?
 - Were measures put in place to maximise the effectiveness of EU funding?
- 16.** Assessment criteria used for the audit are explained further in the report, under each question (see paragraphs 20, 21, 35 and 45). As is usually the case in performance audit, they take into account examples of good practice observed in the domain (see paragraph 9).
- 17.** The audit was carried out at the European Commission and in eight regions in four Member States (Spain, Italy, Portugal and Romania). The sample of infrastructures audited focused on Member States and regions receiving a high-level EU financial support for waste management during the 2000–06 and 2007–13 programming periods and where a sufficient number of completed projects were available at the time of the audit, so that their effectiveness could be assessed. **Annex III** contains the list of infrastructures audited as well as of the operational programmes reviewed.
- 18.** The audit was based on an assessment of:
- the performance of a sample of 26 waste management infrastructures co-financed during the 2000–06 programming period¹²: five sorting facilities, seven composting or anaerobic digestion plants, seven mechanical biological treatment plants and seven landfills;
 - the achievement of EU municipal solid waste objectives in the eight regions audited;
 - the implementation in the regions sampled of supporting measures as well as of the role of the Commission to maximise the effectiveness of EU funding.

¹¹ EU waste directives set objectives and targets at Member State level. However, as, in general, regions are responsible for establishing waste management plans and as they have received EU financial support for infrastructures in the field of municipal waste management, their contribution to the achievement of EU objectives and targets has been assessed in the framework of this audit.

¹² Fifteen waste management infrastructures benefited from Cohesion Fund financial support (including five ex- ISPA facilities launched in Romania when the country was in the process of becoming a Member State). The grant was approved by the Commission. Eleven were ERDF projects contained in operational programmes and approved by the responsible managing authorities.

19. The audit was conducted between January and November 2011. Project files were reviewed at the Commission and in the four Member States sampled and interviews were held with Commission staff, Member State authorities and infrastructure operators. All the waste management infrastructures in the sample were visited during the course of the audit. The Court was assisted by external independent experts knowledgeable in the field of municipal waste management. Audit criteria were established with the assistance of external experts and discussed with the Commission when planning the audit.

OBSERVATIONS

HAVE MUNICIPAL WASTE MANAGEMENT INFRASTRUCTURES BEEN SUCCESSFUL?

- 20.** The performance of the co-financed infrastructures should be in line with their technical design, the funding application and generally accepted standards.
- 21.** According to the waste directive, waste management infrastructures have to be designed and operated to guarantee that waste is treated and disposed of without risk to water, air and soil and without causing noise or odour problems. In addition, the landfill directive requires the setting-up of a financial security to cover closure and after-care costs for a period of at least 30 years, as potential environmental threats extend after the operational phase.
- 22.** The Court examined whether:
- (a) co-financed municipal waste management infrastructures were effective, in terms of the achievement of the expected results;
 - (b) the operation of co-financed municipal waste management infrastructures had caused environmental problems.

¹³ Ratio indicating the proportion between the tonnes of waste treated in the plant and the tonnes of materials recovered.

WASTE MANAGEMENT PLANTS WERE EFFECTIVE TO VARYING DEGREES BUT THOSE RECEIVING UNSORTED WASTE UNDERPERFORMED

SORTING PLANTS

- 23.** The five sorting plants reviewed by the Court, which were designed to recuperate packaging waste (and in some cases paper and glass) segregated at source by households, generally performed satisfactorily in relation to their technical design and to generally acceptable standards in terms of ratio input/output¹³ and quality of the materials recovered:
- (a) they recovered between 50 % and 74 % of the packaging waste received;
 - (b) the quality of the materials recovered was usually in line with market specifications and therefore was saleable.

- 24.** However, three of the five sorting plants were operating at between 106 % and 154 % of their design capacity after 6 or 7 years of operation due to weaknesses at the planning stage of the infrastructures. In one case more municipalities than initially planned were served by the plant and in two cases the quantity of waste collected separately at source exceeded the forecast. Overloading results in the risk of reducing the ratio of materials recovered as well as of not meeting the quality standards for recovered materials required by recycling companies.

COMPOSTING AND ANAEROBIC DIGESTION PLANTS

- 25.** The performance of the seven composting or anaerobic digestion plants, intended to treat biodegradable waste producing compost, varied. The Court noted that:
- (a) the quantity of compost produced compared to the tonnage of municipal waste entering the facilities was below the design target in four of the selected plants (the ratio input/output ranged in those plants from 1 % to 22 %) resulting in significant quantities of residual waste being landfilled;
 - (b) in two plants, the quality of the compost produced was below the objectives set in the applications, especially when it resulted from mixed waste, as a result of the high content of heavy metals, therefore reducing its suitability for other usages, such as agriculture. In a third plant the operator only tested the content of heavy metals during the first year of operation and not in the following 4 years;

BOX 2

AN EXAMPLE OF HOW COMPOST CAN SUCCESSFULLY BE MARKETED

A Portuguese composting plant (LIPOR), serving approximately 1 million inhabitants, received only separately collected biodegradable waste, whether food and kitchen or green waste. The operator of the plant, through actions such as the development of awareness campaigns, focused on the appropriate sorting and collection of biodegradable waste in order to improve the quality of the raw material going into compost. In 2010, the plant produced 10 027 tonnes of high-quality compost, which was easily marketed at an average price of 71,8 euro per tonne.

- (c) the compost produced was difficult to sell in five of the seven facilities sampled due to the lack of development of the compost market¹⁴ and its poor quality. The compost was eventually disposed of for less than 1 euro per tonne. In two cases, stocks were accumulated despite production being significantly below target;
- (d) two plants were operating at a rate below 10 % of their capacity as most biodegradable waste collected separately was unusable because it was mixed with other types of waste and had to be directly landfilled. In contrast, two other plants were overloaded as they were operating at 102 % and 119 % of capacity.

¹⁴ An adequate compost market would imply the existence of compost quality standards, the indication of potential appropriate usages and the implementation of awareness campaigns intended to promote compost utilisation.

MECHANICAL BIOLOGICAL TREATMENT PLANTS

- 26.** Six audited mechanical biological treatment plants were operational; however, a seventh, located in Puglia, for which the works were completed in 2003, was not in operation at the time of the audit due to significant problems in the awarding of the contract for the operation and in delays in obtaining the necessary permits. During this period since 2003, the plant has been kept under conservative maintenance at a cost of 3,5 million euro (or 24 % of the total investment cost) supported by the Member State.
- 27.** Five of the six operational mechanical biological treatment plants audited, were intended to treat mixed waste (including biodegradable waste). The Court noted a very low performance in terms of recovered materials and waste diversion from landfill. In terms of performance these six mechanical biological treatment plants can be divided into three groups:
- (a) one mechanical biological treatment plant clearly contributed to the achievement of EU waste policy objectives and particularly to landfill diversion, even if not fully achieving the targets set in its technical design (see **Box 3**);
 - (b) another mechanical biological treatment plant had a mixed level of performance. It succeeded in sending the dry part of the waste to an external plant to produce refuse-derived fuel and less than 50 % of the waste entering the plant was landfilled. However, with the exception of a small amount of metals recovery, no other material recovery was carried out, and biodegradable waste was not recycled as all the digest resulting from the process was landfilled;
 - (c) four mechanical biological treatment plants did not significantly reduce the quantity of waste landfilled (see **Box 4**).

BOX 3**EXAMPLE OF ONE MECHANICAL BIOLOGICAL TREATMENT PLANT IN LINE WITH EU WASTE HIERARCHY AND WASTE DIVERSION FROM LANDFILL**

One mechanical biological treatment plant in Spain (Sant Adrià de Besòs) received only residual waste, as packaging, glass, paper and cardboard, and biodegradable waste were previously separately collected through dedicated bins available for the entire population of the area covered by the facility. The plant separated the dry fraction from the biowaste. The remaining dry fraction, following the recovery of materials suitable for sale to reprocessors, such as glass, plastics, metals and paper and cardboard, was incinerated and energy recovered in a facility within the same waste management complex. Biowaste was subject to an anaerobic treatment to produce biogas which was then used as a source of energy. As a result of the process, in 2010, materials recovery amounted to 8 % of residual waste entering the plant compared to 10 % set in the application, biodegradable matter for biological treatment to 20 % compared to 26,5 % planned and residual waste for incineration to 70 % compared to 63,5 %.

BOX 4**FOUR MECHANICAL BIOLOGICAL TREATMENT PLANTS NOT ACHIEVING THEIR TARGETS AND NOT CONTRIBUTING TO WASTE DIVERSION FROM LANDFILLS**

In three Italian mechanical biological treatment facilities (Villacidro, Olbia and Cerignola) the operator entirely landfilled the outputs from the process: the dry fraction with no material recovery as well as the digest produced, amounting in total to 68 %, 82 % and 93 % of the waste entering the respective facilities. Only process losses (such as evaporation or leachate generation) reduced the quantity of waste landfilled. In two of the plants the co-financed machinery for refuse-derived fuel production was in one case not put into operation and in the other was dismantled as a result of the lack of potential buyers for the fuel. The mechanical sorting unit of the third plant was not in use 6 years after the plant entered into operation, as it was no longer required, since biodegradable waste was collected separately at source.

Moreover, the three plants were overloaded and as a result 13 %, 52 % and 65 % respectively of the waste received by the facilities was not treated at all and directly landfilled with a high content of biodegradable matter, as biodegradable waste was not collected separately in two cases.

The fourth plant within this group (Linares, Spain) had implemented the recovery of materials and did not landfill the compost produced, which was used in civil works and in agriculture. However, recovery targets were not met: only between 6 % and 9 % of biodegradable waste and 4 % of recoverable materials were recovered compared to a target of 25 % to 28 % and 7 % to 8 % respectively. As a result 85 % of waste entering the plant was landfilled with a high content of biodegradable matter. The resulting compost produced was difficult to sell and approximately 50 % of total production of the plant was stockpiled at the time of the audit.

LANDFILLS

- 28.** Regarding the seven selected landfill sites, the Court noted that the quantity of biodegradable waste landfilled ranged from 31 % to 55 % of total waste landfilled as a result of a failure to effectively treat such waste:
- (a) waste was landfilled without any treatment in five of the seven landfills reviewed. Even if, in three of these five landfill sites biodegradable waste was collected separately, in two cases more than 90 % of biodegradable waste was contaminated with non-biodegradable waste and as a result directly landfilled;
 - (b) waste deposited in the remaining two selected landfills was treated in mechanical biological treatment plants prior to disposal. However, the two treatment facilities did not perform satisfactorily. One of the plants was overloaded (52 % of the waste received was directly sent to landfill without treatment). The second one did not reach the biodegradable waste recovery target set in its technical design and, as a result, waste was landfilled with a high content of biodegradable matter (see **Box 4**).

ALMOST ALL INFRASTRUCTURES MET ENVIRONMENTAL REQUIREMENTS, BUT MORE THAN TWO THIRDS OF LANDFILLS LACKED THE REQUIRED FINANCIAL SECURITY FOR CLOSURE AND AFTER-CARE COSTS

- 29.** For 25 of the 26 waste management infrastructures selected, the Court's review of data indicated that environmental impacts on air, water and soil were generally monitored. Projects complied in most cases with their respective permits. One plant was not yet in operation at the time of the audit (see paragraph 26).

- 30.** However, at the time of the audit, in two of the seven selected landfills, gas resulting from the decomposition of biodegradable waste deposited was not collected and treated or flared, as required by the landfill directive (see **Box 5**). Uncontrolled landfill gas can pollute the atmosphere, affect vegetation and cause explosions.
- 31.** The Court also noted problems regarding the applicable limits for odour emissions set out in the national environmental permits in one third of the infrastructures, at least during certain periods of their operation. A lack of monitoring with regard to odours was noted in another third of the selected infrastructures. Two of the plants failing to monitor odour levels were at the same time in receipt of EU co-financing for complementary works to deal with odour problems.

BOX 5**TWO LANDFILLS LACKED GAS COLLECTION AND TREATMENT OR FLARING**

In one of the landfills in Italy (Cavallino), waste was being deposited for 3 years and at the time of the audit the utilisation rate was approximately 70 %. The gas generated as a result of the decomposition of biodegradable matter was being released into the atmosphere without being treated or flared as the construction of the infrastructure for gas collection had not been completed.

In a landfill in Romania (Piatra Neamt), almost 2 years after starting operation, the Court noted that no landfill gas collection system was either in place, under construction or being planned.

These two landfills received a significant amount of biodegradable waste as a result of a lack of or deficient treatment prior to disposal, which made the collection and treatment or flaring of gas even more relevant in order to safeguard the atmosphere.

32. However, half of the infrastructures which had problems with odour management did not change their operational processes or make complementary investments to solve such problems (see **Box 6**).

33. The potential impacts on the environment resulting from the operation of landfill sites are not limited to the operational period of the infrastructure, as potential leachate infiltrations and landfill gas emissions last for decades after waste disposal has finished. For this reason, the landfill directive requires the setting aside of amounts to cover closure and after-care costs for a period of at least 30 years. However, five of the seven selected landfills lacked a sufficient financial security for this purpose. In these cases, the amounts actually deposited, regardless of the methodology for their calculation, are not sufficient to ensure that appropriate funding will be available, once landfills cease operation, to prevent long-term threats to the environment such as the pollution of groundwater by leachate infiltration into the soil or the pollution of the atmosphere by landfill gas emissions.

BOX 6**EXAMPLES OF WAYS TO DIMINISH ODOUR PROBLEMS**

In two composting/anaerobic digestion plants (Valorsul, Portugal and Gironés, Spain) odour problems were noted by independent monitoring. To tackle this situation the operators implemented changes in the operation process, such as modifying the schedule and timing of the turning of the compost, or in the maintenance of, for example, the biofilters. A reporting system was implemented in one of the plants to allow residents to complain of unpleasant odours by SMS to the operator.

In two of the landfills in Portugal (Residouro and Baixo Tâmega) complaints about odour problems were registered during the first years of operation. Deodorant emission systems were installed which were activated when necessary.

- 34.** The Court also noted significant differences in the methodologies in place in the regions to determine the amount of the financial security, resulting in very different amounts (ranging from 370 000 euro to 4 180 000 euro for a landfill with a capacity about 1,4 million m³). These methodologies do not provide satisfactory assurance that sufficient funding will be available to cover closure and after-care costs for a period of 30 years. In some cases the financial security was determined by the cost of the landfill infrastructure, whereas in others the amount was set taking into account the capacity of the landfill, its surface or the tonnes deposited.

HAVE EU WASTE POLICY OBJECTIVES BEEN ACHIEVED AT REGIONAL LEVEL?

- 35.** Structural measures funding for municipal waste infrastructures should help the beneficiary regions to meet the waste policy objectives set in EU directives. In particular, municipal waste prevention should be encouraged, regions should be increasing their separate collection rate so that they can contribute to achieving EU targets¹¹ for recycling and recovery, and the reliance on final disposal in landfills should be reduced.
- 36.** The Court examined whether:
- (a) the situation regarding the prevention of municipal waste was improving in the regions sampled;
 - (b) regions had increased their separate collection rate, contributed to meeting EU targets for specific waste streams and reduced their reliance on landfilling;
 - (c) illegal dumps had been eradicated and waste was being pre-treated before disposal in landfills.

INCONSISTENT DATA REPORTING

- 37.** Following its visits to eight regions in the four Member States sampled, the Court noted some inconsistencies regarding the reporting of the achievement of EU targets. Data reported to the Commission could not always be reconciled with the figures available in Member States. Such inconsistencies can make it difficult for the Commission to assess whether EU waste targets are actually being achieved (see **Box 7**). The Commission checks the consistency of figures received, but does not assess their reliability.
- 38.** Moreover, the Commission does not compile information on the contribution of the regions to achieving EU targets despite the fact that, in six of the eight regions visited, waste management plans which take into account EU targets are prepared at regional level. Reporting at national level can mask major disparities in waste management performance within a Member State, as was the case for Andalucía and Puglia when compared with the overall situation in Spain and Italy respectively.

BOX 7

EXAMPLES OF CASES WHERE IT WAS NOT POSSIBLE TO RECONCILE DATA IN MEMBER STATES WITH DATA REPORTED TO THE COMMISSION

In Spain, in relation to the achievement of the landfill directive target, the Ministry of the Environment is responsible for consolidating the data from the regions and reporting to the Commission. Andalucía reported, the quantity of biodegradable waste landfilled in 2009 as being 500 000 tonnes, whereas based on data obtained during the audit the Court estimated that the quantity should have been approximately 1 800 000 tonnes. As a result, in 2009 Spain landfilled 58 % of the biodegradable waste produced in 1995, and not 47 % as reported to the Commission, and failed to meet the landfill target for the year set at 50 %.

In Portugal, where no data were available at regional level on the achievement of the targets set in EU directives, data reported at national level to the Commission showed compliance with the landfill directive for 2006 as well as with the packaging directive for 2005. However, data obtained during the audit indicated that the landfill directive target for 2006 was narrowly missed and that the packaging directive targets for 2005 were missed in respect of the recycling of plastic packaging (by 46,95 %).

THE GENERATION OF WASTE INCREASED IN SIX OF THE REGIONS SAMPLED

- 39.** Contrary to the trend observed for the EU-27 average, which shows that despite continuous economic growth until 2008 municipal waste generation has stabilised at around 520 kg/capita, since 2000 per capita waste generation increased in six of the regions sampled. In the two remaining regions, Sardinia and Catalonia, it stabilised. In 2009 the per capita waste generation in half of the regions sampled exceeded the EU-27 average as well as the average of the respective Member State, while this was not the case in 2000 for any of the regions sampled.

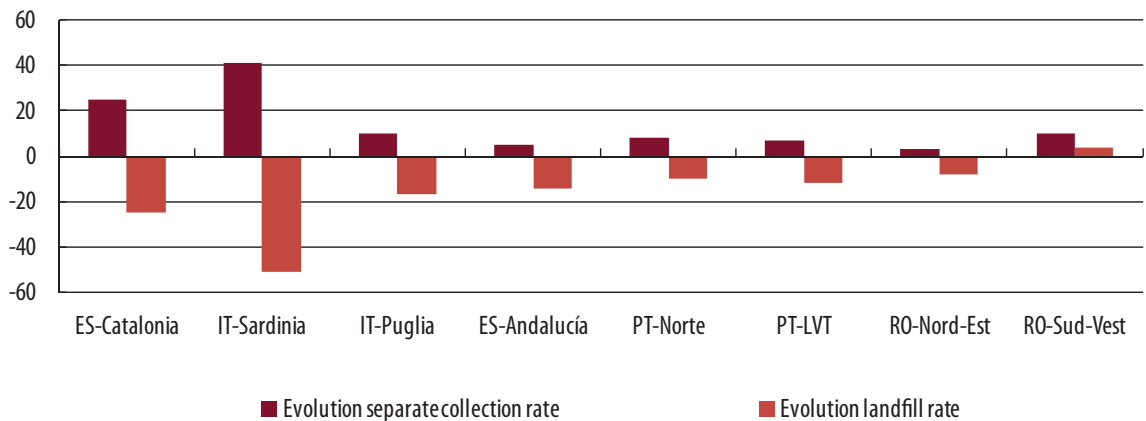
ONLY ONE QUARTER OF THE REGIONS SAMPLED SIGNIFICANTLY INCREASED THEIR SEPARATE COLLECTION RATE, REDUCED THEIR RELIANCE ON LANDFILLING AND CONTRIBUTED TO MEETING EU TARGETS

- 40.** Only two of the regions selected, Sardinia and Catalonia, made significant progress with separate collection and diversion from landfill. The Court noted an increase in the separate collection rate for Sardinia from 2 % in 2000 to 43 % in 2009 and for Catalonia from 13 % to 38 % over the same period. There was also a resulting decrease in municipal waste landfilling over the same period from 74 % to 23 % for Sardinia and from 64 % to 39 % for Catalonia (see **Figure 4**)¹⁵.
- 41.** In these two regions a reduction of waste landfilled in kilograms per capita was observed, whereas this indicator remained almost stable or increased in the other six regions sampled (see **Figure 5**).

¹⁵ The analysis of the results achieved by the region Sud-Vest in Romania is influenced by the lack of reliability of waste management databases available in the Member State, especially in relation to the separate collection rate.

FIGURE 4

EVOLUTION OF MUNICIPAL WASTE SEPARATE COLLECTION AND LANDFILL RATES IN THE REGIONS SAMPLED BETWEEN 2000 AND 2009¹

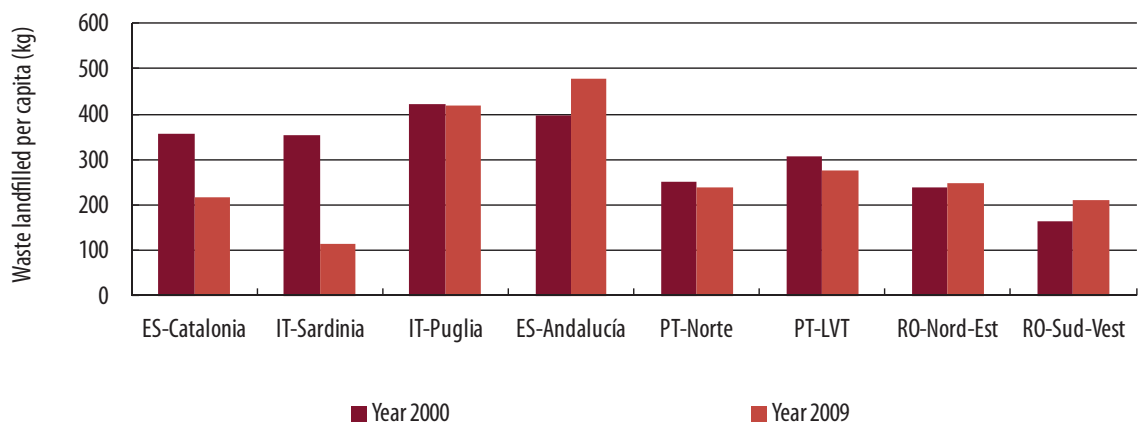


¹ For the region Nord-Est in Romania the landfill rate covers waste collected for the period 2003–09 and the separate collection 2004–09; for Andalucía the separate collection rate refers to the period 2002–08; and for the region Sud-Vest the landfill of waste collected and separate collection rates correspond to the period 2006–09.

Source: European Court of Auditors based on data available at Commission and Member State levels.

FIGURE 5

WASTE LANDFILLED PER CAPITA (KG) IN 2000 AND 2009¹



¹ For the region RO-Nord-Est data refer to 2003 and 2009 and for RO-Sud-Vest to 2007 and 2009.

Source: European Court of Auditors based on data available at Commission and Member State levels.

42. The same regions, Sardinia and Catalonia, are the only ones which contributed to achieving EU targets for specific types of municipal waste:

- (a) in terms of diversion of biodegradable waste from landfills, only Sardinia and Catalonia contributed to meeting the landfill directive targets. Two other regions did not contribute to meeting the EU targets; and for four others the deadline to achieve the target was 2010. Data for 2010 was not available at the time of the audit, but the trend in years prior to 2010 did not show an increase of biodegradable waste diversion¹⁶ (see **Table 2**);
- (b) concerning packaging directive targets, the situation noted in the eight regions varied significantly. Catalonia, Sardinia and Andalucía contributed to achieving EU targets. In the five other regions, no specific monitoring was carried out at regional level. The Court estimated, based on data obtained in the Member States, that these regions were unlikely to contribute to achieving EU targets due to the low separate collection rate;
- (c) five of the eight regions sampled¹⁷ did not contribute to achieving the EU target for separate collection of electrical and electronic equipment to be achieved in 2006 in accordance to the electrical and electronic equipment waste directive, even if in general a positive trend was noted. Catalonia had already contributed in 2006 and Sardinia and Puglia in 2009 and 2010.

¹⁶ For Portugal only data at national level were available.

¹⁷ ES-Andalucía, RO-Nord-Est and RO-Sud-Vest. Regarding the two regions sampled in Portugal, Lisboa e Vale do Tejo and Norte, data were not available at regional level. However, the target was not met by the Member State as a whole.

TABLE 2

BIODEGRADABLE WASTE LANDFILLED RATE TREND ON THE BASIS OF THE TOTAL AMOUNT OF BIODEGRADABLE MUNICIPAL WASTE PRODUCED IN 1995

Regions sampled	2006		2009	
	Achieved	Target	Achieved	Target
ES-Catalonia	69 %	< 75 %	45 %	< 50 %
IT-Sardinia	59 %	< 75 %	36 %	< 50 %
IT-Puglia	84 % ²	< 75 %	85 %	< 50 %
ES-Andalucía	87 %	< 75 %	93 %	< 50 %
Portugal ¹	79 %	NA	78 %	< 75 % ⁵
RO-Nord-Est	56 % ³	NA	69 % ³	< 75 % ⁵
RO-Sud-Vest	75 % ⁴	NA	87 %	< 75 % ⁵

¹ No figures available for the two regions, but only at the level of the Member State.

² Data for 2008.

³ To be added, municipal waste not collected, which amounted to 35 % and 27 % of the total municipal waste generation respectively.

⁴ Data for 2007.

⁵ Target for 2010.

Source: European Court of Auditors based on data available at Commission and Member State levels.

ILLEGAL DUMPS WERE ERADICATED IN HALF OF THE REGIONS BUT WASTE WAS GENERALLY LANDFILLED WITHOUT ANY PRIOR TREATMENT

- 43.** According to data provided by the regions audited, during the 2000–09 period, illegal dumps had been either eradicated or their number significantly reduced:
- (a) in four regions, according to the data provided by the relevant authorities, no illegal dumps were operational at the time of the audit;
 - (b) in the other four regions, illegal dumps were still being used, especially in the two regions selected in Romania where in 2009 municipal waste collection only covered 54 % and 33 % of the population. The lack of collection of municipal waste in these two regions was especially noticeable in rural areas.
- 44.** In the audited regions municipal waste was generally landfilled without proper treatment, despite the landfill directive stipulating that waste deposited in landfills should be treated to reduce the quantity of waste or hazards to human health or the environment. The Court noted the following:
- (a) municipal waste was generally landfilled without any treatment in four of the regions sampled¹⁸. In addition, in these regions the separate collection of biodegradable waste was only found in a very limited number of municipalities resulting in high levels of biodegradable matter in waste landfilled;
 - (b) in one region, treatment prior to disposal covered waste generated by only approximately 40 % of the total population of the region. However, this lack of treatment was partially mitigated by the fact that the separate collection of biodegradable waste was carried out in most of the region;

¹⁸ To be noted that Romania was granted an additional deadline, until 2017, to ensure that all existing landfills comply with the requirements of the landfill directive.

- (c) in the three remaining regions, there were more mechanical biological treatment plants carrying out treatment prior to disposal but in general they did not achieve the performance expected (see **Box 8**).

WERE MEASURES PUT IN PLACE TO MAXIMISE THE EFFECTIVENESS OF EU FUNDING?

- 45.** In order to maximise the effectiveness of the co-financed infrastructures, information, administrative and economic supporting measures, such as awareness campaigns, quality standards and separate collection or 'pay as you throw' schemes and landfill taxes (see paragraph 9), should be in place to encourage waste prevention and recycling in accordance with the EU waste hierarchy (see **Figure 3**). EU financial support should encourage the implementation of such supporting measures. An appropriate regulatory framework and guidelines should be implemented.

BOX 8

EXAMPLE OF A REGION WHERE TREATMENT FACILITIES WERE IN PLACE, BUT WHERE THEIR PERFORMANCE WAS NOT SATISFACTORY

In one of the regions sampled 22 of the 28 landfills in operation at the time of the audit received pre-treated waste from mechanical biological treatment plants. However, these plants did not meet their performance targets. On average 76 % of waste entering the 23 treatment facilities available in the region was landfilled in 2008 with a high content of biodegradable matter despite the treatment process; in the case of the plant audited (Linares, Spain) the recovery of biodegradable waste only amounted to between 6 % and 9 % rather than the design target of 25 % to 28 %.

- 46.** The Court examined whether:
- (a) informative, administrative and economic instruments were put in place at Member State and/or regional level to support the co-financed waste management infrastructures and whether the Commission encouraged their implementation when approving operational programmes or projects;
 - (b) the EU regulatory framework and guidelines were likely to maximise the effectiveness of EU funding.

THE LEVEL OF IMPLEMENTATION OF INFORMATION, ADMINISTRATIVE AND ECONOMIC SUPPORTING MEASURES VARIED SIGNIFICANTLY AMONG THE REGIONS SAMPLED

INFORMATIVE MEASURES

- 47.** In general in the regions where the sampled waste management infrastructures were located, there was evidence of complementary information activities such as public awareness campaigns or the publication of waste management guidelines. **Box 9** describes one such case.

BOX 9

A GOOD EXAMPLE OF HOW DEVELOPING PUBLIC AWARENESS CAN RESULT IN A BETTER QUALITY OF PERFORMANCE FROM INFRASTRUCTURES

One of the composting plants in Portugal (Lipor) was operated by a company providing waste management services (separate collection and treatment) to eight municipalities accounting approximately for 1 million inhabitants. As the company considered communication and high levels of participation as key factors for the success of the management of waste, all its activities were associated with efforts to provide information, raise awareness and educate the public. In particular, the construction of the composting plant was accompanied by communication and awareness campaigns as well as a specific marketing strategy for the compost. Public satisfaction surveys were carried out periodically, a free information phone line was set up and waste management guidelines were published and distributed. All these efforts resulted in a satisfactory segregation at source of biodegradable waste by households and commerce, which allowed the production and selling of high-quality compost (see **Box 2**).

48. However, the Court noted the following:

- (a) in none of the regions sampled did the responsible authorities measure the success of their information campaigns and no measurable targets had been defined at the outset;
- (b) in the two regions selected in Romania, despite some awareness campaigns, almost all biodegradable waste collected separately was found to be contaminated and had to be directly landfilled rather than being treated in the composting plants.

ADMINISTRATIVE MEASURES

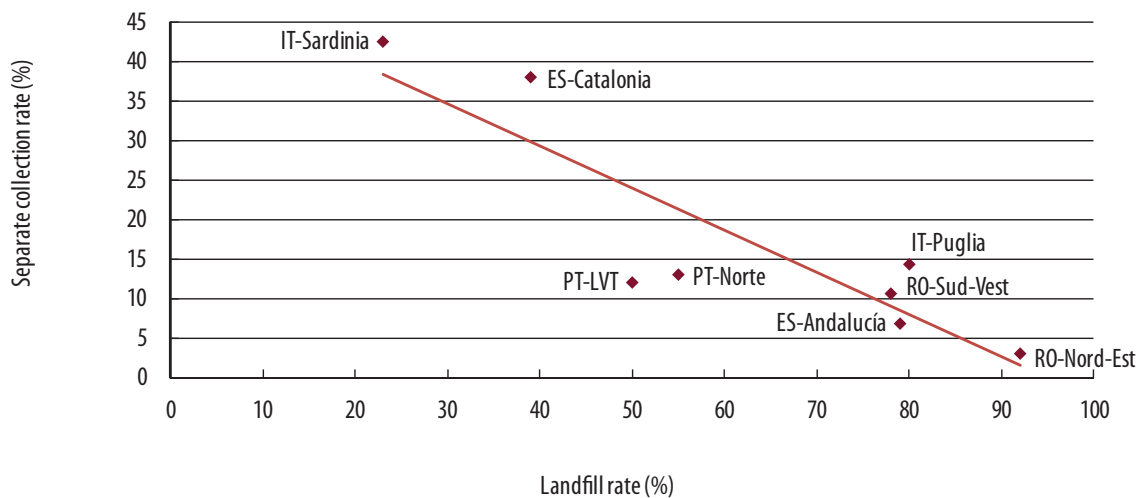
49. As required by the waste directive, the eight regions implemented a system of issuing of permits for establishments carrying out waste treatment. At the time of the audit, all the infrastructures were subject to inspections by the responsible authorities. Such inspections were, however, limited to the assessment of potential environmental impacts and did not cover the performance aspect of the waste management facilities (see **Box 6**).

50. Concerning separate collection, the Court noted significant discrepancies in its implementation in the regions and municipalities served by the waste management infrastructures audited. Whereas segregated collection of packaging waste, paper and cardboard and glass was widely implemented, contributing to the good performance observed in the audited sorting plants, separate collection of biodegradable waste was satisfactory in two regions only. These regions contributed to meeting EU diversion targets for biodegradable waste and managed to reduce the kilograms landfilled per capita (see paragraphs 41 and 42). For the other six regions separate collection of biodegradable waste was generally not in place or was ineffective. As a result, composting plants treating mixed waste or biodegradable waste not properly segregated at source performed poorly.

51. Figures show an inverse relationship between separate collection implementation and percentage of waste landfilled (see **Figure 6**).
52. Regarding compost quality standards, the Court noted that, at the time of the audit, four regions lacked any such standard and for the remaining four regions the admissible concentration limits of heavy metals in the compost varied significantly and were less stringent than those contained in EU draft guidelines. The lack of quality standards contributed to the difficulties faced by the composting and anaerobic digestion plants in selling their compost.

FIGURE 6

INVERSE RELATIONSHIP BETWEEN SEPARATE COLLECTION AND PERCENTAGE OF WASTE LANDFILLED¹



¹ For RO-Nord-Est and RO-Sud-Vest, the landfill rate was calculated based only on waste collected.

Source: European Court of Auditors based on data available at Commission and Member State levels.

ECONOMIC MEASURES

- 53.** Based on the review of the waste management tariffs charged by municipalities to households in at least the three major municipalities served by each infrastructure in the sample, the Court noted the following:
- (a) in all cases, tariffs were flat¹⁹ and not based on ‘pay as you throw’ schemes intended to take into consideration the ‘polluter pays principle’ and to prevent or reduce waste generation;
 - (b) some municipalities, despite not having a ‘pay as you throw’ scheme, introduced elements in the tariff to encourage recycling (see **Box 10**).
- 54.** A waste disposal tax charged to municipalities²⁰ per tonne of waste landfilled and/or incinerated on top of normal landfill and/or incineration fees is another economic incentive to try to change behaviour. Five of the eight regions sampled have introduced such a waste disposal tax to promote waste management options less damaging to the environment. The two regions with the highest level of landfill tax presented the lowest percentage of waste being disposed of in landfills in 2009 (see **Figure 7**) and the most significant improvements during the 2000–09 period. In order to encourage separate collection, two regions linked the amount of the waste disposal tax to the rate of separate collection achieved by each municipality (see **Box 11**).

¹⁹ Tariffs were calculated based on the square metres of apartments or houses, on the number of persons per household, on drinking water consumption or on a combination of these elements, without taking into consideration the quantity of waste generated by each household.

²⁰ As well as to private citizens in the case of disposal in landfills.

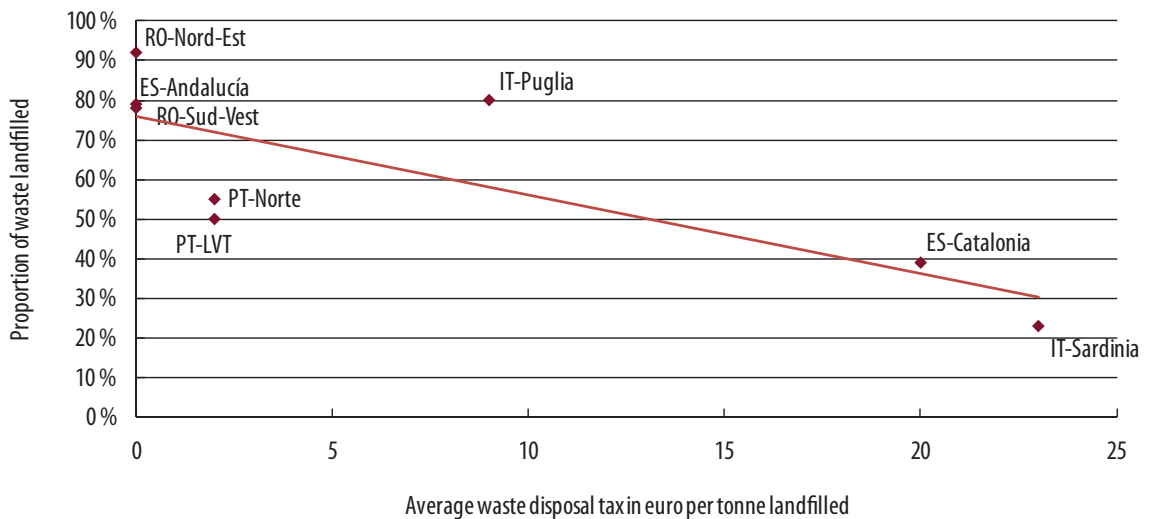
BOX 10

EXAMPLES OF WASTE MANAGEMENT TARIFFS WITH ELEMENTS TO ENCOURAGE RECYCLING

In order to encourage recycling, some municipalities in Catalonia applied discounts to the waste management tariff paid by households based on home composting, use of collection centres or participation in awareness campaigns. The separate collection rate achieved by these municipalities (39 %) was higher than the one observed in municipalities not applying economic incentives (29 %). Other municipalities in Catalonia took into account the proportion of waste landfilled when establishing the tariff to benefit the households of those municipalities with lower landfill rates.

FIGURE 7

WASTE DISPOSAL TAX AND PERCENTAGE OF MUNICIPAL WASTE LANDFILLED IN 2009¹



¹ For ES-Andalucía and IT-Puglia data refer to 2008. For RO-Nord-Est and RO-Sud-Vest the proportion of waste landfilled does not take into consideration waste not collected.

Source: European Court of Auditors based on data available at Commission and Member State levels.

BOX 11

AN EXAMPLE OF THE WASTE DISPOSAL TAX SET FOR WASTE LANDFILLED OR INCINERATED BASED UPON THE PERCENTAGE OF SEPARATE COLLECTION ACHIEVED BY EACH MUNICIPALITY

Since 2005, to promote separate collection of waste at source, Sardinia has adapted the tariff charged to waste landfilled or incinerated, based on the separate collection rate achieved by each municipality. For example, in 2010, if the separate collection rate reached a level between 50 % and 60 % a tax relief of 20 % was applied. If separate collection was above 60 % municipalities benefited from a tax relief of 40 %. However if separate collection was below 50 % (or 40 % depending on the number of inhabitants of the municipality) a penalty of an additional 5,16 euro/tonne was charged.

WHEN APPROVING OPERATIONAL PROGRAMMES OR PROJECTS, THE COMMISSION DID NOT ENCOURAGE THE IMPLEMENTATION OF SUPPORTING MEASURES

- 55.** Structural measures funding did not influence the implementation of information, administrative and economic supporting measures. The Commission required limited information on such instruments when deciding on the co-financing of waste management infrastructures:
- (a) for ERDF funding, the Court noted that 9 of the 10 operational programmes selected did not contain information regarding specific administrative measures nor any reference to waste disposal taxes or types of waste management tariffs paid by households (flat rate or based on 'pay as you throw' schemes);
 - (b) even if each Cohesion Fund project was individually assessed and approved by the Commission during the 2000–06 programme period, the Court noted that the level of detail concerning supporting measures requested by the Commission from Member States did not in general ensure their existence before the granting of EU funding.
- 56.** Implementation reports submitted by the sampled Member States to comply with the requirements set in EU waste directives contain some information on such supporting measures (information on landfill tax implementation, inspections, public information, etc.). However, the Court did not note any link between the assessment of the implementation reports by DG Environment and the EU funding of waste management infrastructures which is the responsibility of DG Regional and Urban Policy: Member States not reporting to the Commission or providing incomplete reports benefit in the same way from structural measures funding for waste management infrastructures.
- 57.** The lack of a link between EU funding and the existence of supporting instruments was especially significant in relation to the implementation of the 'polluter pays principle', which is one of the principles on which EU environmental policy is based²¹. The 1975 waste directive established this principle²² which was then included in other specific directives on waste management, such as the landfill directive²³. According to cohesion policy regulations and to Commission internal guidelines, EU financial support should take into consideration the implementation of the principle through differentiated rates of assistance²⁴.

²¹ Article 191(2) of the Treaty on the Functioning of the European Union (consolidated version).

²² Article 15 of Directive 75/442/EEC, Article 15 of Directive 91/156/EEC, Article 15 of Directive 2006/12/EC and Article 14 of Directive 2008/98/EC.

²³ Article 10 of Directive 1999/31/EC.

²⁴ Article 29 of Council Regulation (EC) No 1260/1999 of 21 June 1999 laying down general provisions on the Structural Funds: 'The contribution of the Funds shall be differentiated through the application of the polluter pays principle'. Article 52 of Council Regulation (EC) No 1083/2006 of 11 July 2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1260/1999: 'The contribution from the Funds may be modulated through the application of the polluter pays principle'. Article 55 of Regulation (EC) No 1083/2006: 'In calculating the eligible expenditure on revenue-generating projects, the managing authority shall take account of the application of the polluter-pays principle'.

58. This principle of differentiated rates of assistance was further developed by the Commission during the 2000–06 period in a technical paper²⁵ which established that ‘where the financing of a project includes a system of charges (such as low flat rate charges), which are not based on the actual consumption of resources and do not provide the necessary financial means to properly maintain the infrastructure nor to cover the operational costs and a large part of the depreciation costs, then the rate of assistance should be reduced’. In these cases, the proposed rate of assistance should normally be as set out in column 5 of **Annex IV**.
59. The Court noted that although for the selected infrastructures, operating and depreciation costs were not covered by the waste management tariff charged to households, the Commission did not apply the principle of a differentiated rate of assistance by reducing the co-financing rate. As a result, in almost all the cases the co-financing rate granted was higher than the one that should have applied in accordance with the principle of differentiated rates of assistance (see **Annex IV**). Some municipalities did not charge any waste management tariff to households.
60. Tariffs charged by municipalities to households for the management of waste varied significantly, even within each region (see **Table 3**). Differences, reaching in some cases up to 300 % within the same region, could not be solely explained by differences in the average income of households and their affordability level or in the cost of waste management among the municipalities sampled.

²⁵ ‘The new programming period 2000-2006: Technical paper 1 — Application of the polluter pays principle — Differentiating the rates of Community assistance for Structural Funds, Cohesion Fund and ISPA infrastructure operations’ (6.12.1999).

TABLE 3

WASTE MANAGEMENT TARIFFS PAID BY HOUSEHOLDS IN THE MUNICIPALITIES SAMPLED IN 2009 OR 2010

Region	Lowest tariff noted	Highest tariff noted	Difference in %
ES-Catalonia	40,25 euro per household	166,50 euro per household	314 %
IT-Sardinia	1,02 euro per m ² of surface	3,3 euro per m ² of surface	224 %
IT-Puglia	1,57 euro per m ² of surface	2,62 euro per m ² of surface	67 %
ES-Andalucía	69,60 euro per household	94,36 euro per household	36 %
PT-Norte	0 euro	76,20 euro per household	-
PT-Lisboa Vale do Tejo	0 euro	70,38 euro per household	-
RO-Nord-Est	8,69 euro per person (the infrastructures sampled served only one municipality)		NA
RO-Sud-Vest	16,2 euro per person (the infrastructures sampled served only one municipality)		NA

Source: European Court of Auditors based on audit evidence obtained during the audit.

WEAKNESSES WERE NOTED IN THE EU WASTE REGULATORY FRAMEWORK AND EU GUIDELINES

- 61.** The EU waste regulatory framework and EU guidelines can contribute to maximise the effectiveness of EU funding. The Court noted weaknesses in this area.

LACK OF FOCUS OF EU DIRECTIVES' TARGETS ON WASTE PREVENTION

- 62.** The EU waste hierarchy contained in the waste directive indicates prevention as the first waste management option. The sixth environment action programme²⁶ included an overall objective to substantially reduce waste generation and disposal.

- 63.** However, targets set in EU directives in the waste management field relate only to recycling, recovery and diversion of biodegradable waste from landfills and do not address prevention or reduction of waste (see paragraph 39).

LACK OF CLARITY OF THE CONCEPT OF TREATMENT BEFORE DISPOSAL

- 64.** According to the landfill directive only waste that has been subject to treatment should be landfilled. However, the directive is not clear enough on what such treatment should consist of and whether treatment requires a reduction in the quantity of waste landfilled or only a reduction of its volume²⁷.

- 65.** This lack of clarity regarding the concept of treatment before landfilling has resulted in different strategies at national and/or regional level. One of the regions sampled focused, for example, on mechanical biological treatment plants, the performance of which in achieving the reduction of waste landfilled was not satisfactory. In two other regions, when high levels of separate collection were achieved, waste was considered as having been treated and could be taken to the landfill directly (see paragraphs 28 and 44).

²⁶ Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions on the sixth environment action programme of the European Community (COM(2001) 31 final).

²⁷ Article 6(a) of Directive 1999/31/EC stipulates that 'by reducing the quantity of the waste or the hazards to human health or the environment', while Article 2(h) stipulates that 'to reduce its volume or hazardous nature, facilitate its handling or enhance recovery'.

LACK OF EU QUALITY STANDARDS FOR COMPOST

- 66.** The EU co-financed composting and anaerobic digestion plants in all eight regions sampled. However, at the time of the audit four of the regions reviewed lacked any quality standards for compost. In the four remaining regions, the admissible concentration levels of heavy metals varied significantly (see paragraph 52).
- 67.** The fact that quality standards for compost at national/regional level either did not exist or if they existed, varied significantly, hampered the development of a compost market, making it difficult for plant operators to sell the compost produced. There are no EU compost quality standards.

NO EU GUIDELINE FOR THE FINANCIAL SECURITY FOR LANDFILL CLOSURE COSTS

- 68.** Concerning the financial security to cover closure and after-care costs, the Court noted that significant differences existed in the methodologies applied for its calculation in the six regions where landfills were sampled, resulting in significantly varying amounts for a landfill of the same capacity, which indicates that they may not always be sufficient to cover all the costs for a period of 30 years as required by the landfill directive. The EU has neither provided any guidelines to Member States as to how the closure and after-care costs should be estimated nor promoted any exchange of experiences among Member States in this area (see paragraphs 33 and 34).

CONCLUSIONS AND RECOMMENDATIONS

- 69.** In almost all the regions selected some improvements in the management of waste were observed, however the effectiveness of structural measures funding for municipal waste management infrastructures in helping Member States achieve EU waste policy objectives was hampered by the poor implementation of supporting measures and by weaknesses in EU rules and guidelines. When assessing operational programmes or projects for which it had responsibility, the Commission did not encourage the implementation of supporting measures. The success of the co-financed infrastructures depends on the existence of effective separate collection at source, which was often not the case. Although all the regions sampled showed some improvements in the management of waste, only 25 % achieved EU waste policy objectives, mainly those who put supporting measures in place.

PERFORMANCE OF MUNICIPAL WASTE MANAGEMENT INFRASTRUCTURES

- 70.** The performance of co-financed infrastructures was highly dependent upon waste collection strategies:
- (a) sorting plants, intended to recover packaging waste segregated at source by households, performed satisfactorily (see paragraphs 23 and 24);
 - (b) in general, composting and anaerobic digestion plants treating biodegradable waste collected separately (when it was not contaminated) performed better than the plants treating unsorted waste where performance was unsatisfactory (see paragraph 25);
 - (c) mechanical biological treatment plants receiving waste unsorted at source did not manage in general to contribute to the achievement of EU waste policy objectives as most of the waste entering the plants was landfilled (see paragraphs 26 and 27).
- 71.** Waste was deposited following either inadequate treatment or without any treatment whatsoever in all of the landfill sites sampled, resulting in a high content of biodegradable matter being landfilled (see paragraph 28).

- 72.** Almost all of the infrastructures audited met environmental requirements. However, five of the seven selected landfills did not set up a sufficient financial security to cover closure and after-care costs. Significant differences were observed in the methodology used to determine the amount of financial security required. In most cases the amounts established would be insufficient to cover all the associated costs (see paragraphs 29 to 34).

RECOMMENDATION 1

- (a) **Member States** should:
- (i) focus on waste management infrastructures treating waste previously segregated at source (including biodegradable waste when cost-effective);
 - (ii) ensure that municipal waste deposited in landfills has been treated before disposal;
 - (iii) make sure that landfill sites possess a sufficient financial security to cover closure and after-care costs for a period of at least 30 years, the calculation of which should be based on an appropriate methodology.
- (b) The **Commission** should make the EU contribution subject to the implementation of these recommendations by the Member States.

EU WASTE POLICY OBJECTIVES AT REGIONAL LEVEL

- 73.** The Court noted significant weaknesses regarding the reporting by Member States of the achievement of EU targets, resulting in the inability of the Commission to evaluate in all cases whether the performance being achieved by Member States was in line with EU waste targets. The Commission checks the consistency of the figures received, but does not assess their reliability and does not compile information on the achievement of EU targets at regional level (see paragraphs 37 and 38).
- 74.** Although in almost all the regions selected some improvements in the management of waste were observed:
- (a) per capita waste generation increased in six of the eight regions sampled despite prevention being fundamental in the hierarchy of EU waste management actions (see paragraph 39);
 - (b) only one quarter of the regions sampled significantly increased their separate collection rate resulting in a reduction of the reliance on landfilling and contributed to achieving EU targets (see paragraphs 40 to 42);
 - (c) waste was generally landfilled without having been adequately treated or not treated at all (see paragraph 44).

RECOMMENDATION 2

- (a) **Member States** should set up reliable waste management databases, both to monitor their progress towards the achievement of EU waste policy objectives and to underpin their reporting to the Commission.
- (b) The **Commission** should assess the data received from Member States for reliability.
- (c) The **Commission**, the **Parliament** and the **Council** should consider linking EU financial support to the achievement of EU waste policy objectives.

MEASURES PUT IN PLACE TO MAXIMISE THE EFFECTIVENESS OF EU FUNDING

- 75.** The effectiveness of EU funding was not maximised due to the weak implementation of supporting measures.
- 76.** The development of supporting information, administrative and economic measures varied significantly in the regions sampled:
- (a) A high level of public awareness and willingness to participate in waste management schemes appeared to be key factors for the success of waste management infrastructures, especially in relation to waste segregation at source by households. In none of the regions sampled did the responsible authorities measure the results of the information measures they had put in place (see paragraphs 47 and 48).
 - (b) Only regions having implemented separate collection at source of biodegradable waste contributed to meeting the related EU diversion targets (see paragraphs 50 and 51).
 - (c) Four of the eight regions sampled lacked any quality standard for compost and in the remaining four regions the acceptable concentration limit for heavy metals varied significantly, contributing to the poor development of a market for the compost produced by the composting and anaerobic digestion plants in the sample (see paragraph 52).
 - (d) The implementation of economic instruments via tariffs or through waste disposal taxes proved to have a significant impact on the performance of projects and regions in the management of waste (see paragraphs 53 and 54).
 - (e) The Commission did not encourage the implementation of supporting measures, especially of the 'polluter pays principle' as no differentiated rates of assistance were found to have been applied in the projects sampled (see paragraphs 55 to 60).

RECOMMENDATION 3

- (a) **Member States** should:
- (i) pay greater attention to increasing public awareness and participation in waste management schemes, especially in relation to waste segregation at source by households. Results achieved by awareness-raising campaigns and educational strategies should be systematically measured;
 - (ii) focus on separate collection implementation, including biodegradable waste when cost-effective, in order to maximise the performance of waste management infrastructures and to progress towards the achievement of EU waste policy objectives;
 - (iii) introduce economic instruments in the management of waste to promote waste prevention and recycling, particularly through a waste disposal tax, 'pay as you throw' schemes and other incentives in the tariffs paid by households.
- (b) The **Commission** should:
- (i) make the EU contribution subject to the implementation of these recommendations by the Member States;
 - (ii) in relation to the 'polluter pays principle', when approving operational programmes, request from the Member States the application of reduced rates of assistance when waste management tariffs paid by households do not cover operating costs and a large part of depreciation costs of municipal waste management. The Commission should apply itself this principle when approving major projects.

- 77.** Improvements in the EU regulatory framework and EU guidelines can contribute towards maximising the effectiveness of structural measures funding of municipal waste management infrastructures. The Court noted:
- (a) a lack of focus of EU waste directives' targets on waste prevention despite prevention being the first management option according to the waste directive (see paragraphs 62 and 63);
 - (b) a lack of clarity of the concept of treatment before disposal, resulting in different strategies at national and regional level (see paragraphs 64 and 65);
 - (c) a lack of EU quality standards for compost, despite the absence or inconsistency of standards available at Member State level, which hampered the development of a compost market (see paragraphs 66 and 67);
 - (d) a lack of guidance on the methodology to be used to assess the closure and after-care costs of landfills (paragraph 68).

RECOMMENDATION 4

The **Commission** should:

- (a) propose waste prevention targets in line with the EU waste hierarchy pyramid;
- (b) clarify the concept of treatment before disposal contained in the landfill directive, to ensure a consistent approach by Member States;
- (c) consider the opportunity to develop with Member States EU quality standards for compost to encourage the development of a compost market;
- (d) provide appropriate guidance and disseminate best practices in relation to the methodology to be used to estimate closure and after-care costs of landfills to be covered by the financial security.

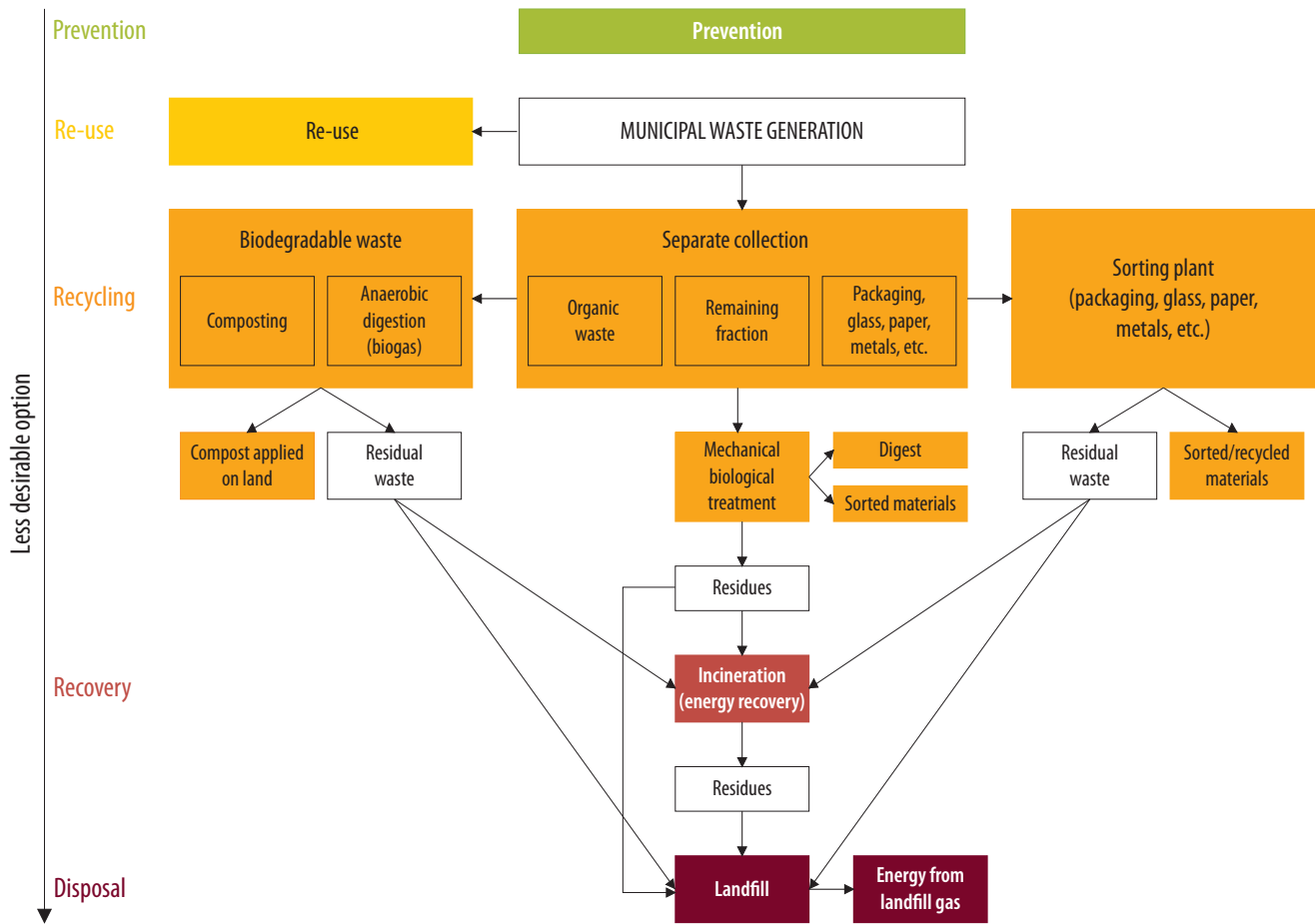
This report was adopted by Chamber II, headed by Mr Harald NOACK, Member of the Court of Auditors, in Luxembourg at its meeting of 24 October 2012.

For the Court of Auditors



Vitor Manuel da SILVA CALDEIRA
President

WASTE MANAGEMENT SYSTEM FROM WASTE SOURCE TO FINAL DISPOSAL



Complementary notes to diagram

According to the waste directive,

Prevention: means measures, taken before a substance material or product has become waste, that reduce: the quantity of waste, the adverse impacts of the generated waste on the environment and human health or the content of harmful substances in materials and products.

Re-use: means any operation by which products or components that are not waste are used again for the same purpose for which they were conceived.

Recycling: means any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of biodegradable material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.

Recovery: means any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy.

Disposal: means any operation which is not recovery even where the operation has as a secondary consequence the reclamation of substances or energy.

STRUCTURAL MEASURES ASSISTANCE EARMARKED FOR WASTE MANAGEMENT PROJECTS

2000–06 PROGRAMMING PERIOD					
Member State	CF (urban and industrial waste)	CF (environment related to waste)	ERDF	TOTAL	% over total
Spain	1 393 087 080	75 120 816	220 099 852	1 688 307 748	36,78
Greece	365 649 728	0	297 647 168	663 296 896	14,45
Portugal	385 910 757	8 908 090	51 652 744	446 471 591	9,73
Italy	0	0	313 677 576	313 677 576	6,83
Hungary	176 848 871	27 958 830	15 167 782	219 975 483	4,79
Germany	0	0	197 557 502	197 557 502	4,30
Poland	74 031 202	29 438 760	91 424 570	194 894 532	4,25
Lithuania	90 372 374	16 563 950	1 446 008	108 382 332	2,36
Romania	0	107 489 325	0	107 489 325	2,34
France	0	0	103 931 777	103 931 777	2,26
Ireland	6 903 275	0	80 617 000	87 520 275	1,91
Slovenia	62 572 651	20 331 730	0	82 904 381	1,81
Czech Republic	47 345 000	0	16 328 485	63 673 485	1,39
Latvia	32 405 111	22 928 732	7 538 163	62 872 006	1,37
EU cross-border cooperation	0	0	56 691 788	56 691 788	1,24
Bulgaria	0	51 800 193	0	51 800 193	1,13
Cyprus	0	28 722 415	0	28 722 415	0,63
Estonia	23 096 673	0	2 389 009	25 485 682	0,56
Slovakia	0	0	22 870 561	22 870 561	0,50
United Kingdom	0	0	16 864 095	16 864 095	0,37
Malta	11 723 250	0	3 166 065	14 889 315	0,32
EU interregional cooperation	0	0	13 985 683	13 985 683	0,30
Finland	0	0	6 222 300	6 222 300	0,14
Belgium	0	0	5 706 707	5 706 707	0,12
Netherlands	0	0	5 680 360	5 680 360	0,12
Denmark	0	0	0	0	0
Luxembourg	0	0	0	0	0
Austria	0	0	0	0	0
Sweden	0	0	0	0	0
TOTAL EU	2 669 945 972	389 262 841	1 530 665 195	4 589 874 008	100,00

Source: European Commission.

2007–13 PROGRAMMING PERIOD		
Member State	EU earmarked amount	% over total
Poland	1 311 253 636	21,01
Romania	792 840 872	12,71
Czech Republic	520 258 572	8,34
Spain	462 015 554	7,40
Greece	432 176 450	6,93
Slovakia	368 600 000	5,91
Hungary	366 500 000	5,87
Italy	338 072 531	5,42
Bulgaria	300 521 138	4,82
Lithuania	278 995 046	4,47
Portugal	224 088 076	3,59
Slovenia	205 568 426	3,29
France	134 470 000	2,16
Latvia	129 500 000	2,08
Cyprus	125 495 000	2,01
Estonia	70 302 813	1,13
Malta	55 250 000	0,89
Germany	47 745 110	0,77
EU cross-border cooperation	47 890 793	0,77
United Kingdom	20 230 668	0,32
Ireland	3 000 000	0,05
Belgium	2 382 219	0,04
Netherlands	2 667 500	0,04
TOTAL	6 239 824 404	100,00

Source: European Commission.

LIST OF INFRASTRUCTURES SELECTED FOR THE AUDIT

Region (Member State)	Project title	Type of waste management infrastructure	EU fund
Catalonia (Spain)	Mechanical biological treatment plant (Sant Adrià de Besòs)	Mechanical biological treatment	Cohesion Fund
Catalonia (Spain)	Construction and adaptation of municipal waste management infrastructures in Catalonia (Project 17 — Enlargement and adaptation of the landfill in Alt Empordà)	Landfill	Cohesion Fund
Catalonia (Spain)	Construction and adaptation of municipal waste management infrastructures in Catalonia (Project 18 — Gironés composting plant)	Composting plant	Cohesion Fund
Sardinia (Italy)	Plant for the production of quality compost (Serramanna)	Composting plant	ERDF (OP Sardegna)
Sardinia (Italy)	Anaerobic digestion plant (Villacidro)	Mechanical biological treatment	ERDF (OP Sardegna)
Sardinia (Italy)	Plant for the selection, stabilisation and production of refuse-derived fuel (Olbia)	Mechanical biological treatment	ERDF (OP Sardegna)
Puglia (Italy)	Plant for bio-stabilisation and composting in Cerignola	Mechanical biological treatment	ERDF (OP Puglia)
Puglia (Italy)	Landfill (Cavallino)	Landfill	ERDF (OP Puglia)
Puglia (Italy)	Bio-stabilisation plant (Cavallino)	Mechanical biological treatment	ERDF (OP Puglia)
Puglia (Italy)	Environment protection and regeneration through the development of the urban waste management cycle (Brindisi)	Not in operation at the time of the audit	ERDF (OP Puglia)
Andalucía (Spain)	Packaging and packaging waste recovery plant in the integrated centre for the treatment of municipal solid waste Monte Marta-Cónica (Sevilla)	Sorting plant	Cohesion Fund
Andalucía (Spain)	Recovery and composting plant (Linares)	Mechanical biological treatment	Cohesion Fund
Andalucía (Spain)	Fitting-out, closure and construction of a new cell in a landfill for depositing municipal solid waste, Guadiel (Linares)	Landfill	Cohesion Fund
LVT (Portugal)	Sorting plant, Resitejo	Sorting plant	ERDF (OP LVT)
LVT (Portugal)	Construction of an organic recovery plant (Valorsul)	Anaerobic digestion plant	Cohesion Fund
Norte (Portugal)	Multi-municipal system for the recovery and treatment of municipal solid waste (Vale do Douro Sul, Residouro)	Sorting plant	ERDF (OP Norte)
Norte (Portugal)	Multi-municipal system for the recovery and treatment of municipal solid waste (Vale do Douro Sul, Residouro)	Landfill	ERDF (OP Norte)
Norte (Portugal)	Environmental rehabilitation of the plant for the treatment of municipal solid waste (Vale do Ave)	Composting plant	ERDF (OP Norte)

Region (Member State)	Project title	Type of waste management infrastructure	EU fund
Norte (Portugal)	Integrated management of solid waste by LIPOR — organic recovery plant	Composting plant	Cohesion Fund
Norte (Portugal)	Multi-municipal system for the recovery and treatment of municipal solid waste (Baixo Tâmega)	Sorting plant	Cohesion Fund
Norte (Portugal)	Multi-municipal system for the recovery and treatment of municipal solid waste (Baixo Tâmega)	Landfill	Cohesion Fund
Nord-Est (Romania)	Piatra Neamt waste management programme	Composting plant	Cohesion Fund (ex-ISPA)
Nord-Est (Romania)	Piatra Neamt waste management programme	Sorting plant	Cohesion Fund (ex-ISPA)
Nord-Est (Romania)	Piatra Neamt waste management programme	Landfill	Cohesion Fund (ex-ISPA)
Sud-Vest (Romania)	Integrated municipal waste management system (Râmnicu Vâlcea)	Composting plant	Cohesion Fund (ex-ISPA)
Sud-Vest (Romania)	Integrated municipal waste management system (Râmnicu Vâlcea)	Landfill	Cohesion Fund (ex-ISPA)
Complementary ERDF operational programmes reviewed for which no infrastructures were audited			
Catalonia (Spain)	Single programming document Cataluña 2000–06		
Andalucía (Spain)	Operational programme Andalucía 2000–06		
Castilla-La Mancha (Spain)	Operational programme Castilla-La Mancha 2000–06		
Comunidad de Madrid (Spain)	Single programming document Comunidad de Madrid 2000–06		
Madeira (Portugal)	Operational programme Madeira 2000–06		
Sicilia (Italy)	Operational programme Sicilia 2000–06		

Source: European Court of Auditors.

RATES OF ASSISTANCE GRANTED COMPARED TO RATES THAT TAKE INTO ACCOUNT THE LEVEL OF COVERAGE OF OPERATING COSTS BY HOUSEHOLDS

Infrastructure	Total cost coverage by tariffs	Operating cost coverage by tariffs	Rate assistance applied	Proposed rates of assistance to be applied ³	Year of reference
ES-CA1	40 %	42 %	80 %	50 %	2010
ES-CA2	56 %	59 %	80 %	50 %	2010
ES-CA3	76 %	80 %	80 %	50 %	2010
IT-SA1	78 %	84 %	50 %	40 %	2009
IT-SA2	77 %	83 %	50 %	40 %	2009
IT-SA3	78 %	84 %	50 %	40 %	2009
IT-PU1	96 %	100 %	50 %	40 %	2009
IT-PU2 and 3	85 %	91 %	50 %	40 %	2009
IT-PU4	NA. The project was not in operation at the time of the audit visit.				
ES-AN1	NA. The operating and depreciation costs of the sorting plant are covered by companies having introduced packaging into the market.				
ES-AN2 and 3	83 %	88 %	80 %	50 %	2009
PT-LVT1	55 %	66 %	75 %	50 %	2010
PT-LVT2 ¹	0 %	0 %	50 %	50 %	2010
PT-N01 and 2	27 %	33 %	75 %	50 %	2010
PT-N03	73 %	88 %	75 %	50 %	2010
PT-N04	68 %	82 %	50 %	50 %	2010
PT-N05 and 6	24 %	29 %	85 %	50 %	2010
RO-PN1, 2 and 3	No info	73 %	75 %	50 %	2010
RO-RV1 and 2	No info	89 % ²	75 %	50 %	2010

¹ Information was only made available to the Court for two of the three municipalities for which it was requested.

² Not including the operating costs of the landfill and of composting plant.

³ Based on 'Technical paper 1 — Application of the polluter pays principle — Differentiating the rates of Community assistance for Structural Funds, Cohesion Fund and ISPA infrastructure operations' (6.12.1999). This technical paper proposes rates of assistance to be applied.

Source: European Court of Auditors based on data available at Commission and Member State levels.

REPLY OF THE COMMISSION

EXECUTIVE SUMMARY

III.

In the framework of projects co-financed by the cohesion policy, the Commission was not empowered to check the appropriateness and assess on substance the waste management plans or to impose the inclusion of supporting measures.

At the moment of the projects' approval and their implementation, separate collection was not an EU legal requirement.

The Commission has proposed *ex ante* conditionalities for the Cohesion Policy 2014–20.

III. (a)

The Commission acknowledges that the issues concerning the concept of treatment and closure and after-care costs are systemic issues in need of a global approach, on which case-law will further develop and technical discussions will take place, respectively.

In accordance with the 'Roadmap to a resource efficient Europe' (COM(2011) 571 final), the Commission will develop policy aiming at minimising the landfilling of waste while increasing the recycling rates. To this end, the implementation of economic instruments, e.g. landfill tax, 'pay as you throw' schemes related to waste separate collection, are regarded as crucial for success.

III. (b)

Improvements in the collection and evaluation of data on waste have been made in the years after the period audited by the Court.

Concerning municipal waste, the Commission has established since 1995 a system for the collection and compilation of data at national level on a voluntary basis and applies the quality framework for official statistics. The Commission has put in place a voluntary system for the production of regional level statistics since 2010.

During the period observed by the Court (2000–09) the per capita generation of municipal waste increased in 16 Member States, decreased in nine and remained unchanged in two.

REPLY OF THE COMMISSION

III. (c)

As regards waste management, one criterion in the *ex ante* waste conditionality proposed for 2014–20 requires the Member States to provide waste management plans compliant with the requirements of the 2008 waste framework directive so that Member States will no longer be able to provide incomplete reports and at the same time benefit from structural measures.

IV. (a)

An *ex ante* conditionality linked to the provisions of the waste framework directive is included in the Commission's proposed common provisions regulation¹ for the 2014–20 programming period.

IV. (b)

The Commission supports this recommendation and encourages Member States to establish public databases on waste management. A framework is provided by the Commission's proposal for a shared environmental information system (SEIS)².

IV. (c)

The separate collection will become a legal obligation for a number of waste streams (except for biodegradable waste) as of 2015.

In accordance with the 'Roadmap to a resource efficient Europe' (COM(2011) 571 final), the Commission will develop policy aiming at minimising the landfilling of waste while increasing the recycling rates. To this end, the implementation of economic instruments, e.g. landfill tax, 'pay as you throw' schemes, related to waste separate collection are regarded as crucial for success.

The Commission has proposed *ex ante* conditionality for the cohesion policy 2014–20. As regards waste management, one criterion of the waste conditionality requires the Member States to establish waste prevention plans as required by Article 29 of the 2008 waste framework directive.

For revenue-generating projects, the Commission currently applies the 'polluter pays principle' and reduced rates of assistance, using a comprehensive approach which takes into account affordability and effectiveness.

IV. (d)

The current waste framework directive (2008/98/EC) sets out legally binding requirements relating to the waste management hierarchy, separate collection, recycling targets, waste management plans and waste prevention programmes.

In June 2012, the Commission published guidelines on the key requirements of this directive³.

The planned 2014 revision of the waste framework directive should focus on waste prevention objectives for 2020 as well as the revision of the 2020 recycling targets. This will be linked with the revision of the landfill directive biodegradable diversion targets in order to avoid the landfilling of recyclable waste, also required for 2014.

The development of end-of-waste criteria for biodegradable waste is being considered by the Commission. This should support the production of quality approved compost.

¹ COM (2011) 615 final/2 of 6 October 2011, as amended on 14 March 2012 and 11 September 2012.

² <http://ec.europa.eu/environment/seis/>

³ http://ec.europa.eu/environment/waste/framework/pdf/guidance_doc.pdf

REPLY OF THE COMMISSION

INTRODUCTION

7.

Compared to the 1975 waste framework directive, the 2008 waste framework directive **strengthens** the waste hierarchy and the 'polluter pays principle'.

Common Commission reply to Observations 10 and 11

There are two main types of EU funding: funds which are managed centrally and directly by the European Commission, e.g. for research; and funds whose management is shared between the EU and the Member States, e.g. the Structural Funds and the Cohesion Fund. For funds in 'shared management', Member States implement programmes at national level. Member States then allocate these funds to end recipients (companies, farmers, municipalities, etc.). The Member State has primary responsibility for setting up a management and control system which complies with the requirements of the regulations, ensuring that this system functions effectively and also preventing, detecting and correcting irregularities. The Commission plays a supervisory role by satisfying itself that the arrangements governing the management and control system are compliant. It does so by verifying the effective functioning of this system and making financial corrections, where necessary.

Member States have then the primary responsibility for the selection, implementation and monitoring of ERDF projects.

AUDIT SCOPE AND APPROACH

17.

One of the sampled countries, Romania, was not a Member of the EU in the 2000–06 period but only from 2007 onwards. The ISPA regulation was applicable for pre-accession countries.

OBSERVATIONS

Common reply to Observations 20 and 21

Among the 26 sampled projects, all were co-funded under the 2000–06 period; five were co-funded by ISPA, 10 by the Cohesion Fund and the remaining by the ERDF, but not as major projects; hence they were not subject to an *ex ante* assessment by the Commission services. For these projects, according to shared management principles, the national managing authorities are responsible for appraising grant applications, deciding the amount of the grant and following-up project implementation.

24.

The over-utilisation of some sorting plants is sometimes also associated with significant and unexpected changes in economic activity and people's behaviour in terms of waste sorting that could not be forecast beforehand.

25. (a)

As explained in the reply to Observation 24, it is difficult to forecast the composition of collected waste. This in turn has consequences for performance in terms of production of compost. Nonetheless, the performance should be assessed on a global basis: for instance, for one project, the Member State stated that the greater biodegradability of waste led to a reduction of the quantity of compost produced but resulted in the production of biogas.

25. (b)

The Commission refers to its reply to Observation 24.

For ISPA/Cohesion Fund projects, the fulfilment of project objectives is checked against objectives (set in the Commission decision) by the Commission services during the project closure procedures.

The Commission services take note of the Court's observation and will consider it during the project closure procedure when verifying the information provided by the Member State.

REPLY OF THE COMMISSION

25. (c)

There are no EU legal obligations for Member States to set up compost standards as these were not specified by the legislator.

There are no EU harmonised standards for compost. Please refer to the 2010 communication from the Commission on future steps in bio-waste management in the European Union (COM(2010) 235 final) at <http://ec.europa.eu/environment/waste/compost/developments.htm>. More specifically, end-of-waste criteria for biodegradable waste are being considered by the Commission.⁴

25. (d)

For the two projects operating below their capacity, the Commission services take note of the Court's observation and will consider it during project closure procedure when verifying the information provided by the Member State.

The over-utilisation is extremely limited in one of the cases referred to. Furthermore, the Member State informed the Commission that current plans provide for the installation of a new composting plant to meet the needs of the region. For the second case, in spite of the increase of the capacity of the plant, there is a higher production of waste.

26.

The sustainability of the action co-financed by the EU is a crucial principle of the EU assistance. Member States have to guarantee that the projects are operable, functional and comply with EU policies:

- In the context of closure of ERDF programmes, Member States are required to submit to the Commission, together with the closure documents, a list of unfinished and non-operational projects and have up to 2 years (31 December 2012) to submit information about completion of these projects. If, by then, projects are still not completed then the Commission will ensure that the Member State recover the funds concerned or will apply financial corrections.
- In the case of the Cohesion Fund, the closure process requires reporting on the investment in the final report which includes an initial assessment whether the results expected are likely to be achieved. For a period of 3 years after the final payment by the Commission, the Member State authorities responsible have to provide all supporting documents regarding expenditure and checks on the project.

The project located in Puglia is in the list of unfinished/non-operational projects. Moreover, following a Commission request for information, the managing authority of the operational programme for Puglia 2000–06 informed the Commission services on 7 March 2012 that the contract for the operation of the project IT-PU4 had in the meantime been awarded and entered into force on 20 July 2012.

27. (b)

According to the Member State, the objectives of the project did not include the production of compost but of stabilised waste or off-specification compost (waste). In view of the structure of the plant, the project could not be authorised to produce quality compost (secondary raw material) on an industrial scale but only in an experimental capacity as was the case at the time of the Court's on-the-spot inspection. Consequently, the waste produced is not expected to satisfy Italian legal requirements for fertilisers.

⁴ This communication concludes that 'standards for compost and digestate should be established to enable their free circulation on the internal market and to allow using them without further monitoring and control of the soils on which they are used' (p. 7). The 'end of waste' procedure under the waste framework directive could be the most efficient way of setting such standards. The Commission is starting work to assess the technical basis for a possible proposal. Standards for compost are being elaborated in the context of end-of-waste criteria (technical drafts being prepared to be adopted, if appropriate, in the course of 2013). For more information on recent developments please see <http://susproc.jrc.ec.europa.eu/activities/waste/index.html>.

REPLY OF THE COMMISSION

Box 4 — First paragraph

The Commission services take note of the Court's observation for the four plants, and will consider it during closure procedures when verifying the information provided by the Member States (see also reply to Observation 26).

Box 4 — Third paragraph

Regarding the sorting and composing plant of Linares in Spain, the Member State indicated as a reply to the Court observation that the low accomplishments of the targets was *inter alia* due to technical issues caused by hydrological conditions. The composting process had been stopped in order to build some works to control the hydrological conditions. This fact has had also an impact on the quantity of waste that had to be landfilled. According to the Member State, works were undertaken to address these issues.

28.

The landfill biodegradable diversion targets are to be met at national level. The first target was fixed from July 2006. The Commission is currently investigating the implementation of the current landfill diversion targets and EU Pilot cases⁵ have been launched accordingly.

28. (a)

For one landfill, without pre-treatment system, only 31% of the waste deposited contained organic matter. Moreover, the ratio of population who had no access to separate collection of organic waste has decreased from 69 % to 35 % in 2010. So the content of organic waste landfilled has been decreasing.

In any case, the Commission services take note of the Court's observation and will consider it during the project's closure procedure when verifying the information provided by the Member State (see also reply to Observation 26).

28. (b)

For one landfill site, according to information from the Member State, the performance had been *inter alia* affected by hydrological conditions but works were undertaken to address these issues.

For the other facility, the Commission understands from the Member State that the significant quantities of undifferentiated waste coming from outside the area affect the performance.

29.

The Commission refers to its reply to Observation 26 for the plant which was not yet in operation at the time of the audit.

Common reply to Observation 30 and Box 5

Note is taken of these findings. To the extent the relevant provisions of the landfill directive on landfill gas control have been violated, the Commission will investigate the matter with the Member States concerned through the EU Pilot scheme.

For the Italian project mentioned in Box 5, the Commission services take note of the Court's observation and will consider it during the project's closure procedure when verifying the information provided by the Member State (see also reply to Observation 26).

With regard to the Romanian project mentioned in Box 5, the Commission notes that when assessing the documents submitted by the Romanian authorities in order to fulfil the specific conditions laid down in Article 8 of the Financing Memorandum, the environmental permit issued for the ISPA project by the national competent authority provided for 'installations for collection and flare of landfill gas' for the new landfill as well as for a monitoring programme on the 'quantity and quality of the landfill gas on the representative sections of the landfill'.

⁵ The EU Pilot is a system for the exchange of information between the Commission and Member States aiming to find solutions to potential breaches of EU law without the need to start infringement proceedings.

REPLY OF THE COMMISSION

Common reply to Observations 31 and 32

The landfill directive does not provide for quantified limits for odour emissions to be respected, but it provides a general requirement⁶ whereby landfill operators are requested to minimise nuisances such as odours. For one project, complementary equipment (several fans and a biological filter) was added to avoid odour problems, according to the relevant permit at national level.

The Commission services take note of the Court's observation and will consider it during project closure procedure when verifying the information provided by the Member State (see also reply to Observation 26).

Common reply to Observations 33 and 34

The Commission acknowledges that the issue concerning the closure and after-care costs is a systemic problem, in need of a global approach.

The Commission will open discussions with Member States at technical level.

In the framework of cohesion policy, the 2007–13 application form for major projects required applicants to demonstrate that operating and maintenance costs including replacement costs will be covered over a given reference period to ensure sustainability of the project. Residual value which can be defined as the virtual liquidation value must also be considered in the financial analysis of major projects.

The Commission services take note of the Court's observation and will consider it during the project closure procedure when verifying the information provided by the Member State.

Common reply to Observations 37 and 38

There is no legal reporting obligation at regional level: directives and their requirements, including targets, are addressed to the Member States.

Member States have to report on progress on the achievement of the recycling and recovery targets for municipal waste under the 2008 waste framework directive at national level; reporting has started in 2012.

Nevertheless, the Commission has put in place the collection of regional municipal waste statistics at EU level as a new activity in 2010. The Commission applies the quality framework as established for the production of annual municipal waste statistics, which are being produced since 1995.

The data collections on municipal waste are provided by Member States on a voluntary basis in the frame of the Commission's annual statistical work programme.

Member States should report regularly on the achievement of the targets set in waste stream-specific EU directives.

The Commission is continuously working on the improvement of data quality by producing guidance documents, training material and through the organisation of workshops with data producers from Member States.

Waste statistics and derived indicators are published on the Commission's website (<http://ec.europa.eu/eurostat/waste>).

⁶ In its Annex I, point 5

REPLY OF THE COMMISSION

Common reply to Observations 40 and 41

The EU legislation applicable during the auditing period contains no legal requirement on separate collection. The 2008 waste framework directive requires Member States to set up separate collection for at least paper, glass, metal and plastic by 2015. The legally binding waste hierarchy positions landfilling at the bottom of the waste management treatment options. In line with the 'Roadmap to a resource efficient Europe' (COM(2011) 571 final), by 2020 landfilling should be minimised to non-reusable and non-recyclable waste. Finally, the landfill targets are established at national level and not at regional level.

42.

As explained in the Court's footnote, the relevant targets set in the EU waste legislation are national based.

43. (b)

The Commission has initiated infringement proceedings, inter alia, against the four Member States subject to the audit for the existence of illegal landfills in their territory.

44.

The Commission initiates infringement proceedings whenever such illegal practices are established.

44. (a)

At the time the projects were implemented, there was no EU legal requirement whereby biodegradable waste had to be collected separately.

Article 22 of the 2008 waste framework directive, encourages Member States to practice the separate collection of biowaste. However it is not a legal obligation.

47.

Publicity measures, including awareness campaigns promoted directly by the operator of the system are compulsory for all projects co-financed by the Cohesion Fund or ERDF. For the 2000–06 Cohesion Fund projects this was verified at closure via the final reports.

48. (b)

It is the responsibility of the national/regional/local competent authorities to ensure that information campaigns are carried out to raise the awareness of the population on the waste management practices and infrastructure available. However, it is recognised that sustained efforts are needed in order to ensure full participation of the population to ensure the success of the waste collection and overall waste management.

Furthermore, Romania obtained a 4-year derogation for the biodegradable diversion targets and therefore has only to be compliant by 2020.

50.

The Commission refers to its reply to Observation 44 (a).

52.

The Commission refers to its reply to Observation 44 (a).

In EU waste legislation there was no legal requirement whereby compost standards had to be adopted.

Furthermore, end-of-waste criteria for biodegradable waste are being considered by the Commission.

Common reply to Observation 53 (a) and (b)

The Commission concurs that the use of economic instruments will help Member States in the implementation of the 'polluter pays principle' enshrined in the Treaty on the Functioning of the European Union⁷.

These economic instruments will help Member States to achieve the targets set out in the the 'Roadmap to a resource efficient Europe' (COM(2011) 571 final). The experience of the best performing Member States has shown that appropriate economic instruments are essential to improve their waste management record. Their waste management recipe is simple: make the first steps of the waste hierarchy more economically attractive for operators and more rewarding for citizens e.g. 'pay as you throw' schemes.

⁷ A recent study (http://ec.europa.eu/environment/waste/pdf/final_report_10042012.pdf) carried out on behalf of the Commission suggests that economic instruments (e.g. landfill taxes, extended producer responsibility and 'pay as you throw' schemes) are instrumental and efficient in achieving recycling targets.

REPLY OF THE COMMISSION

55.

According to the regulatory framework on Structural Funds, there was no obligation on Member States to provide information on such instruments.

During the 2000–06 and 2007–13, no *ex ante* conditionality mechanism (as currently envisaged for 2014–20) as an enforceable legal instrument was built into cohesion policy funding by the legislator, allowing rejecting a project on grounds of insufficient supporting measures such as financial measures.

55. (a)

In particular, the 1975 waste framework directive did not foresee any requirements on the use of economic instruments. However, the 2008 waste framework directive states that Member States **may** describe the use of economic instruments in their waste management plans.

56.

There was no specific legal provision in the cohesion policy regulations linking EU funding with provisions on implementation reports in EU waste legislation.

The Commission has proposed *ex ante* conditionalities for the cohesion policy 2014–20. As regards waste management, one criterion in the waste conditionality requires the Member States to provide waste management plans compliant with the requirements of the 2008 waste framework directive so that Member States will no longer be able to provide incomplete reports and at the same time benefit from structural measures.

Common reply to Observations 57, 58 and 59

The 'polluter pays principle' is taken into consideration by the Commission for the Cohesion Fund and major projects, through the inclusion of tariffs (user charges) into the calculation of the rate of assistance.

The application of this principle needs to be seen in conjunction with the 'affordability principle'. For the revenue-generating projects, the granted rates of assistance are based on a balanced approach taking into account several elements such as the 'polluter pays principle', affordable tariffs and effectiveness as part of the analysis of wider costs and benefits, as prescribed in the 'Cost-benefit analysis' (CBA) guide published by the Commission in 2002 and updated in 2008.

The Technical Paper 1 'Application of the polluter pays principle' issued in 1999 encourages a wider application of the principle by the differentiation of rates of Community assistance, while avoiding setting lower rates of assistance for Member States who integrate the 'polluter pays principle' into co-financed operations than for Member States who do not. It only provided indicative guidance. It is stated in this technical paper that the application of this principle 'must be compatible with the goals of economic and social cohesion', that 'its development should be progressive' and that 'it should take into account the social acceptance of charging'. It is also explicitly underlined that 'it is therefore important not to see application of the polluter pays principle in isolation'. It therefore leaves room for an adaptation of the suggested rate of assistance based on the specific conditions of each project.

60.

Article 14 of the waste framework directive requests the costs of waste management to be borne by the original waste producer, to be defined at national level.

63.

Member States are requested to adopt waste prevention programmes by 12 December 2013. Furthermore, waste prevention will be addressed by the Commission in accordance with Article 9 of the waste framework directive that provides that, by the end of 2014, the Commission shall submit to the European Parliament and Council reports accompanied if appropriate by legislative proposals inter alia on waste prevention and decoupling objectives for 2020.

Common reply to Observations 64 and 65

The treatment of waste needs to reduce as far as possible negative effects of waste on the environment and human health as well as being in line with resource efficiency principles. The Commission acknowledges that the issue concerning the concept of treatment is a systemic problem in need of a global approach.

REPLY OF THE COMMISSION

CONCLUSIONS AND RECOMMENDATIONS

The Commission has initiated infringement proceedings against Italy for sending untreated waste to a landfill (not part of the Court's sample), which is at the stage of Reasoned Opinion. This infringement case could reach the Court of Justice of the European Union, in which case, the Commission would expect the Court in its ruling to clarify the meaning of 'treatment' as laid down in the landfill directive.

Should the case never reach the Court of Justice, the Commission would envisage addressing the issue at technical level with the Member States as a first stage.

Common reply to Observations 66 and 67

There are no EU legal obligations for Member States to set up compost standards as these were not specified by the legislator.

The 2010 communication from the Commission sets out the future steps on bio-waste management in the European Union (COM(2010) 235 final)⁸.

68.

The Commission acknowledges that the issue concerning the closure and after-care costs is a systemic problem, in need of a global approach. The Commission will open discussions with Member States at technical level.

69.

In the framework of projects co-financed by the cohesion policy, there was no legal obligation for the Commission to check the appropriateness and assess on substance the waste management plans or to impose the inclusion of supporting measures when assessing operational programmes.

At the moment of the projects' approval and their implementation, separate collection was not an EU legal requirement.

The Commission has proposed *ex ante* conditionalities for the Cohesion Policy 2014–20. As regards waste management, one criterion in the waste conditionality requires the Member States to provide waste management plans compliant with the requirements of the 2008 waste framework directive so that Member States will no longer be able to provide incomplete reports and at the same time benefit from structural measures.

In accordance with the 'Roadmap to a resource efficient Europe' (COM(2011) 571 final), the Commission will develop policy aiming at minimising the landfilling of waste while increasing the recycling rates. To this end, the implementation of economic instruments e.g. landfill tax, and 'pay as you throw' schemes related to waste separate collection are regarded as crucial for success.

Common reply to Observations 70 (b) and (c)

National/regional integrated approaches in the area of waste management are essential to increase performance of waste facilities.

71.

The Commission is currently investigating the implementation of the landfill diversion targets through EU Pilot cases.

72.

The Commission acknowledges that the issue concerning the setting-up of financial securities to cover closure and after-care costs is a systemic problem in need of a global approach.

The Commission will open discussions with Member States at technical level.

⁸ This communication concludes that 'standards for compost and digestate should be established to enable their free circulation on the internal market and to allow using them without further monitoring and control of the soils on which they are used' (p. 7) (<http://ec.europa.eu/environment/waste/compost/developments.htm>). The 'end of waste' procedure under the waste framework directive could be the most efficient way of setting such standards. The Commission is starting work to assess the technical basis for a possible proposal. Standards for compost are being elaborated in the context of end-of-waste criteria (technical drafts being prepared to be adopted, if appropriate, in the course of 2013). For more information on recent developments please see <http://susproc.jrc.ec.europa.eu/activities/waste/index.html>.

REPLY OF THE COMMISSION

Recommendation 1 (b)

An *ex ante* conditionality linked to the provisions of the waste framework directive is included in the Commission's proposed common provisions regulation⁹ for the 2014–20 programming period.

73.

No targets had been set at regional level.

The Commission has put in place the collection of regional municipal waste statistics at European Union level as a new activity in 2010.

The Commission applies the quality framework as established for the production of annual municipal waste statistics, which are being produced since 1995¹⁰.

74. (a)

At the time the audit was carried out the EU waste management hierarchy, strengthened by the revised waste framework directive (2008/98/EC) promoting prevention as the best waste management option, was not yet legally binding.

During the period observed by the Court (2000–09) the per capita generation of municipal waste increased in 16 Member States, decreased in nine and remained unchanged in two.

74. (b)

The EU legislation applicable during the auditing period contains no legal requirement on separate collection. The 2008 waste framework directive requires Member States to set up separate collection for at least paper, glass, metal and plastic by 2015. The legally binding waste hierarchy positions landfilling at the bottom of the waste management treatment options. In line with the 'Roadmap to a resource efficient Europe' (COM(2011) 571 final), by 2020 landfilling should be minimised to non-reusable and non-recyclable waste. Finally, the landfill targets are established at national level and not at regional level.

74. (c)

The Commission initiates infringement proceedings whenever such illegal practices are established.

Recommendation 2 (a)

The Commission supports this recommendation and encourages Member States to establish public databases on waste management. A framework is provided by the Commission proposal for a shared environmental information system (SEIS)¹¹. Waste statistics and derived indicators are published on the Commission website¹².

Recommendation 2 (b)

Concerning municipal waste, the Commission has established since 1995 a system for the collection and compilation of data at national level on a voluntary basis and applies the quality framework for official statistics. The Commission has put in place a voluntary system for the production of regional level statistics since 2010.

Recommendation 2 (c)

The Commission has proposed *ex ante* conditionality for the cohesion policy 2014–20. As regards waste management, one criterion in the waste conditionality requires the Member States to take the necessary measures to achieve the 2020 targets as required by the waste framework directive.

75.

The Commission agrees with the Court that supporting measures help in maximising the effectiveness of EU funding. During the 2000–06 and 2007–13 periods, no *ex ante* conditionality mechanism as an enforceable legal instrument was built into cohesion policy funding allowing requesting detailed information on these measures or rejecting a project on grounds of insufficient supporting measures.

76.

There was no legal obligation for the 2000–06 period for the Commission to impose the inclusion of supporting measures.

⁹ COM (2011) 615 final/2 of 6 October 2011, as amended on 14 March 2012 and 11 September 2012

¹⁰ <http://ec.europa.eu/eurostat/waste>

¹¹ <http://ec.europa.eu/environment/seis/>

¹² <http://ec.europa.eu/eurostat/waste>

REPLY OF THE COMMISSION

76. (b)

The landfill directive biodegradable diversion targets apply at national level and not at the regional one.

76. (c)

There are no legal obligations at EU level to set compost standards at national level.

Common reply to Observations 76 (d) and (e)

The Commission concurs that the use of economic instruments will help Member States in the implementation of the 'polluter pays principle' enshrined in the Treaty on the Functioning of the European Union¹³.

The 'polluter pays principle' is being applied in conjunction with the 'affordability principle'. The co-financing rates granted are based on a balanced approach taking into consideration both principles, which can lead to differentiated rates of assistance.

Recommendation 3 (a) (ii)

The separate collection will become a legal obligation for a number of waste streams (except for biodegradable waste) as of 2015.

Recommendation 3 (a) (iii)

In accordance with the 'Roadmap to a resource efficient Europe' (COM(2011) 571 final), the Commission will develop policy aiming at minimising the landfilling of waste while increasing the recycling rates. To this end, the implementation of economic instruments, e.g. landfill tax and 'pay as you throw' schemes related to waste separate collection, are regarded as crucial for success.

Recommendation 3 (b) (i)

The Commission has proposed *ex ante* conditionality for the cohesion policy 2014–20. As regards waste management, one criterion of the waste conditionality requires the Member States to establish waste prevention plans as required by Article 29 of the 2008 waste framework directive.

Recommendation 3 (b) (ii)

The Commission currently applies the 'polluter pays principle' and reduced rates of assistance, using a comprehensive approach which takes into account affordability and effectiveness.

77. (a)

No waste prevention targets are set in EU waste legislation. By 12 December 2013 Member States shall draw up waste prevention programmes containing waste prevention measures examples of which are provided in Annex IV to the 2008 waste framework directive.

77. (c)

There are no EU legal obligations for Member States to set up compost standards as these were not specified by the legislator¹⁴.

Furthermore, end-of-waste criteria for biodegradable waste are being considered by the Commission.

77. (d)

The Commission acknowledges that the issue concerning the setting-up of financial securities to cover closure and after-care costs is a systemic problem in need of a global approach.

The Commission will open discussions with Member States at technical level.

¹³ A recent study (http://ec.europa.eu/environment/waste/pdf/final_report_10042012.pdf) carried out on behalf of the Commission suggests that economic instruments (e.g. landfill taxes; extended producer responsibility; and 'pay as you throw' schemes) are instrumental and efficient in achieving recycling targets.

¹⁴ Please refer to the 2010 communication from the Commission on future steps in bio-waste management in the European Union (COM(2010) 235 final) (<http://ec.europa.eu/environment/waste/compost/developments.htm>). The Commission has produced guidelines on applying life-cycle thinking to management of biowaste (<http://lct.jrc.ec.europa.eu/pdf-directory/D4A-Guidance-on-LCT-LCA-applied-to-BIO-WASTE-Management-Final-ONLINE.pdf>).

REPLY OF THE COMMISSION

Recommendation 4 (a)

The Commission shall submit by the end of 2014 to the European Parliament and Council¹⁵ reports accompanied if appropriate by legislative proposals inter alia on waste prevention and decoupling objectives for 2020. Waste prevention targets were proposed by the Commission for the 2008 revision of the waste framework directive; however no agreement was reached in the co-decision procedure.

Recommendation 4 (b)

The Commission has initiated infringement proceedings against Italy for sending untreated waste to a landfill (not part of the Court's sample), which is at the stage of Reasoned Opinion. This infringement case could reach the Court of Justice of the European Union, in which case, the Commission would expect the Court in its ruling to clarify the meaning of 'treatment' as laid down in the landfill directive.

Should the case never reach the Court, the Commission would envisage addressing the issue at technical level with the Member States as a first stage.

Recommendation 4 (c)

The development of end-of-waste criteria for biodegradable waste is being considered by the Commission.

Recommendation 4 (d)

The Commission acknowledges that the issue concerning the setting-up of financial securities to cover closure and after-care costs is a systemic problem in need of a global approach.

The Commission will open discussions with Member States at technical level.

¹⁵ In accordance with Article 9 of the waste framework directive.

European Court of Auditors

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MUNICIPAL WASTE IF NOT COLLECTED, TREATED AND DISPOSED OF PROPERLY CAN CAUSE NEGATIVE ENVIRONMENTAL IMPACTS. AS A RESULT, THE EU HAS INTRODUCED COMMON STANDARDS AND TARGETS IN THE FORM OF DIRECTIVES AND CO-FINANCES WASTE MANAGEMENT INFRASTRUCTURES IN SPECIFIC REGIONS. IN THIS REPORT THE COURT EXAMINED WHETHER THESE INVESTMENTS IN INFRASTRUCTURE HAVE BEEN EFFECTIVE AND HAVE HELPED TO ACHIEVE EU WASTE POLICY OBJECTIVES.



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