

ANNEX 1: MEMBER STATE FACTSHEETS

EXAMPLE TEMPLATE

ECONOMIC INSTRUMENTS IN (MEMBER STATE)

INTRODUCTION

The aim of this template is to collate relatively **limited** summary data on the use of economic instruments (EIs) for waste management in each of the 27 MS. The primary goal is to develop an overview 'inventory' of EIs for waste across the EU. The information gathered for each country will be compared to the waste management performance of the MS to identify up to 10 MS (or a series of EIs) for more detailed investigation and up to 5 MS for in-depth case studies). The questions are oriented towards extracting useful information for this study.

No more than **1.5 days** should be spent for each MS.

Versions of this template will also be sent to EU associations (for waste management and for specific waste materials) at the start of the study; this should provide useful information on EI use. Responses from the associations will be circulated to the consortium as soon as they are received.

ECONOMIC INSTRUMENTS (EIs) TO BE ADDRESSED

1. Fees for waste disposal and treatment:

a) **Landfill taxes, fees** and bans (i.e. intended purely to divert from landfill). (NB There are some 'bans' which apply to all MS as a consequence of Article 5(3) the Landfill Directive: liquid waste; explosive, corrosive, oxidising, highly flammable or flammable waste; infectious hospital and other clinical wastes; tyres; and any other waste which does not fulfil the acceptance criteria in accordance with Annex II). Bans covering these materials are not of interest to this study); and

b) **Incineration taxes, fees** and bans (i.e. intended to move waste away from disposal);

2. **Pay-as-you-throw schemes** – these may be mainly at the local/regional level;

3. **Producer responsibility systems** for packaging, EEE, ELV, batteries and paper/cardboard; and

4. **Other EIs** – Subsidies for energy from waste, and other interesting EIs, should be included in this section. **NB** This section should **not** be the focus of effort; include only if information on other interesting EIs is found during the scoping exercise, or is easy to find, or the researcher already knows about other EIs.

Additional guidance, e.g. defining each type of EI, and explaining the sort of information to be gathered, is provided as appropriate in the remainder of the template.

1.1 Waste Policy in the MS (for AT, BE, DK, EE, FR, DE, NL, SI and UK only)

Please address the following questions:

1. What are the key pieces of **waste legislation** in the MS? *(please provide titles/references and links, and a very brief summary of the main objectives and elements of the legislation)*
2. Does the MS have any **mandatory targets for recycling** of waste streams (and mechanisms to enforce them)? *(please list any mandatory targets additional to, or higher than, those specified in EU Directives, associated deadlines, and outline information on any enforcement mechanisms)*
3. Are there national (or if relevant regional) **waste management plans** in place? *(please provide titles/references and links, and a very brief summary of the main objectives and elements of the plan)*

Waste Policy	
Key Waste Legislation	
Act/Topic	Main features
Mandatory targets for recycling	
Waste management plans	
Reference/source	

1.2 Waste management performance in the MS (for AT, BE, DK, EE, FR, DE, NL, SI and UK only)

Please provide headline data on the following (in addition to that provided in the spreadsheet of Eurostat data circulated by IEEP):

- Waste generation;
- Recycling rates (overall and for individual materials); and
- Disposal rates (landfill and incineration).

The focus should be on municipal waste (where the most complete data sets are available), but where possible data on construction & demolition waste should be included.

Where regional/local EIs have been identified (in particular regional variation of taxes and local pay-as-you-throw schemes), please try to find data at the regional/local level.

Please provide links to any data sources used.

1.3 Fees for Waste Disposal and Treatment

The following two sections should provide a summary of **costs** in the MS for waste disposal and treatment. We consider **fees** to be the amount charged before any tax is applied, and **taxes** as the payments made to (typically) central or regional government. Both landfill and incineration are included.

Landfill or incineration **bans** should be **mentioned briefly** to provide context, but should **not** be the main focus of the research.

1.3.1 landfill fees (and Bans)

This section should highlight the part of the costs of landfill accounted for by:

- a) **taxes/levies** (if any), set for a given geographical area (e.g. national or regional); and
- b) **fees** charged for the disposal of waste, which fluctuate with market conditions and vary from facility to facility. These are essentially the costs of disposal excluding any landfill tax.

Information on a) should be fairly straightforward to obtain (for some overviews, see Annex 52 in <http://www.environ.ie/en/Publications/Environment/Waste/WasteManagement/FileDownload,21598,en.pdf>) NB this information should not be considered as definitive, and should be verified where possible).

To the best of our knowledge, taxes vary by region only in Italy and Belgium. Catalunya (Spain) has a specific system where municipalities pay a levy which is then refunded back to them. Scotland (UK) is currently considering a Scotland-specific tax. If there is regional variation in taxes, please make this clear through appropriate adjustments to the table below.

For b), because fees vary across MS, please try to provide evidence for the **range** of landfill fees which apply. Since different fees apply for different types of waste, please focus on the fees which apply for **residual municipal waste** (i.e. from municipalities or from commercial properties).

In countries where landfilling is restricted through bans, then only limited quantities of such waste may be landfilled. Where this is the case, please note the type of waste to which the fee refers (e.g. in Austria and Germany there may be fees applied specifically to waste which has been stabilised through biological treatment).

NB Any landfill bans should be mentioned **briefly** (i.e. list which waste materials may not be landfilled).

(Appendix 2 in

http://www.wrap.org.uk/downloads/Landfill_Bans_Feasibility_Research_Appendices_Final.6127257c.8866.pdf summarises countries with bans and describes bans in place – this information should not be considered as definitive, and should be verified where possible.)

Please copy the rows of the table below as required for each EI identified.

Fee for the remediation of contaminated sites put on waste to be landfilled (Altlastenbeitrag)
Date of introduction
Principle (one/two lines describing the instrument)
Current levels of tax, and tax structure
Details of any exemptions
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)
How has the tax changed over time?
Extent of geographical coverage
Plans for future levels of the tax
Problems encountered/ solutions found/ lessons learned from implementation
Perceived costs (financial and administrative) of the instrument
Reference/source
Waste disposal fees (Gate fees)
Range of fees for landfilling (excluding landfill tax)
Source of information
Do sources give any explanation for key factors explaining variation?
Problems encountered/ solutions found/ lessons learned from implementation
Perceived costs (financial and administrative) of the instrument

Information on Landfill Bans
Wastes to which the ban is applied
Date of introduction
Means of implementation
Plans for future bans (if any)
Problems encountered/ solutions found/ lessons learned from implementation
Perceived costs (financial and administrative) of the instrument
Source of information

1.3.2 Incineration fees (and Bans)

Incineration fees are the next step up from landfill fees; they attempt to move waste further up the hierarchy, away from disposal.

NB Again, as for landfill, any incineration bans should be mentioned **briefly** (i.e. list which waste materials).

Please copy the rows of the table below as required for each EI identified.

Incineration fees
Date of introduction
Principle (one/two lines describing the instrument)
Current levels of tax, and tax structure
Details of any exemptions
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))
How has the tax changed over time?
Extent of geographical coverage
Plans for future levels of the tax
Problems encountered/ solutions found/ lessons learned from implementation
Perceived costs (financial and administrative) of the instrument
Reference/source
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)
Range of fees for incineration (excluding incineration tax)
Source of information
Do sources give any explanation for key factors explaining variation?
Problems encountered/ solutions found/ lessons learned from implementation
Perceived costs (financial and administrative) of the instrument

Information on incineration Bans
Wastes to which the ban is applied
Date of introduction
Means of implementation
Plans for future bans (if any)
Problems encountered/ solutions found/ lessons learned from implementation
Perceived costs (financial and administrative) of the instrument

1.4 Pay-as-you-throw schemes

This section should provide a summary of **pay-as-you-throw (PAYT) schemes** in place in the MS, i.e. charges placed on the waste producer. In most cases these schemes will apply to municipal waste from households, and will be organised at the local or regional level. The different types of scheme to consider are:

- a) **Bin volume-based schemes:** under these schemes households are typically asked at the beginning of a particular year to say which size bin they would like to use. The charge is related to the size of bin;
- b) **Sack-based schemes:** these are also essentially volume-based schemes. However, since the space available for refuse is not 'fixed' there is a stronger incentive to reduce waste and recycle more;
- c) **Frequency-based schemes:** these schemes are based upon the frequency of service provided to the household. Two possibilities exist: 1. the household subscribes for a particular service frequency (relatively rare); or 2. tags or electronic chips are used to record when bins are emptied;
- d) **Weight-based schemes:** in these schemes, bins are usually equipped with a transponder which is read by software on the collection vehicle as the bin is loaded. The bin is weighed when it is loaded on the vehicle.

Some schemes will combine two or more elements (e.g. households choose the bin size, pay for the frequency of collection and also pay for the weight of the waste in the bin).

The emphasis of PAYT schemes tends to be on the charges levied for door-to-door collections of refuse (residual waste). However, the overall waste management system needs to be considered as it is now common to see charges levied on biowaste containers and sometimes on recycling containers/sacks. Please indicate whether there are variable charges for different types of waste, e.g. mixed municipal waste and recyclables.

Please focus on indicating the **variation between schemes**, and also the **extent of coverage** of the schemes (e.g. % of population, territory or households). A small number of specific examples (maximum 4) can be included to illustrate the types of schemes in use.

NB Please focus on the collection of 'normal' household waste. Many countries require households to pay for 'bulky waste' or 'special collections', but the focus here is **not** on such systems.

Sources of information include:

<http://www.wasteawareness.org/mediastore/FILES/10529.pdf> (A little outdated, but Section 3 describes a number of countries and provides an indication of which countries have a 'stronger tradition' of PAYT than others. The study also has some case studies, but again the information on charge levels is quite old.)

<http://www.defra.gov.uk/environment/waste/strategy/incentives/documents/wasteincentives-research-0507.pdf> (This includes a review of a lot of the literature, but not on a 'country by country' basis.)

Please copy the rows of the table below as required for each EI identified.

Overview of PAYT schemes in (Member State)

What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .
Problems encountered/ solutions found/ lessons learned from implementation
Perceived costs (financial and administrative) of the instrument
Reference/source
Location of scheme (municipality where it is used)
Nature of scheme
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?
Problems encountered/ solutions found/ lessons learned from implementation
Perceived costs (financial and administrative) of the instrument
Reference/source

1.5 Producer responsibility systems

This section should provide a summary of **producer responsibility systems** in place in the MS for particular waste streams. Please include systems relating to the following waste streams: packaging, electrical and electronic equipment (EEE), end-of-life vehicles (ELV), batteries, and paper/cardboard. NB Other waste streams should **not** be the focus of study, but may be included if the researcher has time.

The main focus should be on schemes relating to **household waste**; some countries (e.g. Belgium) have separate schemes for e.g. packaging collection from household and commercial sources but non-household sources should not be the focus of study.

Please try to distinguish between traditional 'take-back' systems (mainly those required by the EU recycling Directives) and 'extra-ordinary' systems e.g. deposit-refund schemes.

If there are numerous systems in place, please focus on a small number that are well-established and/or appear to be particularly successful, but try to include at least one for each of the 5 waste streams above.

Please copy the rows of the table below as required for each EI identified.

Packaging, Fees
Date of introduction
Principle (one/two lines describing the instrument)
Scope of the tax
Current levels of tax, and tax structure
Details of any exemptions
How has the tax changed over time?

Plans for future levels of the tax
Problems encountered/ solutions found/ lessons learned from implementation
Perceived costs (financial and administrative) of the instrument
Reference/source
Packaging, Deposit refunds
Deposit-refund on reusable beverage packaging and boxes
Year introduced
Key Legislation
Targets set for the scheme (including planned future targets)
Scope of scheme
Principle
Level of payment to scheme
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?
Producer-led/funded or government-led/funded?
Problems encountered/ solutions found/ lessons learned from implementation
Perceived costs (financial and administrative) of the instrument
Reference/source
Packaging, Green Dot scheme
Year introduced
Key Legislation
Scope of the scheme
Targets set for the scheme (including planned future targets)
Principle
Level of payment to scheme
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?
Producer-led/funded or government-led/funded?
Problems encountered/ solutions found/ lessons learned from implementation
Perceived costs (financial and administrative) of the instrument
Reference/source
Electrical and electronic equipment (EEE)
Year introduced
Key Legislation

Scope of the scheme
Targets set for the scheme (including planned future targets)
Principle
Level of payment to scheme
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?
Producer-led/funded or government-led/funded?
Problems encountered/ solutions found/ lessons learned from implementation
Perceived costs (financial and administrative) of the instrument
Reference/source
End-of-Life-Vehicles (ELV)
Year introduced
Key Legislation
Scope of the scheme
Targets set for the scheme (including planned future targets)
Principle
Level of payment to scheme
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?
Producer-led/funded or government-led/funded?
Problems encountered/ solutions found/ lessons learned from implementation
Perceived costs (financial and administrative) of the instrument
Reference/source
Batteries
Year introduced
Key Legislation
Scope of the scheme
Targets set for the scheme (including planned future targets)
Principle
Level of payment to scheme
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?
Producer-led/funded or government-led/funded?
Problems encountered/ solutions found/ lessons learned from implementation

Perceived costs (financial and administrative) of the instrument
Reference/source

1.6 Other interesting instruments

NB This section is **not** the focus of the study but if information on other interesting EIs is found during the scoping exercise, or is easy to find, or the researcher already knows about other EIs, they can be included here. Subsidies for energy from waste should be included in this section.

Please copy the rows of the table below as required for each EI identified.

Subsidies for energy from waste according to the Environmental Funding Act
Principle (one/two lines describing the instrument)
Structure of incentive (how is it applied and at what levels?)
Scope (waste streams)
Voluntary or mandatory/legislative?
Geographical coverage
Target group (e.g. consumer, households, business, manufacturer)
Problems encountered/ solutions found/ lessons learned from implementation
Perceived costs (financial and administrative) of the instrument
Reference/source

ECONOMIC INSTRUMENTS IN AUSTRIA

1.1 Waste Policy in the MS

Waste Policy	
Key Waste Legislation	
The main piece of waste legislation is the Act on waste management 2002 which sets the frame for waste management in Austria. More specific provisions, e.g. on certain waste streams or waste treatment methods, are dealt with in a number of waste ordinances which are based on the main waste act.	
Act/Topic	Main features
Act on waste management 2002 – Federal law of the Republic of Austria with which the act on a sustainable waste management is enacted (Abfallwirtschaftsgesetz 2002 - Bundesgesetz der Republik Österreich, mit dem ein Bundesgesetz über eine nachhaltige Abfallwirtschaft (Abfallwirtschaftsgesetz 2002 – AWG 2002) erlassen wird. BGBl. I 102/2002)	<p>The Act on waste management 2002 is the main piece of waste legislation in Austria. It is structured in 10 chapters:</p> <ol style="list-style-type: none"> 1. General provisions 2. Waste prevention and -recovery 3. General obligations for waste owners 4. Waste collection and treatment companies 5. Collection and Recovery Systems 6. Treatment facilities 7. Transfrontier shipment of waste 8. Treatment orders, supervision 9. Transition provisions 10. Final clauses <p>http://www.lebensministerium.at/article/archive/6968,</p>
Gewerbeordnung 1994 (Commerce regulation ordinance)	For certain waste management facilities, which are not covered by the Waste Management Act, the Commerce Regulation Ordinance contains rules for permissions and for the handling of accidents in facilities.
Landfill	Ordinance on Landfilling, Law Gazette II No. 39/2008 amended 178/2010
Incineration	Ordinance on Waste Incineration, Law Gazette No. II 389/2002 amended 476/2010
End-of-life Vehicles	End-of-life Vehicles Ordinance, BGBl. II Nr. 407/2002
Batteries	Battery Ordinance, BGBl. II Nr. 159/2008
Waste Electrical and Electronic Equipment	Ordinance on Waste Prevention, Collection and Treatment of Waste Electrical and Electronic Equipment, BGBl. II Nr. 121/2005 http://www.lebensministerium.at/article/archive/6969
BMW (Biodegradable municipal waste)	<p>Ordinance on the Separate Collection of Organic Wastes, Gazette II No. 68/1992</p> <p>Law on the prohibition of incinerating biogene materials outside of facilities, Gazette I No 405/1993</p> <p>Ordinance on Compost, Gazette II No 292/2001</p>

Packaging	Ordinance on the prevention and recovery of packaging waste and certain product residues and on collection and recovery schemes, Law Gazette II No 648/1996 amended 364/2006 Ordinance on the take back and deposit charging for refillable beverage packaging made of plastic, Law Gazette II No 513/1990																												
Construction and demolition waste	Ordinance on the Separation of Materials Accumulated during Construction Work, Law Gazette II 259/1991																												
Remediation of contaminated sites	Federal Act on the Financing and Implementation of the Remediation of Contaminated Sites, BGBl. Nr. 299/1989 http://www.lebensministerium.at/article/archive/7010																												
Renewable energy	Renewable Energy Act, BGBl. I Nr. 149/2002 http://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20002168 Ordinance on Renewable Energy 2010, BGBl. II Nr. 42/2010 http://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20006698																												
Mandatory targets for recycling																													
<table border="1"> <thead> <tr> <th>Waste fraction</th><th>Recycling target in %</th></tr> </thead> <tbody> <tr> <td>Packaging waste</td><td></td></tr> <tr> <td>Paper, cardboard</td><td>60</td></tr> <tr> <td>Glass</td><td>60</td></tr> <tr> <td>Metals</td><td>50</td></tr> <tr> <td>Plastics</td><td>22.5</td></tr> <tr> <td>Wood</td><td>15</td></tr> <tr> <td>Beverage compound packaging</td><td>25</td></tr> <tr> <td>Other compound packaging</td><td>15</td></tr> <tr> <td>ELV</td><td>80 (85 from 2015)</td></tr> <tr> <td>WEEE</td><td>70 – 80 (depends on type)</td></tr> <tr> <td>Batteries</td><td>50 – 75 (depends on type)</td></tr> <tr> <td></td><td></td></tr> <tr> <td></td><td></td></tr> </tbody> </table>		Waste fraction	Recycling target in %	Packaging waste		Paper, cardboard	60	Glass	60	Metals	50	Plastics	22.5	Wood	15	Beverage compound packaging	25	Other compound packaging	15	ELV	80 (85 from 2015)	WEEE	70 – 80 (depends on type)	Batteries	50 – 75 (depends on type)				
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Batteries	50 – 75 (depends on type)																												
<p>There are mandatory annually reports of the obliged enterprises and recycling schemes regarding the targets. The targets are reported to the commission according the respective commission decisions.</p> <p>Furthermore the obligation of separate collection of separate construction- and demolition waste and biowaste was introduced with regard to a high recycling rate (see Ordinance on the Separation of Materials Accumulated During Construction Work an Biowaste Ordinance).</p>																													
Waste management plans																													

The Feder Waste Management Plan 2006

<http://www.bundesabfallwirtschaftsplan.at/article/articleview/52746/1/13192/> provides both a state of waste management system Austria report and defines what is to be regarded as best available technique in waste management.

The targets of the Federal Waste Management Plan must be in line with the objectives and principles of the Federal Waste Management Act 2002. Accordingly, waste management should be based on the precautionary principle and sustainability and be geared:

1. To prevent harmful or adverse effects on humans, animals, and plants, and on their basic resources and natural environment, and generally minimize other negative effects on human well-being,
2. To minimize air pollution and gases affecting the climate,
3. To conserve resources (raw materials, water, energy, landscapes, land areas, landfill volumes),
4. In the case of recycling, to ensure that the materials reclaimed do not present a greater risk than comparable primary raw materials or products from primary raw materials and
5. To ensure that only such waste remains as can be stored without danger to future generations.

The Federal Waste Management Plan must include the following:

- Analysis of the waste management situation and an evaluation of the development of waste streams in the future;
- The regional distribution of waste disposal facilities as well as of important waste recovery plants;
- An assessment of the necessity of closure of existing waste installations,
- An assessment of the need for additional installation infrastructure,
- Existing waste collection schemes and an assessment of the need for new ones,
- Presentation of cooperation with concerned MS and the EC in case of transboundary movements of waste,
- The targets derived from the objectives and principles of the Waste Management Act 2002
 - a) To reduce the quantities and contaminants in waste as well as the harmful effects of waste,
 - b) To promote the preparation of the re-use of waste, the recycling and other methods of recovery of waste in order to save resources,
 - c) To recover the waste in an environmentally and economic way,
 - d) To dispose of waste that is unavoidable and non-recoverable,
 - e) To ship the waste out of Austria or to Austria for recovery or disposal and
- The federal measures planned to achieve these targets,
- Special precautions for certain types of waste, particularly treatment requirements and programmes.

The provinces draw waste management plans additionally (see the websites of the governments of the provinces)

The upcoming Feder Waste Management Plan 2011 is currently published for different participation processes and will be published in its final version on 30. June 2011.

Reference/source

ETC-SCP (2009): Country fact sheet on waste policy. http://scp.eionet.europa.eu/facts/factsheets_waste/
EEA – European Environment Agency (2010): State of Environment Report 2010 – Part C Country Assessments, Waste. Copenhagen. <http://www.eea.europa.eu/soer/countries/>

1.2 Waste management performance in the MS

Waste Management Performance

Waste generation and treatment

In 2009 about 53.54 million tons of wastes were generated and thereof about 63 % were collected for the purpose of conditioning and recovery, about 14 % were incinerated (with utilisation of the energy content of the waste) and 23 % were landfilled, treated in chemical-physical waste treatment or mechanical-biological waste treatment plants.

Figure 1 gives an overview of the historic development of waste generation for major waste types.

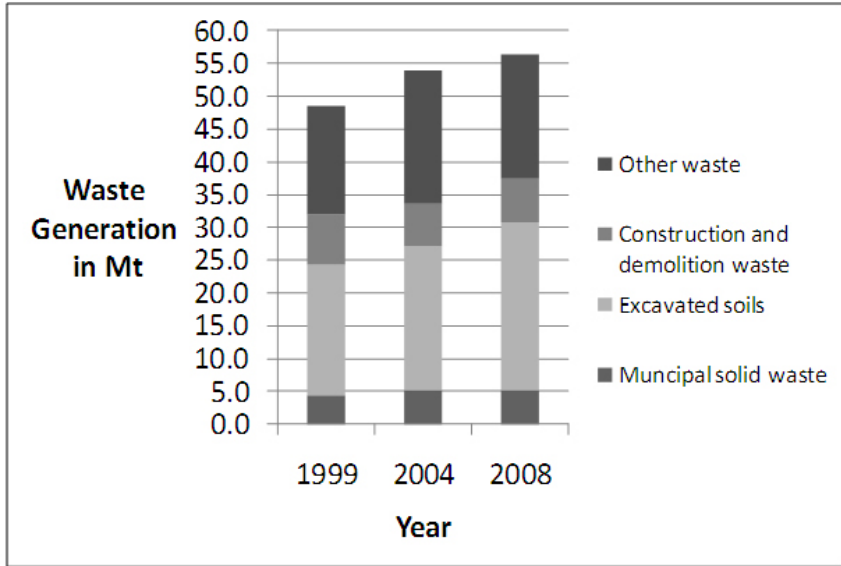


Figure 1: Total waste generation in Austria

WEEE:

The quantity to be collected required by the European WEEE-Directive for 2006 (4 kg/inhabitant) could be exceeded significantly in Austria (9 kg/inhabitant in 2009).

End-of-life-vehicles:

In the year 2009 the material recycling and reuse quota was 84 % and the recovery quota was 96.1 %. The total quantity of EOL vehicles in 2009 was 85,000 tons.

Packaging waste:

Austria could achieve top results for recycling and recovery in the European comparison. The recycling quotas for packaging waste for the year 2008 are listed as follows:

Glass: 84 %

Plastic: 35 %

Paper: 85 %

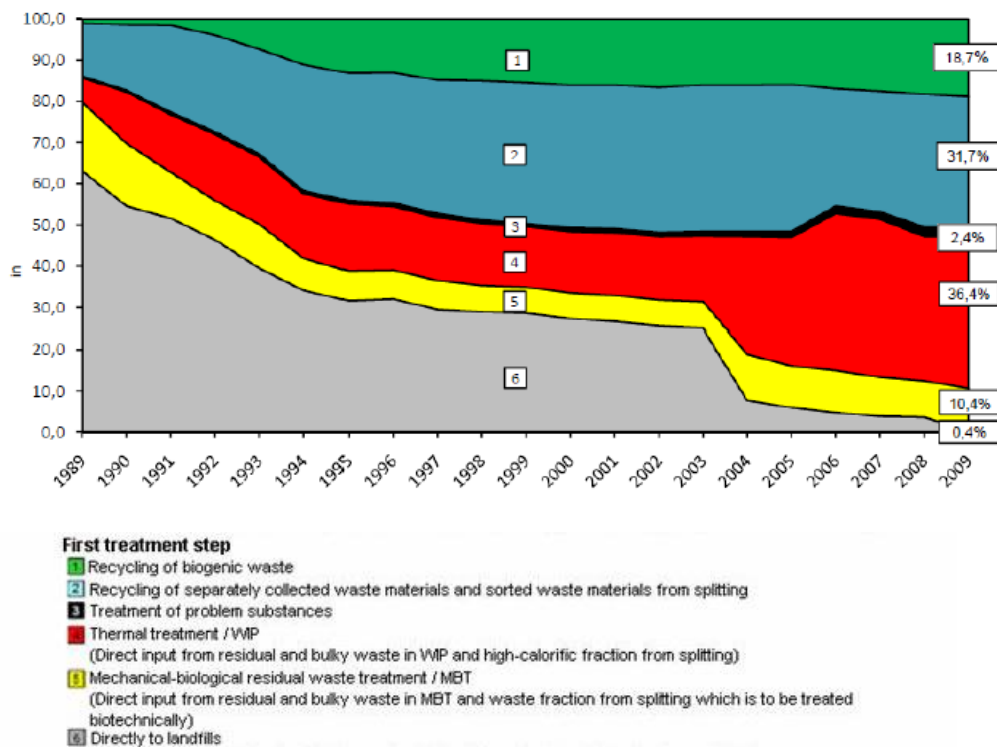
Metal: 85 %

Construction and demolition waste:

About 5.5 million tons construction and demolition waste were recovered in 2009. The total accumulation of construction and demolition waste amounted to 6.9 million tons.

Waste from households and similar establishments:

The following figure 2 presents the shares of recovered and disposed waste from households and similar establishments from 1989 to 2009.



Recycling rates

Waste fraction	Achieved recycling rate in %
Packaging waste	
Paper, cardboard	100
Glass	100
Metals	79
Plastics	35
Wood	54
ELV	84
WEEE	
Batteries	

Disposal rates

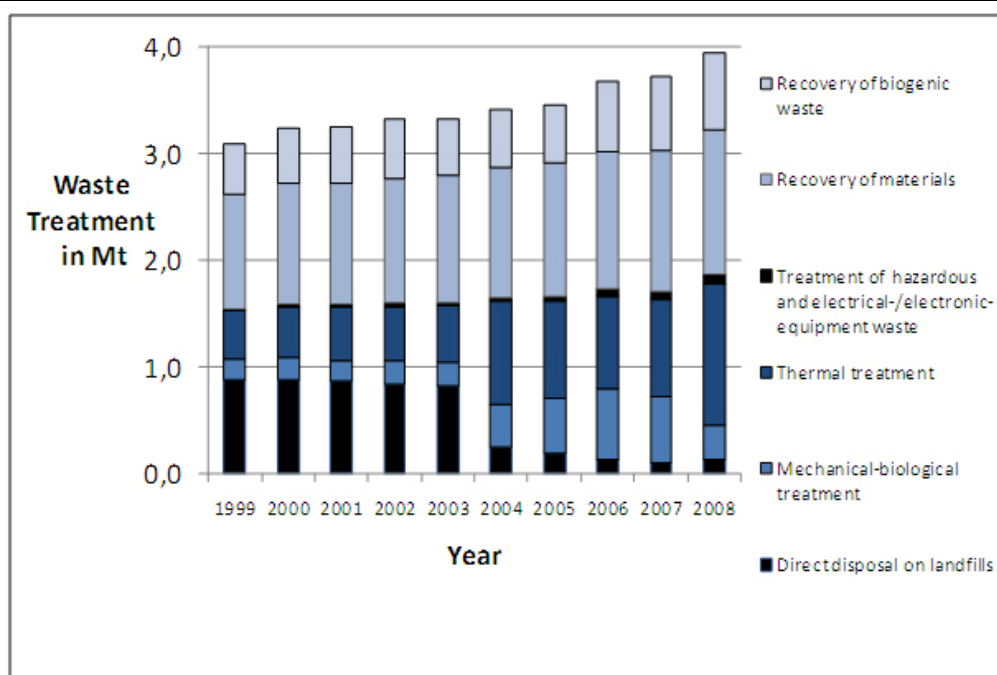


Figure 3: First treatment step of waste from households and similar establishments 1999-2004

Reference/source

<http://www.bundesabfallwirtschaftsplan.at/>

http://www.ara.at/fileadmin/user_upload/Downloads/Publikationen/ARA_Systemreport/ARA_Report09_Web.pdf

ETC-SCP (2009): Country fact sheet on waste policy. http://scp.eionet.europa.eu/facts/factsheets_waste/

EEA – European Environment Agency (2010): State of Environment Report 2010 – Part C Country Assessments, Waste. Copenhagen. <http://www.eea.europa.eu/soer/countries/>

1.3 Fees for Waste Disposal and Treatment

1.3.1 landfill fees (and Bans)

Fee for the remediation of contaminated sites put on waste to be landfilled (Altlastenbeitrag)

Date of introduction	1989 (amended 2000), Act on remediation of contaminated sites, Federal Law Gazette I 136/2004																															
Principle (one/two lines describing the instrument)	The Act on the Remediation of Contaminated Sites (ALSAG) was enforced in 1989 and requires a levy on landfilled waste which on the one hand finances the remediation or securing of contaminated sites and on the other hand provides a financial incentive for waste preventin, for waste treatment and for recycling instead of landfilling. The fee depends on the target landfill type and is higher for reactive waste (for the waste with the highest environmental impacts). The fee is to be submitted to the customs administration.																															
Current levels of tax, and tax structure	Incineration plants: 7 € per tonne Excavated soil landfill: 8.00 € per tonne Construction waste landfill: 8.00 € per tonne Residual material landfill: 18.00 € per tonne Mass waste landfill (Municipal waste landfill): 26.00 € per tonne Conventional land fills where municipal waste with high content of biodegradable material is deposited: 87 € per tonne The rate changed in 1996 and different rates were set depending on the technical quality of the landfill site and to the type of waste. Such that modern high technology landfill sites pay a much lower rate than sites without any anti-pollution provisions e.g. against leakage of landfill gas.																															
Details of any exemptions	Exempted are soils which are not contaminated.																															
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	Only pre-treated and non-reactive waste is allowed to be landfilled. Residual material landfill for stabilised waste with low hazardous substance concentration: 18.00 € per tonne Mass waste landfill (Municipal waste landfill) for stabilised waste with moderate hazardous substance concentration: 26.00 € per tonne In case of incineration: 7.00 € per tonne																															
How has the tax changed over time?	<table><tr><td colspan="4">Landfill levies (ALSAG) in €/tonne</td></tr><tr><td>Landfill type</td><td>Yea 2001</td><td>Year 2004</td><td>Year 2008</td></tr><tr><td>Excavated soil landfill</td><td></td><td></td><td>8</td></tr><tr><td>Construction waste landfill</td><td>5.8</td><td>7.2</td><td>8</td></tr><tr><td>Residual material landfill</td><td>10.9</td><td>14.5</td><td>18</td></tr><tr><td>Mass waste landfill (Municipal waste landfill)</td><td>14.5</td><td>21.8</td><td>26</td></tr><tr><td>Landfills where still waste with high biodegradable content is deposited</td><td></td><td></td><td>87</td></tr></table>				Landfill levies (ALSAG) in €/tonne				Landfill type	Yea 2001	Year 2004	Year 2008	Excavated soil landfill			8	Construction waste landfill	5.8	7.2	8	Residual material landfill	10.9	14.5	18	Mass waste landfill (Municipal waste landfill)	14.5	21.8	26	Landfills where still waste with high biodegradable content is deposited			87
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Mass waste landfill (Municipal waste landfill)	14.5	21.8	26																													
Landfills where still waste with high biodegradable content is deposited			87																													
Extent of geographical coverage	Austria (nation) wide																															

Plans for future levels of the tax	<p>From January 2012:</p> <p>Excavated soil landfill: 9.20 € per tonne</p> <p>Construction waste landfill: 9.20 € per tonne</p> <p>Residual material landfill: 20.6 € per tonne</p> <p>Mass waste landfill (Municipal waste landfill): 29.80 € per tonne</p>
Problems encountered/ solutions found/ lessons learned from implementation	<p>In order to prevent illegal dumping (driven by the economic incentive to “save” the disposal costs as well as the remediation contribution) we had to make intensive awareness and information campaigns. Especially the improper backfilling of construction and demolition waste and the illegal transfrontier shipment of waste increased after the rise of the levy. This unrequested development is reduced by the forced cooperation with the waste management industry and increased control activities. Furthermore unfair practices are also hindered by the improved electronic recording of the waste streams (electronic data management in environment and waste management).</p>
Perceived costs (financial and administrative) of the instrument	<p>Dimension</p> <p>The land fill fee is very reasonable with on average less than 10 € per citizen and year</p> <p>Effectiveness</p> <p>Yearly incomes of the remediation funds range between 50 and 80 million €</p> <p>The management of the funds requires approximately 1 mio. € per year and employs approximately 12 experts.</p>
Reference/source	<p>http://portal.wko.at/wk/format_detail.wk?angid=1&stid=592813&dstid=0&titel=%C3%84nderung,des,Altlastensanierungsgesetzes</p>
Waste disposal fees (Gate fees)	
Range of fees for landfilling (excluding landfill tax)	<p>The fee depends on the geographical location, competition and the type of waste. E.g. the landfill gate fee for non contaminated excavated soil varies between 3.70 and 5.00 € per tonne, the costs for the landfilling for construction waste varies between 18.50 and 20.00 € per tonne, the landfill for residual material costs approximately 70 EUR per tonne and for mass waste approximately 82 € per tonne.</p> <p>Gate fees must be cost covering.</p>
Source of information	<p>http://www.deponiebar.at/preisliste_2009_deponiebar.pdf</p> <p>http://www.spindler.co.at/data/preisliste09_sm.pdf</p> <p>http://www.rechnungshof.gv.at/beratung/kernaussagen/kernaussagen/detail/deponiepreise-kalkulation.html</p> <p>Buchinger, B. (2004): Abfallbehandler und Deponien in Österreich 2004. WKO, Vienna</p>
Do sources give any explanation for key factors explaining variation?	<p>The fee depends on the geographical location, competition and the type of waste.</p>
Problems encountered/ solutions found/ lessons learned from implementation	<p>The instrument was very effective to promote an early implementation of the landfill directive and therefore an environmental sound landfilling because of the association of the fees with the adjustment of the site according to the state of the art.</p>

Perceived costs (financial and administrative) of the instrument	
Information on Landfill Bans	
Wastes to which the ban is applied	<p>The Landfill Ordinance includes a general ban from landfills for waste with a total organic carbon (TOC) content of more than 5 %. That means especially municipal waste has to be pre-treated before landfilling by incineration or by mechanical-biological treatment.</p> <p>Furthermore there is a “ban” on landfilling of hazardous waste at Austrian surface landfill sites (there is no underground landfill site in Austria). There is only an exemption of this ban for pre-treated asbestos wastes.</p>
Date of introduction	Landfill Ordinance, BGBl. II Nr. 39/2008
Means of implementation	Regulatory measure
Plans for future bans (if any)	
Problems encountered/ solutions found/ lessons learned from implementation	The 5 % TOC is a criterion which shall prevent reactive waste to be landfilled and direct waste with a usable energy content to be used as energy carrier. However, in some cases (e.g. mechanical-biological pre-treated wastes) the waste may contain a higher carbon contents without being reactive and without being an effective fuel. In such cases landfilling may cause the least environmental impacts. For these cases exemptions had to be formulated.
Perceived costs (financial and administrative) of the instrument	
Source of information	CEWEP (2010): Waste-to-Energy in Europe in 2008. http://www.cewep.eu/media/www.cewep.eu/org/med_557/529_cewep_-_landfill_taxes_and_bans_7september2010_web.pdf

1.3.2 Incineration fees (and Bans)

Fee for the remediation of contaminated sites put on waste to be incinerated (Altlastenbeitrag)	
Date of introduction	2006
Principle (one/two lines describing the instrument)	<p>The fee is put on all waste to be incinerated (however it is lower than the fee on landfilling)</p> <p>The objectives of the law are to finance the remediation of contaminated sites and to provide incentive for waste prevention and recycling.</p>
Current levels of tax, and tax structure	7.00 € per tonne of waste to be incinerated + 18.00 € per tonne of residues from incineration to be landfilled.

Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	There is no waste-type based differentiation of the fee.
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	An increase to 8.00 € per tonne will be effective as of January 2012.
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.lebensministerium.at/article/articleview/26742/1/7010/ http://www.umwelt.net.at/article/articleview/30855/1/7018 http://wko.at/ooe/rechtsservice/umweltrecht/Extranet_Abfall/Altlastenbeitraege.htm
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	Currently, the average waste incineration prices for residual municipal waste range from 100 € to 150 €/tonne.
Source of information	DI Hubert Grech, Federal Ministry of Agriculture and Forestry, Environment and Water Management
Do sources give any explanation for key factors explaining variation?	The prices vary according to the current market situations (demand and supply, the degree of the capacity utilization etc.).

Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Information on incineration Bans	
Wastes to which the ban is applied	In Austria there is no general ban concerning waste incineration, but there are input criteria for waste to be used in co-incineration facilities. Waste which doesn't meet the requirements may only be incinerated in waste incineration plants. Primarily, the input criteria were laid down in the Guideline for Waste Fuels, in the meantime they were laid down in the Waste Incineration Ordinance.
Date of introduction	The Guideline for Waste Fuels was published in 2008, the amendment of the Waste Incineration Ordinance, implementing the requirements of the Guideline for Waste Fuels, was enacted in 2010.
Means of implementation	At first: guideline, by 2011: ordinance
Plans for future bans (if any)	
Problems encountered/ solutions found/ lessons learned from implementation	As non-waste incineration plants which use waste derived fuels usually do not have as elaborate emission monitoring systems as incineration plants, different rules for the two types of plants had to be established.
Perceived costs (financial and administrative) of the instrument	

1.4 Pay-as-you-throw schemes

Overview of PAYT schemes in Austria	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	All Austrian households pay waste fees based on the size of the residual waste bin and the frequency of emptying it. If several households share the same waste bin, the charge usually is allocated according to the size (m ²) of the apartments. The kind of charging depends on the municipalities.

What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	<p>In Austria, fees for the removal of domestic waste must correspond to the costs of the services rendered, i.e. they must not be profit-oriented. The fee is frequently composed of a basic rate and a surcharge.</p> <p>The basic rate consists of the costs arising directly out of the domestic waste collection. The surcharge covers costs that cannot be directly allocated to the waste just generated, e.g. the costs of cleaning up of littering.</p> <p>Local authorities exercise the authority bestowed upon them by the constitution and carry out tasks arising from federal and state laws, such as the collection and treatment of municipal waste. The Federal Constitution allows municipalities the option of forming associations among themselves for waste management. In most cases municipalities have followed this route, and delegate the organization of collection and treatment of all fractions to the waste management associations. The responsibility for the packaging wastes rests with the recycling associations.</p> <p>Article 8, paragraph 5 of the Constitutional Finance Law of 1948 (amended in 1966): the legislation of the <i>Länder</i> (regions) may authorise municipalities to charge certain fees; this legislation stipulates the essential elements of these fees, and especially their upper limit.</p>
Problems encountered/ solutions found/ lessons learned from implementation	<p>The pay as you throw schemes are aimed at providing incentive for less waste generation and for collecting recyclable fractions separately. Separate waste collection schemes were introduced for glass, paper, metals, bio-waste and plastics. However, in some regions which feature waste incineration, part of the separately collected plastics is incinerated. Consequently the in some areas the rules were changes, that plastics other than hollow-packaging should not be collected separately. This caused some consternation with final consumers.</p> <p>In apartment buildings the costs for waste collection and treatment are allocated to the apartments according to the m² of the apartment and not according to the actual waste contribution. This limits the effect of the pay as you throw scheme.</p>
Perceived costs (financial and administrative) of the instrument	In general a cost allocation according to the size of the waste bin and the frequency of emptying is seen as a fair compromise which does not incur excessive costs.
Reference/source	http://www.wasteawareness.org/mediastore/FILES/10529.pdf
Location of scheme (municipality where it is used)	
Nature of scheme	Frequency- and bin-size-based scheme

Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	<p>In small cities, residual waste is collected every two or every four weeks, in larger cities usually once a week.</p> <p>Some cities have introduced systems using special bags that must be purchased along with stickers. Bins, however, are used much more frequently than bags in Austria.</p> <p>Owners of apartment blocks usually pass the costs along to the tenants based on household size.</p> <p>The collection of bio-waste is compulsory (where it is not self-composted at home gardens) in Austria. All federal provinces, with the exception of Vienna, levy a fee for the emptying of bio-waste containers (Biotonne).</p> <p>The fee is frequently composed of a basic rate (covering the direct cost of waste collection and treatment) and a surcharge (for overheads).</p> <p>The accounting method and the actual fees vary over a wide range. This shall be depicted by 3 examples:</p> <ol style="list-style-type: none"> 1. There is only one waste bin size (240 l) – every emptying costs 9.72 € 2. The annual fix price is 22 €, every emptying of a 240 l container costs 1.8 € 3. The annual fix price is 0.29 € per liter of waste bin (69.60 € for a 240 l waste bin), every emptying costs 7.90 €. <p>When there is weekly emptying the annual costs of these examples are: 505 €, 116 € and 480 €, respectively.</p>
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	Homepage from municipalities

1.5 Producer responsibility systems

Packaging, Fees ARA license partners	
Date of introduction	
Principle (one/two lines describing the instrument)	<p>In Austria, the costs of the recycling and recovery of packaging materials are paid directly and in full by the producers, importers or fillers of the packaging or packed goods, mostly by participating in the ARA systems. Others have to organize the collection and recycling on their own.</p> <p>Municipalities do not pay for packaging waste recycling and recovery.</p>
Scope of the tax	

Current levels of tax, and tax structure	
Details of any exemptions	
How has the tax changed over time?	
Plans for future levels of the tax	
Problems encountered/ solutions found/ lessons learned from implementation	There are concerns that the ARA system, due to its high market share (and lack of competition), works really efficient. These concerns are addressed by ARA by claiming that they to keep the tariffs as low as possible. In effect the tariffs for e.g. for paper packaging in 2011 are about the same as they were in 2005.
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.ara.at/
Packaging, Deposit refunds	
Deposit-refund on reusable beverage packaging and boxes	
Year introduced	1970ies
Key Legislation	Voluntary initiative of beverage industry and retail sector.
Targets set for the scheme (including planned future targets)	
Scope of scheme	
Principle	For some reusable glass and PET beverage bottles (mainly beer bottles) and their boxes a deposit has to be paid which is returned at the bring back points (automatic collection machines).
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	

Problems encountered/ solutions found/ lessons learned from implementation	This is an old scheme, which is so much part of the business that it is not even mentioned on the homepages of the retail chains. However, it still exists and may help to keep the market share of reusable beer bottles high, as the only remaining beverage packaging with high reusable market share.
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Packaging, Green Dot scheme	
Altstoff Recycling Austria - ARA	
Year introduced	It was founded in 1993 by Austrian trade and industry
Key Legislation	Austrian Packaging Ordinance
Scope of the scheme	The ARA System runs nationwide systems for the collection and recovery of all household and commercial packaging waste
Targets set for the scheme (including planned future targets)	The required recycling and recovery rates are as in EU legislation (seen as minimum targets).
Principle	<p>Fillers of packaging, importers of packaged goods, producers of Serviceverpackungen pay for the collection, recycling and recovery of packaging. The money is paid to a central scheme. The scheme then compensates local authorities for their role in collecting household and commercial packaging.</p> <p>The Austrian Packaging Ordinance requires from all producers, distributors, importers, retailers, and all other business organisations which put packaging or packed goods on the Austrian market to take back their packaging free of charge and recover it.</p>

Level of payment to scheme	<p>The fees ARA license partners need to pay are based on the multiplication of the packaging quantities with the respective tariffs. The tariffs are annually calculated by the system operators of the ARA System according to the real costs for the collection, sorting, and recycling of each packaging material.</p> <p>Due to continuous system improvement and efficiency enhancement, ARA and its partners within the ARA System have been able to reduce the tariffs or at least keep them stable.</p> <table><tr><th rowspan="2">Packaging material</th><th colspan="2">Tariffs in € per kg excl. VAT)</th></tr><tr><th>as of Jan. 1, 2010</th><th>as of Jan. 1, 2011</th></tr><tr><td>Sales packaging – paper, cardboard, orrugated board * (Refunding of heavy-duty-bags – turn page)</td><td>0.130</td><td>0.120</td></tr><tr><td>Transport packaging – paper, cardboard, corrugated board</td><td>0.050</td><td>0.045</td></tr><tr><td>D sposable glass packaging</td><td>0.071</td><td>0.071</td></tr><tr><td>Wood</td><td>0.014</td><td>0.014</td></tr><tr><td>Ceramics</td><td>0.170</td><td>0.170</td></tr><tr><td>Ferrous metals small < 3 l</td><td>0.270</td><td>0.270</td></tr><tr><td>Ferrous metals large ≥ 3 l and metal hoops</td><td>0.130</td><td>0.130</td></tr><tr><td>Aluminium</td><td>0.500</td><td>0.450</td></tr><tr><td>Textiles</td><td>0.265</td><td>0.65</td></tr><tr><td>Plastics small * < 1.5 m² or < 0.15 kg, hollow bodies < 5 l, EPS < 0.1 kg, bags ≤ 10 l, net bags < 25 l, multipacks</td><td>0.760</td><td>0.670</td></tr><tr><td>EPS (e. g. Styrofoam ®) ≥ 0.1 kg</td><td>0.200</td><td>0.200</td></tr><tr><td>Composite materials (without beverage composite cartons)</td><td>0.670</td><td>0.630</td></tr></table>	Packaging material	Tariffs in € per kg excl. VAT)		as of Jan. 1, 2010	as of Jan. 1, 2011	Sales packaging – paper, cardboard, orrugated board * (Refunding of heavy-duty-bags – turn page)	0.130	0.120	Transport packaging – paper, cardboard, corrugated board	0.050	0.045	D sposable glass packaging	0.071	0.071	Wood	0.014	0.014	Ceramics	0.170	0.170	Ferrous metals small < 3 l	0.270	0.270	Ferrous metals large ≥ 3 l and metal hoops	0.130	0.130	Aluminium	0.500	0.450	Textiles	0.265	0.65	Plastics small * < 1.5 m² or < 0.15 kg, hollow bodies < 5 l, EPS < 0.1 kg, bags ≤ 10 l, net bags < 25 l, multipacks	0.760	0.670	EPS (e. g. Styrofoam ®) ≥ 0.1 kg	0.200	0.200	Composite materials (without beverage composite cartons)	0.670	0.630
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Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	<p>The costs for the collection, sorting and recovery are covered by the license fees that ARA license partners pay to ARA for the reported packaging volumes they put on the market. The revenues are passed on by ARA to operative partners, disposal companies, and communal waste cooperatives.</p>																																									
Producer-led/funded or government-led/funded?	<p>The law is a government one. The scheme, however, is operated by trade and industry.</p>																																									

Problems encountered/ solutions found/ lessons learned from implementation			
Perceived costs (financial and administrative) of the instrument			
Reference/source			
Electrical and electronic equipment (EEE)			
UFH (Umweltforum Haushalt), Elektro Recycling Austria GmbH (ERA), Erfassen und Verwerten von Altstoffen GmbH (EVA), European Recycling Platform (ERP) a cooperation of Sony, HP, Braun and Elektrolux.			
Year introduced	2005		
Key Legislation	Ordinance on Waste Prevention, Collection and Treatment of Waste Electrical and Electronic Equipment		
Scope of the scheme	The Austrian WEEE Ordinance requires that producers: <ul style="list-style-type: none">- register with the Federal Environment Agency;- mark new equipment put onto the Austrian market;- inform final users and treatment facilities in accordance with the WEEE Directive;- submit quarterly and annual reports to the clearing house (either directly or via a collective scheme);- and finance the collection recovery and recycling of WEEE.		
Targets set for the scheme (including planned future targets)	The same targets as described in the EC WEEE-Directive are valid in Austria. In 2009, more than 9 kg / inhabitant of WEEE could be collected from households and in 2008 the following recovery and recycling quotas could be achieved:		
	Type of appliance	Recovery rate [%]	Re-use and recycling rate [%]
	Large household appliances	89	84
	Small household appliances	85	73
	IT & telecommunications equipment	89	77
	Consumer equipment	92	81
	Lighting equipment	85	72
	Gas-discharge lamps	93	92
	Electrical and electronic tools	85	75
	Toys, leisure and sports equipment	85	73
	Medical devices	86	72
	Monitoring & control instruments	86	74
	Automatic dispensers	93	75

Principle	Producers of household EEE must participate in a collection scheme. Consumers may return their WEEE free of charge at municipal collection centres, take-back points or at the point of sale. Producers must finance the collection of WEEE from the collection sites onwards to the recycling / treatment facilities. Local authorities may invoice the 'Clearing House' established under the Ordinance to pay for costs of setting up their WEEE collection infrastructure, a cost which is then passed on to producers. The Clearing House distributes an annual lump sum to the municipalities for these WEEE infrastructure costs.				
Level of payment to scheme	WEEE treatment fees from 01.01.2010 (excluding VAT) charged to the producers / importers of electric or electronic equipment:				
	Type of appliance	Mass of appliance in kg	Unit of fee	Fee for Sector	
				Households	Industry
	Large	< 8	€/appliance	0.08	0.07
	Large	8 to 35	€/appliance	0.2	0.17
	Large	≥ 35	€/appliance	0.8	0.65
	Fridge, freezer, air-conditioner	< 45	€/appliance	6	5.8
	Fridge, freezer, air-conditioner	≥ 45	€/appliance	9.5	9.1
	Screens	< 35	€/kg	0.24	0.2
	Screens	≥ 35	€/kg	0.165	0.14
	Small	< 8	€/kg	0.05	0.045
	Small	≥ 8	€/kg	0.04	0.035
	Gas-discharge-lamps		€/kg	0.75	0.7
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	100 % (collection costs only from the WEEE collection sites onwards)				
Producer-led/funded or government-led/funded?	The ordinance is a federal / governmental one. The scheme, however, is operated and funded by trade and industry.				
Problems encountered/ solutions found/ lessons learned from implementation	Financing of the collection and treatment of WEEE generated from EEE sold by foreign distance-sellers is missing.				
Perceived costs (financial and administrative) of the instrument					
Reference/source	http://info.hktdc.com/alert/eu0603d.htm http://www.weee-forum.org/index.php?section=members&page=members_community&id=40				
End-of-life vehicles (ELV)					
Take back system for ELV					
Year introduced	2002				

Key Legislation	Ordinance on end-of life vehicles
Scope of the scheme	The Ordinance stipulates that the collection of end-of life vehicles has to be at least without any cost for the last holder or owner, but always provided for the possibility that the holder/owner may be charged in case essential parts of the vehicle are missing (or waste has been added to the vehicle). The last amendment of the Ordinance now clarifies this exception to the no-cost-rule: The last holder or owner may be charged in case essential parts of the vehicle are missing which determine the value of the end-of life vehicle.
Targets set for the scheme (including planned future targets)	Austria meets the targets written in the Directive and for 2008 has achieved the following rates: Reuse and recycling rate 83.7 % Reuse and recovery rate 96.1 %
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	In principle the take back system works very well. However, the incentive to sell old cars for being used abroad seems to be higher than for collecting and treating the end-of-life vehicles within the country. It is estimated that the potential for ELV in Austria is nearly 4 times the actual numbers of ELV collected within the country.
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://epp.eurostat.ec.europa.eu/portal/page/portal/waste/data/wastestreams/elvs
Batteries	
UFH, Elektro Recycling Austria GmbH (ERA), Erfassen und Verwerten von Altstoffen GmbH (EVA), European Recycling Platform (ERP) a cooperation of Sony, HP, Braun and Elektrolux.	
Year introduced	2008
Key Legislation	Batteries Ordinance

Scope of the scheme	Producers and importers take over the financing responsibility for the collection and environmentally compatible treatment of these products that represent hazardous waste (consumer batteries, vehicle batteries, industrial batteries) and thereby relieve the burden of communities and waste associations.
Targets set for the scheme (including planned future targets)	
Principle	Producers and importers take over the financing responsibility for the collection and environmentally compatible treatment of these products that represent hazardous waste, and thereby relieve the burden of communities and waste associations.
Level of payment to scheme	Battery treatment fees from 01.01.2010 (excluding VAT) Batterien: Consumer batteries: 0.540 €/kg Vehicle batteries: 0.001 €/kg Industrial batteries: 0.540 €/kg
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	100% for portable batteries and accumulators and automotive batteries or accumulators.
Producer-led/funded or government-led/funded?	The ordinance is a federal / governmental one. The scheme, however, is operated and funded by trade and industry.
Problems encountered/ solutions found/ lessons learned from implementation	Data from the year 2002 indicate that maybe one third of small consumer batteries are separately collected, one third can be found in other waste streams and on third simply vanish from the balance. The collection of vehicle batteries suffers from the high share of old-cars exported instead of treated within Austria.
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.era-gmbh.at/ Umweltbundesamt (2005): Abfallvermeidung und –verwertung: Schlacken, Aschen und Staube in Oesterreich. Reports REP-0003, Wien.

1.6 Other interesting instruments

Subsidies for energy from waste according to the Environmental Funding Act

Principle (one/two lines describing the instrument)	There is a financial support for investments to incinerate biogenic raw materials and residual materials and for measures to substitute fossil fuels by biogenic materials and residues.
Structure of incentive (how is it applied and at what levels?)	Financial assistance (in general: up to 25 % of the investment costs).
Scope (waste streams)	Any waste stream with a high biogenic proportion (and consequently with a high potential of formation of methane). A corresponding waste list is published.
Voluntary or mandatory/legislative?	Based on the Environmental Funding Act
Geographical coverage	Austria
Target group (e.g. consumer, households, business, manufacturer)	Business and power supply enterprises
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	www.publicconsulting.at

ECONOMIC INSTRUMENTS IN BELGIUM

2.1 Waste Policy in the MS

2.2 Waste management performance in the MS

2.3 Fees for Waste Disposal and Treatment

2.3.1 landfill fees (and Bans)

Landfill charges (various and regional)

Brussels Capital Region: No charges. The Brussels Capital Region does not possess a landfill on its territory, and does not apply taxes or levies for waste exported outside the Region for landfilling elsewhere.

Flanders

- Landfilling in an illegal way; high levy applied as a fine
- Landfilling of combustible wastes
- Landfilling of household waste that cannot be incinerated in an incinerator permitted for household waste
- Landfilling of non-combustible wastes
- Landfilling of combustible recycling residues (with diversified levies and a % of what is acceptable to be recycling residue for recycling of different materials)
- Landfilling of non-combustible recycling residues (with diversified levies and a % of what is acceptable to be recycling residue for recycling of different materials)
- Landfilling of residues from soil sanitation
- Landfilling of residues from permitted treatment facilities of sewage sludge
- Landfilling of sludge residues from the cleaning of sieving sand
- Landfilling on a dumping site permitted for this type of waste of immobilised non-flammable waste
- Landfilling on a dumping site permitted for iron oxide of waste from zinc production
- Landfilling on a dumping site permitted for landfilling of gypsum or calcium chloride waste
- Landfilling of titanium dioxide pigments on a dumping site permitted for ore residues
- Landfilling of dredging sludge on a landfill therefore permitted
- Landfilling of clearing spoils on a landfill therefore permitted
- Landfilling of inert waste and sludge from the preparation of drinking water on a landfill therefore permitted
- Landfilling outside the Region, or sorting or pretreating waste destined for landfilling outside the Region, for one of the landfill activities mentioned above

Wallonia:

- Waste generation charge for household waste
- Waste generation charge for non-combustible industrial waste
- Waste generation charge for non-recycled construction and demolition waste.

Date of introduction	<p>Flanders: Introduced in July 1989 (frequently amended)</p> <p>Wallonia: Waste generation charge for non-combustible industrial waste introduced in MONTH 2007; waste generation charge for household waste introduced in MONTH 2008 (introduced in 1999?)</p>
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Principle (one/two lines describing the instrument)	<p>Flanders:</p> <p>Having set a target to reduce to 150kg per person MSW treated, which means decreasing from 200kgs/person in 2008 to 180kgs/person from 2010. Charges are part of continuing to apply the polluter pays principle (with tariff differentiation) for household waste.</p> <p>General application of 'smart' taxes that:</p> <ul style="list-style-type: none"> • Make landfilling more expensive than incineration • Provide controlled exemptions for recycling residues to promote recycling. Reduced tariffs for the final disposal of residual waste from recycling processes on landfill sites are however cancelled by 2010. • Avoid charges on non recyclable non incinerable waste that has to be landfilled (a selection of waste streams including asbestos, unavoidable dig and dump waste from soil sanitation, use on f some wastes as a landfill coverage...) • Steer the market towards the treatment option with the lowest environmental impact <p>Also having a restrictive permitting policy for landfill increases landfilling costs.</p> <p>An important principle is that the levies are not a financing but a steering instrument, although in practice the financing aspect plays a role. Income from levies is earmarked for an environmental fund (MINA-fonds). Fiscal repayment mechanisms for the levies may affect the application of the polluter pays principle, and move the system partly towards a financing instrument instead of a steering instrument.</p> <p>Wallonia:</p> <p>Household waste generation charge was implemented to incorporate the polluter pays principle and to provide funding to the local authorities for activities on waste prevention and recycling and awareness-raising. For non-household waste being landfilled, the tax was created to increase the costs of waste disposal and to encourage alternative treatment including waste reduction.</p>
Current levels of tax, and tax structure	<p>Flanders:</p> <p>The Flemish landfill and incineration levies are one of the most complex systems in the EU, with 37 different regimes and tariffs. Illegal landfill and incineration is suppressed with an indexed levy of €164.06/tonne. The levies vary based on the possibility to apply more environmentally friendly alternatives for the treatment of the waste, or to promote recycling. Recycling residues that are landfilled or incinerated have a lighter levy than the same material which is landfilled or incinerated directly. To define 'recycling residue' the legislation includes 21 definitions, with percentages evolving from 3% of weight for the treatment of bottom ashes or garden waste, 5% of weight for e.g. plastic, wood, paper, to up to 25% for used solvents or shredder residues from scrap treatment. For some waste streams for which no BAT alternative is present a zero levy is imposed.</p> <p>2011 tax levels:</p> <p>Private landfill (to compensate for formerly received but now abolished tax refund, legal levels are multiplied with 0,70):</p> <ul style="list-style-type: none"> • € 57.42 combustible waste (+ max 20% local taxes) • € 30.63 non-combustible waste (+ max 20% local taxes) <p>Public landfill:</p> <ul style="list-style-type: none"> • € 82.03 combustible waste • € 43.75 non-combustible waste <p>Wallonia:</p> <p>Non-combustible industrial waste levy of 35 EUR/ton.</p> <p>Household waste level was set at 1000BEF or €24.79 per tonne per household.</p> <p>Illegal waste dumping tax to be paid by the property owner illegally accepting waste on his territory. Automatic starting amount is 1000BEF or €24.79 per tonne and with a ceiling of €24.789.</p> <p>2010 tax levels:</p> <ul style="list-style-type: none"> • € 65 hazardous waste • € 60 non-hazardous waste
Details of any exemptions	Hazardous waste exported for landfilling are not subject to the Wallonian tax, but are subject to the Flemish tax.
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	<p>Wallonia:</p> <p>Household waste landfill levy increased in 2010 to 60 EUR/ton.</p>

How has the tax changed over time?	<p>Flanders :</p> <p>Introduced in juli 1989 at 0,99 EUR/ton MSW, last updated on 1st January 2011 at 82,03 EUR/ton.</p> <p>Wallonia:</p> <p>Household waste landfill levy originally introduced in 2008 at 20EUR/ton, to be increased in 2010 to 60 EUR/ton.</p>
Extent of geographical coverage	Regional level (i.e. in Brussels Capital Region, Flanders or Wallonia).
Plans for future levels of the tax	The Wallonian government intends to modify the tax regime so that, in addition to the basic waste generation tax paid by households, a sanction will be charged to local authorities whose citizens generate more waste than an established limit level. Beyond this limit, the authorities will be charged for waste not collected selectively.
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	<p>"Market study of the final treatment of residual household waste and industrial waste similar to household waste in Flanders and neighbouring regions: a summary report" 2008</p> <p>http://www.ovam.be/jahia/Jahia/cache/offonce/pid/176?actionReq=actionPubDetail&fileItem=1701</p> <p>"Horizon 2010: Plan Wallon des déchets" (Wallonia waste plan); Office Wallon des Déchets</p> <p>"Rapport d'Activités 2006", Office Wallon des Déchets ; (2006 Activity Report of the Wallonian Waste Office)</p>
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	

Range of fees for landfilling (excluding landfill tax)	<p>Flanders:</p> <p>Based on a periodical review by OVAM of the combined levies and fees, if it can be concluded that for some categories incineration remains more expensive than landfill</p> <div><p>landfill and incineration average fees and levies, Flanders 2008</p><table border="1"><caption>landfill and incineration average fees and levies, Flanders 2008 (estimated values in euro/ton)</caption><thead><tr><th>Treatment</th><th>Average Fee</th><th>Average Levy</th><th>Total</th></tr></thead><tbody><tr><td>landfill hazardous waste</td><td>55</td><td>40</td><td>95</td></tr><tr><td>landfill anorganic industrial waste</td><td>40</td><td>75</td><td>115</td></tr><tr><td>landfill organic industrial waste</td><td>45</td><td>75</td><td>120</td></tr><tr><td>landfill low calorific industrial waste</td><td>115</td><td>5</td><td>120</td></tr><tr><td>landfill high calorific industrial waste</td><td>125</td><td>5</td><td>130</td></tr><tr><td>incineration MSW</td><td>105</td><td>10</td><td>115</td></tr><tr><td>landfill MSW</td><td>50</td><td>40</td><td>90</td></tr><tr><td>landfill inert waste</td><td>45</td><td>10</td><td>55</td></tr></tbody></table></div>	Treatment	Average Fee	Average Levy	Total	landfill hazardous waste	55	40	95	landfill anorganic industrial waste	40	75	115	landfill organic industrial waste	45	75	120	landfill low calorific industrial waste	115	5	120	landfill high calorific industrial waste	125	5	130	incineration MSW	105	10	115	landfill MSW	50	40	90	landfill inert waste	45	10	55
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Source of information	<p>“Market study of the final treatment of residual household waste and industrial waste similar to household waste in Flanders and neighbouring regions: a summary report” 2008 http://www.ovam.be/jahia/Jahia/cache/offonce/pid/176?actionReq=actionPubDetail&fileItem=1701 WRAP Landfill Bans: Feasibility Research – Appendices http://www.wrap.org.uk/downloads/Landfill_Bans_Feasibility_Research_Appendices_Final.7d4ad9a5.8866.pdf CEWEP (European Incineration Federation) presentation on landfill bans/taxes</p>																																				
Do sources give any explanation for key factors explaining variation?	<p><i>e.g. Generally the local availability of landfill void space (the level of competition in the market) is considered the strongest influence. Some evidence indicates that the costs of some alternative treatments are suppressing gate fee increases as the landfill tax rises.</i></p>																																				
Problems encountered/ solutions found/ lessons learned from implementation																																					
Perceived costs (financial and administrative) of the instrument																																					
Information on Bans																																					

Wastes to which the ban is applied	<p>Flanders:</p> <ul style="list-style-type: none"> • Unsorted household and industrial waste • Wastes that were selectively collected for the purpose of recovery • Combustible residues from the sorting of household waste or comparable industrial waste • Waste pharmaceuticals <p>Deviations are possible for combustible industrial waste, but only following a thorough evaluation and if there is a shortage in incineration capacity.</p> <p>Wallonia:</p> <ul style="list-style-type: none"> • Separated household waste and non-hazardous industrial waste, e.g. organic waste, paper and cardboard, timber waste; packaging waste • Waste from pre-treatment and sorting facility • Non-pre- treated fine residual household waste and non-shredded bulky waste • Shredded bulky waste
Date of introduction	<p>Flanders:</p> <p>1998 for on unsorted wastes and wastes selectively collected for the purpose of recovery. The landfill ban for non-recyclable combustible household and industrial waste since 1 January 2006. Wastes suitable for incineration banned in 2000.</p> <p>Wallonia:</p> <p>Decrees of 18 March 2004 and 30 March 2006 provide for phased introduction of landfill bans Article 3 provides that a pre-treatment of waste materials, requiring sorting out of reusable fraction, must be carried out before the waste can be landfilled. (There is also a decree of 27 June 1996 that bans landfilling of organic matter for 2010, so not clear on the first bullet point below that says organic waste banned in 2004.)</p> <p>Dates of entry into force:</p> <ul style="list-style-type: none"> • 1 July 2004: Separated household waste and non-hazardous industrial waste, e.g. organic waste, paper and cardboard, timber waste; packaging waste • 1 January 2007: Waste from pre-treatment and sorting facility • 1 January 2008: Non-pre- treated fine residual household waste and non-shredded bulky waste • 1 January 2010: Shredded bulky waste
(Means of implementation)	<p>Flanders:</p> <p>The VLAREA, the Flemish law on waste management, forbids the use of three waste treatment routes, i.e. D2 (Land treatment like biodegradation of liquid or sludgy discards in soils, etc.), D3 (Deep injection such as injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc.) and D11 (Incineration at sea, which is in any case already prohibited by EU legislation and international conventions). In addition, for certain waste streams, landfill is forbidden, because of the nature of the wastes, or because the possibility clearly exists to treat it through a means higher in the waste hierarchy. For some waste streams, both landfill and incineration are forbidden, which means that at least one preparatory sorting activity has to be applied to it. Over and above this, landfills and incineration plants have acceptance criteria included in their permits to operate.</p> <p>Wallonia:</p> <p>Article 5 of the decree provides for deviations in case of force majeure and in exceptional circumstances. The shortage of adequate treatment facilities in Wallonia is explicitly acknowledged as an exceptional circumstance. The application for a deviation needs to be sufficiently justified and the licensing authority, the 'Office Wallon des Déchets' (OWD), the Department of Waste Materials, shall impose demands relating to the landfill and the requirement to look for alternative treatment possibilities in the future.</p>
Plans for future bans (if any)	None detailed.
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	

Source/references	http://www.wrap.org.uk/downloads/Landfill_Bans_Feasibility_Research_Appendices_Final.7d4ad9a5.8866.pdf
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2.3.2 Incineration fees (and Bans)

Incineration taxes/charges: Flanders: <ul style="list-style-type: none"> • Incineration in an illegal way ; high levy applied as a fine • Incineration in a permitted installation • Co-incineration with fuels in a permitted plant for energy generation • Incineration of co-incineration of recycling residues for paper or plastics recycling • Incineration outside the Region, or sorting or pretreating waste destined for incineration outside the Region, for one of the incineration activities mentioned above 	
Date of introduction	<p>Brussels :</p> <p>Brussels Capital Region has not yet introduced any charges on incineration.</p> <p>Flanders:</p> <p>Introduced in July 1989</p> <ul style="list-style-type: none"> • Incineration in general + co-incineration • Incineration of recycling residues (paper, cardboard and synthetic materials only) <p>Wallonia:</p> <p>Introduced tax at 3EUR/ton in 2004, no details available on which wastes.</p>
Principle (one/two lines describing the instrument)	<p>Flanders:</p> <p>Two central policies can be defined to discourage disposal.</p> <ul style="list-style-type: none"> • Levies on incineration and on landfill give financial incentives to avoid final disposal; and • Direct landfill and incineration bans exclude final disposal for a range of waste types. <p>Both policies have the same final objective. By avoiding disposal (and in Flanders, incineration has always been considered, in the past, as disposal) waste has either to be recycled or its production has to be prevented (direct prevention). The measure indirectly promotes social prevention as well, if the waste which cannot be landfilled or incinerated has to be fit for recycling.</p> <p>The aim is to make landfilling more expensive than incineration, and incineration more expensive than recycling. This goal is however not always reached, see figure above.</p>

Current levels of tax, and tax structure	<p>Flanders (level in 2011) :</p> <ul style="list-style-type: none"> Household (hazardous and non-hazardous) at 7.66 EUR/tonne Commercial waste at 7.66 EUR/tonne Recycling residues at 2.19 EUR/tonne <p>As mentioned above, commercial installations may multiply these levels with *0,7 to compensate for formerly received but now abolished tax refund.</p> <p>The Flemish landfill and incineration levies are one of the most complex systems in the EU, with 37 different regimes and tariffs. Illegal landfill and incineration is suppressed with an indexed levy of €164.06 EUR/tonne. The levies vary based on the possibility to apply more environmentally friendly alternatives for the treatment of the waste, or to promote recycling. Recycling residues that are landfilled or incinerated have a lighter levy than the same material which is landfilled or incinerated directly. To define 'recycling residue' the legislation includes 21 definitions, with percentages evolving from 3% of weight for the treatment of bottom ashes or garden waste, 5% of weight for e.g. plastic, wood, paper, to up to 25% for used solvents or shredder residues from scrap treatment. For some waste streams for which no BAT alternative is present a zero levy is imposed.</p> <p>Wallonia (applicable in 2010):</p> <ul style="list-style-type: none"> Non-hazardous waste (with recovery) at 6EUR/tonne Hazardous waste (with recovery) at 12EUR/tonne Non-hazardous waste (without recovery) at 25EUR/tonne Hazardous waste (without recovery) at 30EUR/tonne Wastes from soil decontamination activities (with/without energy recovery) at 1EUR/1.50EUR / tonne <p>All the above taxes are added to gate fees charged by incinerators.</p>
Details of any exemptions	<p>Wallonia:</p> <ul style="list-style-type: none"> Hospital and health assistance waste
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	Flanders: see graph above
How has the tax changed over time?	
Extent of geographical coverage	Regional (i.e. Brussels Capital Region, Flanders or Wallonia).
Plans for future levels of the tax	<p>Brussels :</p> <p>Brussels Capital Region has not yet introduced an incineration tax or levy. It's waste plan from 2010 states that the region will introduce a tax regime on incineration using similar structures and levels as those in the Flemish and Walloon regions. The tax regime will permit the Region to :</p> <ul style="list-style-type: none"> encourage prevention and recycling of waste recover financial income due to the Region <p>The incoming funds will be used to finance infrastructure and other activities developed in the delivery of the waste prevention and management plan via special budgetary funds.</p>

Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	<p>Bruxelles Environnement; <i>Plan de prévention et de gestion des déchets; May 2010 (Waste Prevention and Management Plan)</i> http://documentation.bruxellesenvironnement.be/documents/Plandechets_2010_FR.PDF</p> <p>WRAP Landfill Bans: Feasibility Research - Appendices</p>
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	<p>Brussels: Average tariff range from 97-112EUR/ton, depending on the net heating value.</p> <p>Flanders: 70-130EUR/ton (plus 7EUR/ton tax equals 77-137EUR/ton). Average of 110EUR/ton. See graph above</p> <p>Wallonia: No figures provided, depends on contract structure within the inter-municipal partnership.</p>
Source of information	<p>Presentation on 'Prevention and management of household waste in Flanders' made by Lore Mariën of OVAM on 27.04.2009; http://www.foe.co.uk/resource/event_presentations/2_lore_marien.pdf</p> <p>"Market study of the final treatment of residual household waste and industrial waste similar to household waste in Flanders and neighbouring regions: a summary report" 2008 http://www.ovam.be/jahia/Jahia/cache/offonce/pid/176?actionReq=actionPubDetail&fileItem=1701</p>
Do sources give any explanation for key factors explaining variation?	No.
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Information on Bans	

Wastes to which the ban is applied	<p>None detailed for Brussels Capital Region or Wallonia.</p> <p>Flanders:</p> <p>Incineration is forbidden for:</p> <ul style="list-style-type: none"> selectively collected waste fit for material recovery or recycling, with the exception of some types of biowaste if they have a calorific value above 11.5 MJ/kg and are used for the creation of renewable energy unsorted industrial waste unsorted household waste <p>Flemish legislation includes the possibility for the Flemish minister to allow for exceptions from these obligations, on a case-by-case basis, for technical reasons (mainly due to treatment capacity issues).</p>
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	None detailed for any of the Regions.
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	

2.4 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	<p>Flanders:</p> <p>XX% of municipalities are covered by PAYT schemes.</p> <p>Wallonia:</p> <p>Not a PAYT scheme in its strictest sense, but with an impact on local authority charging for waste management. Since 2002, a maximum waste generation limit of 240kg/inhabitant was set by the regional government (and continued to 2008), and the waste generation tax was set at 35EUR/ton for amounts exceeding this. Average waste generation per capita in 2005 was 181kg, a reduction of 35kg/inhabitant compared to 2000. The maximum waste generation limit for 2009-10 was maintained at 240kg/inhabitant for local authorities with 25000 or more residents, reduced to 230kgs for populations between 10-25000, and to 220kgs for populations under 10000. In 2011, the 240kg limit has continued to be maintained for local authorities with 25000 or more residents, further reduced to 220kgs for 10-25000 residents, and 200kgs for 10000 or fewer residents.</p> <p>Brussels : recently voluntary source separated kerbside collection is introduced, but not accompanied by a PAYT scheme. PAYT is applicable for some waste fractions on 2 regional and 8 municipal civic amenity sites.</p>

What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly.	<p>Flanders</p> <p>Separation of recyclables has been achieved through environmental 'covenants' or 'agreements' or 'cooperation protocols' with municipalities. In exchange for subsidies towards selective collection infrastructure (including doorstep and bring systems), municipalities agree to achieve a series of environmental goals which go beyond the minimum legal requirements. They must develop an action plan for municipal waste, including targets and instruments to qualify for the subsidies. The system was set up in 1992, and now the fifth version (2008-2013) is signed by 276 out of 308 municipalities. Subsidies do not cover 100 per cent of initiatives but have made a crucial difference to the provision of infrastructure for the separate collection of domestic waste components, including household hazardous waste, organic waste, waste paper, glass, plastics and metal waste.</p>
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	<p>Green Alliance ; "Creative Policy Packages for Waste – Flanders"; 2002</p> <p>http://www.green-alliance.org.uk/uploadedFiles/Publications/CPPWFlanders.pdf</p>
Location of scheme (municipality where it is used)	
Nature of scheme	
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	<p>Flanders:</p> <p>From waste implementation plan 2008-2013: Per household, the annual cost for local waste management will rise from 222EUR in 2005 to 275EUR in 2015. It is expected that the average price of the garbage bag will rise from 1,25EUR in 2005 to 1,50EUR and to 1,60EUR in 2015. Likewise, charges and cash payments for other waste fractions will increase. In this process, all principles of correct and appropriate municipal financing are applied, without prejudice to its regulatory effect:</p> <ul style="list-style-type: none"> • The costs for waste removal are the major costs facing the resident; • The costs are, for the most part, being paid directly by the polluter; • Part of the costs is being financed by means of a tax that is based on income. <p>Selective collection and recycling – charges for mixed waste collection:</p> <ul style="list-style-type: none"> • between 0.75 and 2.5EUR per bag (60L) • containers (120L): <ul style="list-style-type: none"> ○ taxation per volume: 2.5 to 3.76 EUR ○ taxation per weight: 0.15 to 0.2EUR/kg ○ taxation per collection: 0.25 to 1EUR

Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	Exemptions can be and are introduced at the level of the local authorities.
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	Flanders : Implementation Plan for environmentally responsible household waste management: http://www.ovam.be/jahia/Jahia/cache/offonce/pid/176?actionReq=actionPubDetail&fileItem=1591

2.5 Producer responsibility systems

Packaging, Taxes	
Date of introduction	Federal tax introduced in 2004
Principle (one/two lines describing the instrument)	
Scope of the tax	<p>Since April 2004, the Federal government introduced various packaging taxes:</p> <ul style="list-style-type: none"> • April 2004: single use drinks packaging • March 2007: reusable drinks packaging • April 2007: plastic bags, disposable cutlery, plastic cling film, aluminium foil <p>Total tax take has been identified at 477million EUR.</p>
Current levels of tax, and tax structure	Drinks packaging are taxed at 0,37184EUR per unit, regardless of the content, volume of the packaging or its material) except if they are reused, are part of a deposit-return system or certain recycling objectives are respected (no details provided).
Details of any exemptions	<p>Due to the difficulty of recycling these materials, drinks packaging made of wood, sandstone, porcelain or crystal are exempt. Recyclable containers were also exempt during a transition phase ending in 2000, on the condition that defined recycling rates were met. The transition period that ran until 31 December 2001 incorporated the same recycling rates as 2000: 70% for synthetic materials and drinks cartons, and 80% for glass and metals.</p> <p>Drinks packaging carrying the 'green dot' conform to exceptional conditions exempting the container from the eco-tax.</p>
How has the tax changed over time?	The tax has been the subject of huge political discussion and has been adapted frequently.

Plans for future levels of the tax	No details.
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	Website of DETIC, an industrial movement, supporting environmental protection but against taxes (http://www.tax-emballage.be/index2.html) accessed 22 February 2011. Public information website on eco-consumption providing information from September 2003 (http://www.ecoconso.be/Le-point-vert) accessed on 22 February 2011.
Packaging, Deposit refunds	
[Name of existing scheme]	
Year introduced	Introduced at Federal level in 1997
Key Legislation	Ecotax legislation modified to introduce a deposit-return system and the deposit amount for drinks packaging.
Targets set for the scheme (including planned future targets)	
Scope of scheme	
Principle	
Level of payment to scheme	Reusable drinks containers – 1.41EUR/hectolitre (100l) Disposable drinks containers – 9.86EUR/hl
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Legislation at Federal level.
Problems encountered/ solutions found/ lessons learned from implementation	

Perceived costs (financial and administrative) of the instrument	
Reference/source	Federal Finance Ministry website (http://tarweb.minfin.fgov.be/itarbel_ext/listAcc_Btw?l_DAT=20/05/2007&l_LG=FR&BL=B&FLAG=AX) accessed 22 February 2011.
Packaging, Green Dot scheme	
<p>FOST Plus is the Belgian 'green dot' system coordinating and financing of selective collection of packaging waste across the country. Materials collected are:</p> <ul style="list-style-type: none"> • Glass: bottles and jars are collected, colour-sorted, in bottle banks*. Coverage: <ul style="list-style-type: none"> ○ 1 site/700 inhabitants, or ○ at least 1 site/400 inhabitants in intermunicipals with an average density less than 200 inhabitants / km². • Paper and cardboard: paper and cardboard packaging are collected door-to-door, together with scrap paper, newspapers and magazines*. Quantity: <ul style="list-style-type: none"> ○ paper / cardboard: maximum 1 m³ per collection; ○ with the exception of collections from schools and public collectivities, PMD: maximum 240 liters per collection. • PMD (plastic bottles and flasks, metallic packaging and drink cartons): collected door-to-door, in a transparent, light blue bag* <p>*and collection via container parks</p> <p>100% of authorities are covered by the scheme, made up of 3 regions, 35 contracts with intermunicipal authorities. 589 municipalities are concerned.</p> <p>VAL-I-PAC is the Belgian EPR system coordinating and financing the separate collection and treatment of non-municipal packaging waste across the country.</p>	
Year introduced	FOST Plus was founded in 1994 VAL-I-PAC was founded in 1997
Key Legislation	In Belgium, EC Directive 94/62/EC was transposed into national law as a Cooperation Agreement between the three Belgian regions. The law came into force on 5 March 1997. The revised Packaging Directive 2004/12/EC has been transposed in the renewed Cooperation Agreement of 4 November 2008 with effect from 1 January 2009.

Scope of the scheme	<p>The following materials are included: glass, paper/cardboard, drinks cartons, metal, plastic (and wood, which is only included as a non-household material).</p> <p>The Cooperation Agreement obliges parties responsible for packaging to comply with three legal obligations:</p> <ul style="list-style-type: none">• Take-back obligation, i.e. the obligation to recycle or recover a certain percentage of the packaging brought onto the market. As of 2009, this amounts to 80% recycling and 90% recovery (for household packaging waste).• Information obligation, i.e. the obligation to inform the Interregional Packaging Commission (IVCIE) of the nature of your packaging and the recycled percentages your company has achieved. Only then have you demonstrated that you have complied with the legal requirements.• Prevention plan, i.e. the obligation, every three years, to develop a prevention plan which describes the measures taken to reduce the quantity of packaging and the objectives the company wants to achieve. A company can draw up the prevention plan itself or subscribe to a prevention plan applicable to a particular sector through the professional federation. This obligation only applies to:<ul style="list-style-type: none">· Companies annually marketing at least 300 tons of single-use packaging· Each company packaging products or having them packaged in Belgium, with at least 100 tons of single-use packaging a year.																																								
Targets set for the scheme (including planned future targets)	<p>The Cooperation Agreement between the 3 political regions sets the following targets: at least 80% recycling, and at least 90% recovery of the materials covered. According to FOST Plus, 2009 performance is 93% recycling and 96.5% recovery. This equates to 116kg/inhabitant/year collected.</p> <p>The Cooperation Agreement also fixes minimum recycling levels by material to be reached for the entire Belgian territory. As from calendar year 2010 this figures are as follows. The last column contains the figures according to Fost Plus.</p> <table><tr><th>Minimum recycling targets - for the different packaging materials</th><th>Household %</th><th>Industrial %</th><th>Results 2008 % (source Fost Plus)</th></tr><tr><td>Glass</td><td>60</td><td></td><td>111.7</td></tr><tr><td>Paper/cardboard</td><td>60</td><td></td><td>122.6</td></tr><tr><td>Drinks cartons</td><td>60</td><td></td><td>77.5</td></tr><tr><td>Metal</td><td>50</td><td></td><td>98</td></tr><tr><td>Plastic</td><td>30</td><td></td><td>36.4</td></tr><tr><td>Wood</td><td></td><td>15</td><td>Not applicable</td></tr></table> <p>The Cooperation Agreement fixes minimum overall targets for recycling and recovery. As from calendar year 2010 this figures are as follows. The last column contains the figures according to Fost Plus.</p> <table><tr><th>Minimum overall targets</th><th>Household %</th><th>Industrial %</th><th>Results 2008 % (source Fost Plus)</th></tr><tr><td>Recycling</td><td>80</td><td>80</td><td>93</td></tr><tr><td>Recovery</td><td>90</td><td>85</td><td>96.6</td></tr></table>	Minimum recycling targets - for the different packaging materials	Household %	Industrial %	Results 2008 % (source Fost Plus)	Glass	60		111.7	Paper/cardboard	60		122.6	Drinks cartons	60		77.5	Metal	50		98	Plastic	30		36.4	Wood		15	Not applicable	Minimum overall targets	Household %	Industrial %	Results 2008 % (source Fost Plus)	Recycling	80	80	93	Recovery	90	85	96.6
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Principle	FOST Plus and VAL-I-PAC act as an interface between the various parties involved in the life cycle of packaging: producers, users, distributors, consumers, intermunicipals and local authorities, waste management companies, and recycling businesses.																																								

Level of payment to scheme	<p>The parties responsible for placing a product on the national market – producers, importers and distributors of private labels – finance the collection, sorting and recycling of the packaging waste. They delegate their legal responsibility to Fost Plus and finance the system via the Green Dot, depending on the composition and quantity of the packaging.</p> <p>2010 tariffs (excluding VAT):</p> <table> <tr> <td>Glass</td><td>18,40EUR/ton</td></tr> <tr> <td>Paper and cardboard (>85% fibre)</td><td>17,60EUR/ton</td></tr> <tr> <td>Steel (>50%)</td><td>37,60EUR/ton</td></tr> <tr> <td>Aluminium (>50%, >50µ)</td><td>137,90EUR/ton</td></tr> <tr> <td>PET bottles</td><td>199,40EUR/ton</td></tr> <tr> <td>HDPE bottles and flasks</td><td>199,40EUR/ton</td></tr> <tr> <td>Drinks cartons</td><td>272,80EUR/ton</td></tr> <tr> <td>Other recoverable</td><td>313,50EUR/ton</td></tr> <tr> <td>Other not recoverable</td><td>441,70EUR/ton</td></tr> </table>	Glass	18,40EUR/ton	Paper and cardboard (>85% fibre)	17,60EUR/ton	Steel (>50%)	37,60EUR/ton	Aluminium (>50%, >50µ)	137,90EUR/ton	PET bottles	199,40EUR/ton	HDPE bottles and flasks	199,40EUR/ton	Drinks cartons	272,80EUR/ton	Other recoverable	313,50EUR/ton	Other not recoverable	441,70EUR/ton
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Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	<p>1) 100% of costs for paper/cardboard (packaging), glass, plastic bottles and flasks, beverage cartons and metal packaging.</p> <p>2) some small additional waste flows: financial contribution</p> <p>3) to cover additional costs (up to 100%): annual tax of 0,50 EUR/inhabitant/year.</p>																		
Producer-led/funded or government-led/funded?	<p>FOST Plus was founded by major Belgian producers and importers of packaged products or packaging materials, distributors and trade organisations. It is accredited as an officially approved organisation for household packaging waste management. This accreditation is valid up to and including 2013.</p> <p>VAL-I-PAC has a similar origin and serves more than 8.000 companies. Companies can however choose to take care of their acceptance obligations for packaging waste themselves, and introduce a file proving their compliance of their own at the competent authority IVCIE.</p>																		
Problems encountered/ solutions found/ lessons learned from implementation	<p>* Importance of phased implementation of collection scheme.</p> <p>* Importance of uniform collection scheme, but with sufficient flexibility.</p>																		
Perceived costs (financial and administrative) of the instrument	<p>EUR/in terms of weight (Green Dot);</p> <p>This covers almost the full cost.</p>																		
Reference/source	<p>PRO-Europe website (http://www.pro-e.org/General_Information_3.html) accessed 22 February 2011.</p> <p>FOST Plus website (http://www.fostplus.be/Pages/default.aspx) accessed 23 February 2011.</p> <p>http://www.valipac.be</p>																		
Electrical and electronic equipment (EEE)																			
RECUPEL																			
Year introduced	<p>2001 (Flanders covenant)</p> <p>2002 (Walloon covenant)</p> <p>2002 (Brussels covenant)</p>																		
Key Legislation	<p>RECUPEL is a national not-for-profit organisation created in 2001 to organise the collection and treatment of WEEE throughout Belgium. RECUPEL was founded on the basis of the Flemish Decree on Waste Prevention and Management (VLAREA, 1997) and the Environmental Policy Agreement (MBO) - an agreement between the 3 regional governments and the industry sectors. Decrees regarding the collection and treatment of WEEE for the Walloon Region and the Brussels Capital Region followed in 2002.</p>																		

Scope of the scheme	<p>Covers all appliances in the scope of the WEEE Directive.</p> <p>Each manufacturer or importer has to join a system for WEEE collection and treatment. Alternatively, manufacturers or importers may establish an individual waste management plan and have it approved by the authorities.</p> <p>RECUPEL collaborates with commerce, local authorities, the inter-municipal authorities and reuse centres, as well as companies specialising in the transport and treatment of the appliances. It is financed by the charges paid according to whether the appliances are for domestic or professional use (see cost coverage).</p>
Targets set for the scheme (including planned future targets)	<p>Brussels and Walloon legislation : a legally defined collection target of 4 kgs per inhabitant / Flemish legislation : legal collection target = 7 kgs per inhabitant - According to the 2010 annual report of Recupel the following collection levels were achieved for domestic WEEE : 2007 – 7.7kgs/inhab; 2008 – 8.2kgs/inhab; 2009 – 9.3kgs/inhab; 2010 – 9.39 kgs/inhab</p> <p>Detailed recycling targets are included in the MBO cooperation agreement :</p> <p>Considering reuse and recycling of parts and materials:</p> <ul style="list-style-type: none"> • Ferrous metals : 95 % • Non-ferrous metals : 95 % • plastics : 50 % • batteries : 65 % <p>Considering recovery of parts and materials</p> <ul style="list-style-type: none"> • plastics : 80 % <p>Considering individual product categories, targets in weight %;</p> <ul style="list-style-type: none"> • reuse and recycling of parts and materials: <ul style="list-style-type: none"> ○ large household equipment and fluorescent tubes: 80 % ○ automates: 75 % ○ other equipment: 70 % • recovery of parts and materials: <ul style="list-style-type: none"> ○ large Household equipment : 85 % ○ automates: 80 % ○ IT and telecommunications equipment: 75 %
Principle	<p>Based on the legal background and the “MBO” there is the obligation:</p> <ul style="list-style-type: none"> • to organise separate collection of WEEE (for municipalities or municipalities working together), and to optimise the management of WEEE, • to include social economy undertakings in the collection of WEEE, • to take back a similar product when a new product is purchased (for retailers), and • to arrange an environmentally sound treatment of WEEE

Level of payment to scheme	<p>At point of purchase, consumers are charged a visible fee. Various appliance costs are detailed for each of the 10 current WEEE Directive categories. Below is a non-exhaustive list of charges from 2010, including VAT:</p> <ul style="list-style-type: none"> • Domestic fridges and freezers: 10EUR • Small domestic appliances: 0.05EUR • Domestic computer monitors: 0.50EUR • Domestic televisions: 1EUR • Lamps: 0.20EUR • Domestic garden appliances: 0.35EUR • Electronic toys: 0.10EUR • Medical devices: 0.40EUR • Domestic thermostats: 0.40EUR • Professional food vending machines: 0.50EUR
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	<p>Recupel states that the charges finance collection, separation, transportation and the treatment of appliances presented at waste recovery sites (civic amenity sites) and at shops at the time of purchase of a similar, new appliance. A part of the charges also cover Recupel communication and coordination costs (reporting, monitoring of companies, etc).</p> <p>Professional appliances are subject to an administrative charge at the time of their being put on the market. This administrative charge covers administrative costs for reporting. The costs for transport and treatment of these appliances is calculated when an appliance is handed in for treatment.</p> <p>The cost per appliance varies across the product groups and is calculated based on the average weight of the group of products, their components, percentage of appliances collected, type of treatment, product lifetime, and other parameters.</p>
Producer-led/funded or government-led/funded?	Producer-led and funded via charges at time of appliance purchase (domestic appliances) or at time of placing on the market (professional appliances).
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	Data on the Recupel system from the Recupel website (http://www.recupel.be/portal/page?_pageid=531,770792&_dad=portal&_schema=PORTAL) accessed on 22 February 2011.
End-of-life vehicles (ELV)	
Year introduced	1999

Key Legislation	<p>Take back obligation included in the Flemish VLAREA executive decision Based on the Flemish Covenant on end-of-life vehicles MBO (established in 1999, last updated in 2010). The control organism Febelauto reports every year about the evolution in management to comply with the purpose of the covenant. OVAM, the Flemish waste management authority, evaluates this report every year. OVAM, in turn, reports to the Flemish Parliament.</p> <p>Wallonia established a Covenant on end-of-life vehicles in 2004.</p>
Scope of the scheme	<p>Its activities include:</p> <ul style="list-style-type: none"> • Coordination: creation of an annual management plan in collaboration with the regions, including annual budgets and regional authority information • Monitoring: creation of a monitoring system on waste levels in order that authorities and the industry sector can verify the meeting of the annual management plan objectives • Certification: creation of reporting procedures for participating bodies in collaboration with the regions and approved centres • Awareness-raising: communication with members on treatment problems relating to ELVs; information campaign on the take-back obligation • Prevention: with the aim of reducing the use of hazardous substances and products in order to increase the recyclability of vehicles, a study on 'ecodesign' of vehicles was undertaken • Social: to organise and follow prevention and overall management of ELVs.
Targets set for the scheme (including planned future targets)	The scheme was created to deliver the objectives of the ELV Directive. Objectives: for 2006, 85% of ELVs treated to be recycled (80%) or recovered (5%), and 95% recycling and 10% recovery by 2015
Principle	The organisation was created to deliver ELV Directive targets, with related activities included. See scope of scheme.
Level of payment to scheme	Federations finance the monitoring body. According to the Febelauto website, vehicles that have reached the end of their lifetime need to be treated. This activity has a price, which is higher when environmentally aware treatment is systematically chosen. These costs should not (exclusively) be borne by the final owner of the car. No other details provided.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	Cost of collection, recycling and recovery are covered by the value of parts and materials.
Producer-led/funded or government-led/funded?	Producer-led and funded
Problems encountered/ solutions found/ lessons learned from implementation	

Perceived costs (financial and administrative) of the instrument	
Reference/source	Febelauto and its website (http://www.febelauto.be/)
Batteries	
Year introduced	The Federal Ecotax legislation of 16 July 1993 and its amendment on 7 March 1996 set the framework for the creation of BEBAT, the organisation charged with battery collection and recycling, on 21 August 1995. BEBAT has been active since 1 January 1996.
Key Legislation	Federal Ecotax law of 16 July 1993 Flanders Covenant on waste batteries (1998) Wallonia ecotax on batteries
Scope of the scheme	<p>BEBA is responsible for the collection and recovery of all types of used batteries, accumulators and pocket lamps/torches.</p> <p>Wallonia includes some exemptions in its 2010 waste plan:</p> <ul style="list-style-type: none"> • Batteries (piles de reference – need translation) used in medical devices in medical institutions, some industrial uses or if these are not meant to be easily replaced (e.g. car batteries) • Batteries subject to a deposit-return system or with a return refund • Batteries subject to a voluntary collection system or where the following recycling levels are achieved: <ul style="list-style-type: none"> ○ 1996 – 40% ○ 1997 – 50% ○ 1998 – 60% ○ 1999 – 67.5% ○ 2000 – 75%
Targets set for the scheme (including planned future targets)	<p>No targets detailed, but presumed to be those of the Batteries Directive. From 2011, these are based on minimum recycling efficiencies: 65% by average weight of lead-acid batteries and accumulators; 75% by average weight of nickel-cadmium batteries and accumulators; and 50% by average weight of other waste batteries and accumulators.</p> <p>BEBA website states a collection rate achieved of 50%. On the basis of used batteries available via the collection system, a system efficiency of 86% has been achieved. This is equivalent to 236gr/inhabitant for Belgium, making it a world leader.</p>
Principle	
Level of payment to scheme	At Federal level, the Ecotax law set an ecotax for batteries at 20BEF (0.50EUR) for all batteries. In order to finance the system, a collection and recycling charge to be paid by the consumer was set at 0,1239 EUR plus VAT per battery and 0,08EUR per pocket lamp/torch. All the batteries collected are required to undergo a treatment that conforms to legislation. The 3 regional laws on take-back have different requirements to the federal ecotax law.

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	Costs are covered by the federal ecotax and the collection and recycling charge.
Producer-led/funded or government-led/funded?	Led by government, funded by government, consumer and producer.
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	BEBAT website (http://bebat.be/pages/fr/main.html) accessed 23 February 2011.
Paper/cardboard Is collected in a mixed selection and consists of packaging and non-packaging. The amount of packaging waste in this waste stream is 25% in terms of weight; the other 75% in terms of weight is considered non-packaging. Fost Plus has a financial responsibility of 30% of the total weight that is collected in this mixed selection.	
Year introduced	Federal Ecotax law (1993) Federal packaging law (1997) requiring a minimum of 15% recycling of paper/cardboard packaging by 1997 Flanders covenant on paper waste from publicity press (1999) Flanders covenant on paper waste from the periodic press (1998, updated in 2009) Walloon covenant on paper recycling (1994)
Key Legislation	The Federal ecotax law introduced an ecotax on paper. Chlorine-bleached paper was subject to a 10BEF/kg tax, and non-chlorine-bleached paper was exempt. Uncoated papers were subject to the 10BEF/kg tax if their recycled content was below a certain percentage, and those papers meeting or exceeding this minimum level were exempt. In 1994, a central economic council was unanimous in recognising, after consultation with experts, that no acceptable method of control existed to be used as verification of the recycled content percentage or for the chlorine or non-chlorine bleaching. Requirements were changed so that the ecotax was linked to the levels of recycling of paper and cardboard, with exemptions made for those materials that achieved these levels. To the year 2000, these levels were 30% in 1997, 40% in 1998, 55% in 1999 and 70% from 2000 onwards.
Scope of the scheme	
Targets set for the scheme (including planned future targets)	See details in 'key legislation' section and in section on packaging.
Principle	
Level of payment to scheme	

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Government-led.
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	Wallonia Waste Plan: Horizon 2010
Other (if any)	
Flanders EPR scheme and Covenant on fluid waste photochemicals (2005) Flanders -- EPR scheme and Covenant on automotive batteries (2003; 2010) Flanders -- EPR scheme and Covenant on old and expired medicines (1985; 2008) Flanders -- EPR scheme and Covenant on waste frying oil and fat (2004) Flanders -- EPR scheme and Covenant on waste oils (2008) Flanders -- EPR scheme and Covenant on waste tyres (2000; 2010) Wallonia -- EPR scheme and Covenant on car batteries (2003; 2010) Wallonia -- EPR scheme and Covenant on fluid waste photochemicals (2004) - same website Wallonia -- EPR scheme and Covenant on waste tyres (2003; 2010) – same website	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	

Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	

2.6 Other interesting instruments

Subsidies to waste treatment facilities	
Principle (one/two lines describing the instrument)	
Structure of incentive (how is it applied and at what levels?)	Flanders does not grant subsidies for waste treatment facilities. The Walloon Region has always strongly subsidised the treatment facilities. However, the subsidy percentage for incinerating facilities is being reduced from 85% to 35% as of 2007. In the Brussels Region, all investments are being financed from the general environmental funds.
Scope (waste streams)	
Voluntary or mandatory/legislative ?	
Geographical coverage	
Target group (e.g. consumer, households, business, manufacturer)	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	"Market study of the final treatment of residual household waste and industrial waste similar to household waste in Flanders and neighbouring regions: a summary report" 2008 http://www.ovam.be/jahia/Jahia/cache/offonce/pid/176?actionReg=actionPubDetail&fileItem=1701
Energy-to-waste subsidies	
Principle (one/two lines describing the instrument)	
Structure of incentive (how is it applied and at what levels?)	Flanders issues green-energy certificates and WKK-certificates. These are both applicable to waste incinerating facilities for the renewable energy component part. Brussels region does not grant such subsidies. The Walloon Region has made this a point on its agenda.
Geographical coverage	Regional (Flanders)

Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	<p>"Market study of the final treatment of residual household waste and industrial waste similar to household waste in Flanders and neighbouring regions: a summary report" 2008</p> <p>http://www.ovam.be/jahia/Jahia/cache/offonce/pid/176?actionReq=actionPubDetail&fileItem=1701</p>

ECONOMIC INSTRUMENTS IN BULGARIA

3.1 Fees for Waste Disposal and Treatment

3.1.1 landfill fees (and Bans)

Fee for Landfilling	
Legislation / Date of introduction	<ul style="list-style-type: none"> - Ordinance No 7 on the requirements for sites determined for placing of waste treatment facilities (SG 81/17.09.2004) - Ordinance No 8 on the conditions and requirements for construction and operation of landfills and other facilities and installations for waste disposal and recovery (SG 83/24.09.2004).
Principle (one/two lines describing the instrument)	In Bulgaria landfills of waste is the primary method for waste disposal. Between 83 – 96 % of the total amount of the industrial non-hazardous waste and municipal waste generated were disposed by landfilling. The percentage of the wastes that are landfilled on specially engineered landfills operated by the enterprises remains constant at the rate of 95 %. The rest is disposed on landfills for municipal waste.
Current levels of tax, and tax structure	In 2009 the fee for landfilling was at 2 to 3 €/tonne. The costs of a compliant landfill were calculated to lie with 15 €/tonne. In order to also finance recycling and to deflect waste from being landfilled, the government discusses landfill fee at a level of 25 to 30 €/tonne waste.
Details of any exemptions	
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Reference/source	http://www.capital.bg/politika_i_ekonomika/bulgaria/2010/09/17/962285_otpaduci_sus_zakusnitel/http://www.dnevnik.bg/ekobiznes/2009/07/16/756752_zaradi_regionalnite_depa_taksite_smet_na_mesta_shte_se/
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	

Range of fees for landfilling (excluding landfill tax)	
Source of information	
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	There are no additional bans to those included in the Landfill Directive.
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	
Reference/source	http://www.moew.government.bg/recent_doc/legislation/waste/en/Regulation8_landfill.pdf

3.1.2 Incineration fees (and Bans)

According to CEWEP (2010) there was no waste incineration in Bulgaria in 2008.	
Date of introduction	
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Reference/source	CEWEP (2010): Waste-to-Energy in Europe in 2008. http://www.cewep.eu/media/www.cewep.eu/org/med_557/529_cewep_-_landfill_taxes_and_bans_7september2010_web.pdf

Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	
Source of information	
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	

3.2 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	At the end of 2006, organised collection of household waste covered 90% of the country's population. The share of the population charged variable fees is not known.

Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	<p>The mechanism for financing household waste management obligations of municipalities, provided by the Waste Management Act, is laid down in the Local Taxes Act (LTA). There is a 'household waste fee', paying for services such as collection, transportation and disposal of household waste in landfills or other facilities, and maintaining clean public areas in towns and villages; research, design and construction, maintenance, operation, closing and monitoring of household waste landfills or other installations or facilities for disposal of household waste. The fee is calculated separately for each service.</p> <p>Property owners, and in the event of established real right – by the holder, are charged fees according to costs for each service, approved by the municipal council.</p> <p>According the Local Taxes Act (LTA) every household pays household waste fees</p> <p>In principal base on the amount of household waste generated. Where the amount of household waste cannot be calculated, the fee is specified per user or proportionally on a basis defined by the municipal authority.</p> <p>The fee is set on an annual basis for each town or village by a decision of the municipal council, based on an approved expenditure plan for each service, including costs of household waste storage vessels – containers, buckets, etc., collection of household waste and transportation to landfills or other facilities or installations for their disposal; research, design and construction, maintenance, operation, closing and monitoring of household waste landfills or other installations or facilities for disposal of household waste, and cleaning of streets, squares, alleys, parks, and other public areas.</p>
Reference/source	Bulgarian waste management plan 2009-2013
Location of scheme (municipality where it is used)	
Nature of scheme	
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	<p>The maximum frequency of collection is once every 2 weeks</p> <p>The municipality also provides:</p> <p>A food waste collection twice a week in small buckets</p> <p>A weekly collection of plastic and cans in 60l sacks</p> <p>A fortnightly collection of paper and card in a 140l bin</p> <p>There is a dense network of 'bring sites' for the collection of glass containers</p> <p>The owner of a building or a plot is obliged to pay a waste-collecting fees. These are different in value and depend on the size of populated area and its situation in the country.</p> <p>Charges related to the value of property are in the range of 0.1- 0.4 per cent annually.</p>
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Reference/source	

3.3 Producer responsibility systems

Packaging, Product tax for packaging	
Date of introduction	2004
Principle (one/two lines describing the instrument)	<p>The product tax for packaging was established in Council of Ministers Decree No 1/2004. The funds raised are spent pursuant to article 35, paragraph 3 of the Bulgarian waste management act (WMA).</p> <p>Any person who puts products on the market generating widespread waste must pay a product tax, for which the amount and procedure for application are defined in a decree of the Council of Ministers.</p> <p>Product taxes are not due in cases when the respective persons prove to the Minister of Environment and Water that they fulfil their obligations for separate collection and recovery of waste under regulations pursuant to article 24, paragraph 2 of WMA.</p> <p>The WMA allows persons who put on the market products generating widespread waste, to fulfil their obligations:</p> <ul style="list-style-type: none"> -individually – organised by the respective person Individual fulfilment of obligations – the respective producer/importer independently organises and funds the fulfilment of his obligations for separate collection and recovery of waste, generated after use of products supplied to the market. -by a collective scheme - Producers and importers participate in a collective scheme for carrying out their obligations. The collective scheme is represented by a Recovery organisation, where each producer/importer pays a contribution towards the total amount, proportionate to the quantity of products supplied to the market. These funds are spent on the separate collection, recycling, recovery and disposal of waste, generated by the use of respective products; -by paying a product tax to an EMEPA account - Producers and importers of products whose use results in common waste pay product taxes which are directed to EMEPA and spent on treatment and transportation of waste, generated by these products.
Scope of the tax	
Current levels of tax, and tax structure	
Details of any exemptions	
How has the tax changed over time?	
Plans for future levels of the tax	
Reference/sourc	Bulgarian waste management plan 2009-2013
Year introduced	
Key Legislation	

Targets set for the scheme (including planned future targets)	
Scope of scheme	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Packaging, Green Dot scheme	
ECOPACK BULGARIA JSC	
Year introduced	2004
Key Legislation	The Ordinance on Packaging and Packaging Waste and the Waste Management Act (WMA) oblige all producers or importers of packaged goods to collect, recycle and recover their packaging waste
Scope of the scheme	The gradual introduction of the system for separate packaging waste collection in the municipalities took place in 2003, funded by EMEPA and organisations for use of packaging waste.
Targets set for the scheme (including planned future targets)	<p>The targets are quantitative. They are determined in the Waste Management Act as a percentage of the total quantity of packaging waste generated.</p> <p>Targets</p> <p>2009: Recovery 46 %, Recycling 45 %, Specific Targets by Materials: 17% plastics, 46% glass, 60% paper, 50% metals, 15% timber</p> <p>2010: Recovery 48 %, Recycling 47 %, Specific Targets by Materials: 19% plastics, 51% glass, 60% paper, 50% metals, 15% timber</p> <p>2009: Recovery 50 %, Recycling 49 %, Specific Targets by Materials: 20% plastics, 55% glass, 60% paper, 50% metals, 15% timber</p> <p>In 2006 the recovery target of all packages on the market was 35 weighted percent and the recycling target – 34%. In addition to the overall national recovery and recycling targets, there are differentiated targets, respectively: paper - 15%, glass – 26%, metal – 15% and plastics - 8%.</p>

Principle	Producers and importers have obligation to achieve targets for recycling and recovery of packaging waste generated in result of the use of the produced/imported goods.																				
Level of payment to scheme	<p>The relationships between producers/importers and ECOPACK BULGARIA are regulated by a contract. The amount of the remuneration covers only the costs of the company in connection with organization, administration and reporting of the collection, recovery and recycling of the packaging waste, implementation of information and communication campaigns to promote responsible attitude towards separate collection and recycling.</p> <p>Tariff for determining the unit amount of the recovery installment</p> <table> <tr> <th>Packing Material</th><th>Unit amount of the installment [€/kg]</th></tr> <tr> <td>Plastics</td><td>0.13</td></tr> <tr> <td>Paper, cardboard and corrugated cardboard</td><td>0.08</td></tr> <tr> <td>Beverage cartons</td><td>0.15</td></tr> <tr> <td>Metals</td><td>0.03</td></tr> <tr> <td>Aluminum</td><td>0.10</td></tr> <tr> <td>Glass</td><td>0.04</td></tr> <tr> <td>Composite materials</td><td>0.15</td></tr> <tr> <td>Timber</td><td>0.05</td></tr> <tr> <td>Other</td><td>0.18</td></tr> </table> <p>The minimum tariff for a one-time annual instalment for companies that place up to 10 tons packaging on the market is 75 €.</p>	Packing Material	Unit amount of the installment [€/kg]	Plastics	0.13	Paper, cardboard and corrugated cardboard	0.08	Beverage cartons	0.15	Metals	0.03	Aluminum	0.10	Glass	0.04	Composite materials	0.15	Timber	0.05	Other	0.18
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Other	0.18																				
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?																					
Producer-led/funded or government-led/funded?																					
Reference/source	http://www.pro-e.org/Select_your_country1.html																				
Electrical and electronic equipment (EEE)																					
Ecobultech and ELTECH Resource (Recovery organisations)																					
Year introduced	2006																				
Key Legislation	Regulation on placing electrical and electronic equipment on the market and treatment and transportation of waste electrical and electronic equipment																				
Scope of the scheme																					

Targets set for the scheme (including planned future targets)	Targets for reuse, recovery, and recycling		
	Waste electrical and electronic equipment	Minimum recovery rate (%)	Minimum reuse and recycling rate (%)
	Category 1. Large household equipment and Category 10. Automatic dispenser	80	75
	Category 3. Computer and telecommunication equipment and Category 4. Consumer appliances	75	65
	Category 2. Small household equipment, Category 5. Lighting equipment, Category 6. Electrical and electronic tools Category 7. Toys, leisure and sports equipment and Category 9. Monitoring and control equipment	70	50
	Gas-discharge lamps	80	80
Principle	In 2007 five programmes for individual fulfilment of obligations were approved. The most widespread method for separate collection of WEEE from households is through collection sites, to which waste equipment is submitted by holders. Since collection is centralised, large quantities of WEEE from different sources are collected on the site, which makes this method the most economically efficient one.		
Level of payment to scheme			
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?			
Producer-led/funded or government-led/funded?			
Reference/source	http://eltechresource.com/?cid=24		
End-of-life vehicles (ELV)			
Avtoecobul and Ecobulcar			
Year introduced	2004		
Key Legislation	Regulation on treatment of end-of-life vehicles		
Scope of the scheme	System for environmentally sound collection, reuse, recovery, and recycling		

Targets set for the scheme (including planned future targets)	Targets for recycling, reuse and recovery of ELV waste		
		Minimum quantity	Minimum quantity
	Year	reuse and recovery (%)	reuse and recycling (%)
	2009	88	81
	2010	89	82
	2011	90	82
	2012	91	83
	2013	93	84
Principle	<p>The Regulation on treatment of ELV waste provides for the practical implementation of the producer responsibility principle, enabling producers and sellers of motor vehicles to participate in the ELV treatment process.</p> <p>The Regulation on treatment of ELV waste provides for the practical implementation of the producer responsibility principle, enabling producers and sellers of motor vehicles to participate in the ELV treatment process.</p> <p>So far permits have been issued to two ELV waste recovery organisations – Avtoecobul and Ecobulcar. Funding of operations comes from the collected licenses.</p> <p>Dismantling centres remove hazardous substances and components, as well as parts and components of ELV, suitable for reuse. Waste generated from the dismantling of ELV is sent to facilities for further treatment – recycling, recovery, and for certain wastes – disposal.</p>		
Level of payment to scheme	AVTOECOBUL JSC released its members, the importers of motor vehicles from paying product fee to Enterprise management activities environment, assuming full obligations for collection and recovery of vehicles.		
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?			
Producer-led/funded or government-led/funded?			
Reference/source	http://avtoecobul.com/new/?page=about&id=&slang=2 http://ecobulcar.com/?cid=65		
Batteries (Waste Batteries and Accumulators WBA)			
Separate collection and recycling obligation for battery introducers			
Year introduced	2005		
Key Legislation	Regulation on sale of batteries and accumulators, treatment and transportation of waste batteries and accumulators		
Scope of the scheme			

Targets set for the scheme (including planned future targets)	In 2006, the collected and treated quantities are from lead-acid and nickel-cadmium batteries and accumulators. Quantitative data for pre-treated lead-acid automobile batteries and accumulators for 2006 show that 97% of the collected lead-acid automobile batteries and accumulators are pretreated, and 81% are recycled. About 96% of all materials, generated by pretreatment, are recycled. The entire quantity of lead, generated by pretreatment of lead-acid batteries and accumulators, was recycled.
Principle	The Regulation introduced an obligation for entities selling batteries and accumulators which generate common waste to achieve certain quantitative targets for separate collection, recycling and/or recovery of waste batteries and accumulators.
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	So far there are no issued licenses to recovery organisations under the Waste Management Act. The only company which fulfils its obligations individually is Monbat PLC, which produces lead-acid accumulators. The Republic of Bulgaria has a system for collection of waste lead-acid batteries and accumulators. So far there are around 400 sites in the country for collection and temporary storage of WBA, which collect mainly waste lead-acid batteries and accumulators. Licenses for recycling and reuse of lead-acid batteries and accumulators are issued to Monbat Montana, KCM Plovdiv, and LZC Kardzhali. These facilities have sufficient capacity for recycling of waste lead-acid batteries and accumulators in the country.
Producer-led/funded or government-led/funded?	
Reference/sourc	Bulgarian waste management plan 2009-2013
Paper/cardboard	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Other (if any)	
Product tax	
Year introduced	2004
Key Legislation	
Scope of the scheme	The approach to funding waste management is based on the 'polluter pays' principle
Targets set for the scheme (including planned future targets)	
Principle	<p>Any person who puts on the market products generating widespread waste must pay a product tax, for which the amount and procedure for application are defined in a decree of the Council of Ministers.</p> <p>Product taxes are not due in cases when the respective persons prove to the Minister of Environment and Water that they fulfil their obligations for separate collection and recovery of waste under regulations pursuant to article 24, paragraph 2 of WMA.</p> <p>WMA allows persons who put on the market products generating widespread waste, to fulfil their obligations:</p> <ul style="list-style-type: none"> -individually – organised by the respective person; -by a collective scheme; or -by paying a product tax to an EMEPA account. <p>The collective system is represented by a recovery organisation, holding a permit, issued following the procedure under Chapter Five, section IV of WMA. Persons who are parties to a contract with a recovery organisation are considered responsible through a collective scheme. Persons, who fulfil their obligations individually, ensure achievement of the planned targets at their own expense. The achievement of targets is proved before the Minister of Environment and Water.</p>
Level of payment to scheme	

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Planned future schemes (if any)	
Tax on plastic bag	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	Bulgaria's Ministry of Environment has made a proposal to limit the use of plastic bags in the country. A tax on polyethelene bags, announced in the first week of January by the Bulgarian Polymer Association (BAP), is expected to come into effect from July 1, 2011.
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	As a result of the tax, plastic bags will become approximately three times more expensive by 2014, thus allowing the possibility for more environmental friendly alternatives to replace them in the market. "Retailers will most likely cease the use of plastic bags by July and add the tax to the price of their products, which will then be passed on to end users," argued BAP Deputy Chairman Tsvetanka Todorova. Recent reports show that Bulgaria, compared to other countries, consumes a proportionately high rate of plastic bags. According to the data from the National Statistics Institute, Bulgaria produced 8,019 tonnes of plastic packaging (or 263 bags per capita) in 2007, compared to just 65 in Germany.
Producer-led/funded or government-led/funded?	
Reference/source	http://www.wtert.eu/Default.asp?Menuue=18&NewsPPV=10040

3.4 Other interesting instruments

e.g. Landfill Allowance Schemes	
Principle (one/two lines describing the instrument)	
Structure of incentive (how is it applied and at what levels?)	
Scope (waste streams)	
Voluntary or mandatory/legislative?	
Geographical coverage	
Target group (e.g. consumer, households, business, manufacturer)	
Reference/source	

ECONOMIC INSTRUMENTS IN CYPRUS

4.1 Fees for Waste Disposal and Treatment

4.1.1 landfill fees (and Bans)

Landfill fee	
Date of introduction	
Principle (one/two lines describing the instrument)	According to the Strategic Waste Management Plan of Cyprus from 2005 a landfilling fee corresponding to the amount of waste landfilled maybe set by local authorities. The landfill fee shall be on a cost covering level.
Current levels of tax, and tax structure	The landfill fee is part of the waste management fee which has to paid by private households. The base of the fee is either the number of persons per household or the square meter floor area of the household. Each local authority has its own tax structure and tax policy. Generally the waste management fee may vary from €50 (small Communities) to €250 (big Municipalities) per household per year. Due to the fact that the landfills of Lemesos and Lefkosia are not constructed according to the directive 99/31/EC, the level of fee in these districts may vary from €50 to €150 per household per year. Although the landfill of Paphos District is constructed according to the directive 99/31/EC the same fee level is valid In Paphos District. Because of the operation of the Integrated Domestic Waste Management Plant operated at the District in Larnaca-Ammochostos the fee level may vary from €120 to €250 per household per year since all Local Authorities are obliged to take their municipal waste there.
Details of any exemptions	-
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	-
How has the tax changed over time?	The fee has increased over the years due to the more strict regulations regarding landfilling municipal waste and the operation of Integrated Domestic Waste Management Plant in Larnaca-Ammochostos District.
Extent of geographical coverage	The regulation is vaild in total Cyprus except for the area controlled by Turkish troops since 1974.
Plans for future levels of the tax	It is anticipated the fees to be increased in the next years due to the operation of the other three Integrated Domestic Waste Management Plants in Lefkosia, Lemesos, and Paphos Districts

Reference/source	http://www.cyprus.gov.cy/moa/agriculture.nsf/index_en/index_en?OpenDocument Republic of Cyprus (2005): Strategic Waste Management Plan Cyprus. Chapter 9 of Solid and Hazardous Waste Law. www.ucm.org.cy/Depository/Document/556/Document_556_File.doc Regulations for landfill, PI 562/2003: http://www.cyprus.gov.cy/moa/agriculture.nsf/legislation_gr/
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for landfilling (excluding landfill tax)	Since June 2010 the Integrated Domestic Waste Management Plant in Larnaca-Ammochostos District which includes a Reside Sanitary Landfill (Landfill Site) is under operation. Since the residual waste is a product coming off the final stage of the treatment process, there is no gate fee. However the gate fee for green waste is €46 per tonne, for mixed municipal waste is €56 per tonne, for recycling waste €80 per tonne and for bulky waste €100 per tonne. The gate fees were set according to Plant operation costs.
Source of information	Ministry of Interior
Do sources give any explanation for key factors explaining variation?	
Excise tax on mineral waste	
Date of introduction	
Principle (one/two lines describing the instrument)	According to the Strategic Waste Management Plan of Cyprus from 2005 an excise tax on the landfilling of construction and demolition waste, excavation and road construction waste was planned.
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	

Reference/source	Republic of Cyprus (2005): Strategic Waste Management Plan Cyprus. Chapter 9 of Solid and Hazardous Waste Law. www.ucm.org.cy/Depository/Document/556/Document_556_File.doc
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for landfilling (excluding landfill tax)	
Source of information	
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	

4.1.2 Incineration fees (and Bans)

Incineration	
Date of introduction	
Principle (one/two lines describing the instrument)	<p>The Strategic Waste Management Plan Cyprus proposes a fee from waste owners feedubg their waste to thermal treatment units. The fee is determined by the competent authorities and will escalate according to the quantities produced.</p> <p>Up to now, there, however, seems to be only a infectious hospital waste incineration plant which had been build in the period 1999 to 2002 for 7.3 million €.</p>
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	

Extent of geographical coverage	
Plans for future levels of the tax	
Reference/source	Republic of Cyprus (2005): Strategic Waste Management Plan Cyprus. Chapter 9 of Solid and Hazardous Waste Law. www.ucm.org.cy/Depository/Document/556/Document_556_File.doc http://www.helector.gr/index.php?option=com_content&view=article&id=46&Itemid=43&lang=el
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	
Source of information	
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	

4.2 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	0
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	0
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	The collection and transportation of household waste for further management is the responsibility of local authorities and citizens have to pay a fee for the disposal of waste. At this stage, the monetary charge is fixed, depending on the surface of each house. The charge is independent of the waste quantities produced. The charge is paid as an annual lump sum.

Reference/source	Republic of Cyprus (2005): Strategic Waste Management Plan Cyprus. Chapter 9 of Solid and Hazardous Waste Law. www.ucm.org.cy/Depository/Document/556/Document_556_File.doc
Location of scheme (municipality where it is used)	
Nature of scheme	
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Reference/source	

4.3 Producer responsibility systems

Packaging, Taxes	
Date of introduction	2006 – Fees introduced by Green Dot Cyprus.
Principle (one/two lines describing the instrument)	Producers are obliged to pay fees per packaging material (household and commercial) according to the quantities of packaging they put on the market each year (€/t).
Scope of the tax	Fees are collected in order to set up and organize the collective scheme.
Current levels of tax, and tax structure	For household packaging waste: <ul style="list-style-type: none"> - Glass - € 29.06/t - Paper - € 47.14/t - Ferrous metal - € 95.39/t - Non-Ferrous metal - € 21.38/t - Plastic (PET, HDPE) - € 105.89/t - Tetrapack - € 122.75/t - Other - € 131.05/t
Details of any exemptions	Producers who put on the market less than 5 t/y of packaging waste are exempted from the obligation to participate in a collective or individual scheme.
How has the tax changed over time?	From 2006, the fees have been increased twice (15% increase each time).
Plans for future levels of the tax	There will be re-evaluation of the fees in 2012.
Reference/source	www.moa.gov.cy www.greendot.com.cy
Packaging, Deposit refunds	
[Name of existing scheme]	
Year introduced	- (No deposit refund system has been introduced until now. It is not obligatory)
Key Legislation	Producers' responsibility Regulations (ΚΔΠ 747/2003)

Targets set for the scheme (including planned future targets)	-
Scope of scheme	-
Principle	-
Level of payment to scheme	-
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	-
Producer-led/funded or government-led/funded?	-
Reference/source	www.moa.gov.cy
Packaging, Green Dot scheme	
Green Dot Cyprus	
Year introduced	2006
Key Legislation	Packaging Waste Act 32 (I) 2002
Scope of the scheme	The System manages both household and commercial/industrial packaging in order to fulfil their obligations according to relevant legislation. About 800 producers participated in Green Dot Cyprus System during 2010.
Targets set for the scheme (including planned future targets)	<p>According also to the Law, until the 31st of December 2012 the Company should accomplish the following quantitative targets for its shareholders and members:</p> <ul style="list-style-type: none"> a) recover or incinerate in waste incineration facilities for energy recovery, at least 60% of the weight of packaging waste, b) recycle between 55% as a minimum and 80% as a maximum of the weight of the packaging waste, and c) recycle, the following materials that are included in packaging waste: <ul style="list-style-type: none"> (i) 60% of the weight of glass (ii) 60% of the weight for paper and cardboard (iii) 50% of the weight of metal (iv) 22,5% of the weight of plastic, taking under consideration material which can be recycled into plastic (v) 15% of the weight of wood.
Principle	<p><u>Producer Responsibility</u></p> <p>The packaging responsible organisations that join the System as members are responsible for financing the System. Large companies that introduce packaging to the market have joined the System as shareholders and have provided initial financing through their share capital contributions and through temporary borrowing of funds to the System. In the longer term packaging responsables declare the package they place in the market and they pay packaging fees according to the fee catalogue of the System.</p>

Level of payment to scheme	For household packaging waste: <ul style="list-style-type: none"> - Glass - € 29.06/t - Paper - € 47.14/t - Ferrous metal - € 95.39/t - Non-Ferrous metal - € 21.38/t - Plastic (PET, HDPE) - € 105.89/t - Tetrapack - € 122.75/t - Other - € 131.05/t
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	The scheme should cover all the costs for collection, recycling and recovery of packaging waste representing its members.
Producer-led/funded or government-led/funded?	Funded by packaging waste producers. Government funds education/information programme for the period 2009-11.
Reference/source	www.moa.gov.cy www.greendot.com.cy http://www.pro-e.org/cyprus1.htm
Electrical and electronic equipment (EEE)	
WEEE Electrocyclosis Cyprus Ltd + Fee on EEE	
Year introduced	2009
Key Legislation	ΚΔΠ 668/2004 and Ν.215(Ι)/2002 enforcing 2002/96/EC and 2006/12/EC respectively.
Scope of the scheme	Green Dot Cyprus has undertaken over the last two years to manage also (on a management contract basis) a collective scheme to fulfil the obligations of WEEE producers on behalf of the company WEEE Electrocyclosis Cyprus Ltd. The WEEE Regulations (KDP 668/2004) propose a fee to be paid by the WEEE producers (majority are importers of EEE). The amount of the fee is to cover the costs to create Public Awareness concerning the need of separate collection and environmentally sound treatment of WEEE, to collect and treat WEEE.
Targets set for the scheme (including planned future targets)	<ul style="list-style-type: none"> - to collect at least 4 kg of electronic and electrical equipment per capita annually (about 3000 t/y) - achieve recycling and reuse targets according to directive 2002/96/EC.
Principle	Producer Responsibility
Level of payment to scheme	Large Equipment (>50cm) - € 84.51/t. Small Equipment (<50cm) - € 142.74/t. Lamps - € 517.91/t. Fridges - € 236.55/t. Cathode ray tube monitors - € 249.28/t.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	Through their approvals, collective and/or individual schemes are obliged to cover all of the costs of collection, recycling and recovery.
Producer-led/funded or government-led/funded?	Funded by EEE importers (WEEE producers).

Reference/source	http://www.moa.gov.cy http://www.electrocyclosis.com.cy http://www.pro-e.org/cyprus1.htm http://www.greendot.com.cy/default_gr.aspx Republic of Cyprus (2005): Strategic Waste Management Plan Cyprus. Chapter 9 of Solid and Hazardous Waste Law. www.ucm.org.cy/Depository/Document/556/Document_556_File.doc
End-of-life vehicles (ELV)	
[Name of existing scheme]	
Year introduced	ELV management is regulated by national legislation from 2004, but no producer responsibility based system exists.
Key Legislation	ELVs Law 157(I)/2003 enforcing EU Directive 2000/53/EC.
Scope of the scheme	-
Targets set for the scheme (including planned future targets)	Treatment facilities licensed under the Waste Management Law (215(I)/2002) are responsible to achieve recycling and reuse targets set up in EU Directive 2000/53/EC
Principle	-
Level of payment to scheme	-
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	-
Producer-led/funded or government-led/funded?	-
Reference/source	www.mcw.gov.cy/ems - Electromechanical Services of the Republic of Cyprus www.moa.gov.cy – Ministry of Agriculture, Natural Resources Republic of Cyprus (2005): Strategic Waste Management Plan Cyprus. Chapter 9 of Solid and Hazardous Waste Law. www.ucm.org.cy/Depository/Document/556/Document_556_File.doc
Batteries	
Battery return scheme and treatment fee	
Year introduced	2009
Key Legislation	KΔΠ 125/2009 and N.215(I)/2002 enforcing 2006/66/EC and 2006/12/EC respectively.
Scope of the scheme	<p>Green Dot Cyprus has undertaken over the last two years to manage also (on a management contract basis) a collective scheme to fulfil the obligations of portable batteries producers on behalf of the company AFIS Cyprus Ltd. In that sense, Green Dot Cyprus has become a one stop shop for local companies for their compliance needs.</p> <p>The battery Regulations (KΔΠ 125/2009) propose a fee to be paid by the portable batteries producers (majority are importers of batteries). The amount of the fee is to cover the costs to create Public Awareness concerning the need of separate collection and environmentally sound treatment of waste batteries and to collect and treat waste batteries.</p>
Targets set for the scheme (including planned future targets)	<ul style="list-style-type: none"> - 25% recycling of portable batteries put on the Market until 26/9/2012. - 45% recycling of portable batteries put on the Market until 26/9/2016. - Achieve recycling efficiencies set up in EU Directive 2006/66/EC.
Principle	Producer Responsibility

Level of payment to scheme	<p>Non-Rechargeable Batteries</p> <ul style="list-style-type: none"> - Up to 5 gr (Button cells) - € 0.02/item. - 6 – 30 gr (AA, AAA, etc) - € 0.04/item. - 31 – 150 gr (C, D, 4.5V, 9V, F22, etc) - € 0.08/item. - 151 – 2000 gr - € 0.40/item. <p>Rechargeable Batteries</p> <ul style="list-style-type: none"> - Up to 150 gr (AA, AAA, C, D 9V, etc) - € 0.10/item. - 151 – 2000 gr - € 0.40/item.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	Through their approvals, collective and/or individual schemes are obliged to cover all of the costs of collection, recycling and recovery.
Producer-led/funded or government-led/funded?	Funded by portable batteries importers (waste batteries producers). Car batteries are collected by licensed collectors free of charge and sent to recovery facilities abroad according to EU Regulation 1013/2006/EC.
Reference/source	www.moa.gov.cy www.afiscyprus.com.cy Republic of Cyprus (2005): Strategic Waste Management Plan Cyprus. Chapter 9 of Solid and Hazardous Waste Law. www.ucm.org.cy/Depository/Document/556/Document_556_File.doc
Paper/cardboard	
[Name of existing scheme]	
Year introduced	2006
Key Legislation	Packaging Waste Act 32(I)/2002
Scope of the scheme	To fulfil obligations of waste producers deriving from relevant legislation.
Targets set for the scheme (including planned future targets)	By the 31 st of December 2012 producers should achieve 60% recycling of the weight of paper & cardboard.
Principle	Producer Responsibility
Level of payment to scheme	For household packaging waste: <ul style="list-style-type: none"> - Paper - € 47.14/t -
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	The scheme should cover all the costs for collection, recycling and recovery of packaging waste representing its members.
Producer-led/funded or government-led/funded?	Funded by packaging waste producers. Government funds education/information programme for the period 2009-11.
Reference/source	www.moa.gov.cy www.greendot.com.cy http://www.pro-e.org/cyprus1.htm
Other (if any)	
"Polluter pays" and "producer responsibility for motor oils"	

Year introduced	Legislation introduced in 2002 but until now no collective or individual schemes based on the producer responsibility were set up.
Key Legislation	Motor Oils, PCBs and PCTs: Discarding of used machine oil and PCBs / PCTs are regulated by the Law on the Control of Pollution of Water and Soil (Law 106 (I) / 2002). Specific regulations for their management (Regulations of Used Motor Oils (PI 637/2002)) and Regulations for PCBs and PCTs (KDP. 636/2002)) have been issued. They adopt the "polluter pays" principles and "producer responsibility" in the system for collecting, storing, transporting and processing spent motor oils, PCBs and PCTs.
Scope of the scheme	-
Targets set for the scheme (including planned future targets)	-
Principle	The producer/end user (garages, petrol stations) are obliged to deliver used oils to licensed waste collectors according to Waste Management Law (N.215(I)/2002).
Level of payment to scheme	-
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	-
Producer-led/funded or government-led/funded?	Licensed collectors collect used oils free of charge.
Reference/source	www.moa.gov.cy
Planned future schemes (if any)	
Take back system for / levy on tyres	
Year introduced	2011
Key Legislation	ΚΑΠ 61/2011 regulations for used tires.
Scope of the scheme	To define producer responsibility in order to ensure the collection and environmentally sound treatment of used tires.
Targets set for the scheme (including planned future targets)	<ul style="list-style-type: none"> - 75% recovery of tires put in market until 31/12/2012. - 90% recovery of tires put in market until 31/12/2015.
Principle	Producer Responsibility.
Level of payment to scheme	About € 120/t.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	The scheme should cover all the costs for collection, recycling and recovery of packaging waste representing its members.
Producer-led/funded or government-led/funded?	Funded by new tires importers (used tires producers).
Reference/source	www.moa.gov.cy http://www.parliament.cy/parliamentgr/008_05e/008_05_3265.htm Republic of Cyprus (2005): Strategic Waste Management Plan Cyprus. Chapter 9 of Solid and Hazardous Waste Law. www.ucm.org.cy/Depository/Document/556/Document_556_File.doc

4.4 Other interesting instruments

Fund for the promotion of packaging waste recycling	
Principle (one/two lines describing the instrument)	A national recycling fund ("de minimis") was given to 12 recycling companies (€98.000 each) in 2004. In the period 2006-8, the Government organized a recycling project where 17 Municipalities/Communities participated in order to collect and environmentally sound treat packaging waste. The aim was to increase recycling rates and to provide the opportunity for cooperating parties (local authorities, packaging waste collectors, recyclers, the public, government authorities) to prepare adequately for the full implementation of the law on packaging and packaging waste (Law 32 (I) / 2002).
Structure of incentive (how is it applied and at what levels?)	<ul style="list-style-type: none"> - Recycling companies were able to invest funds in new machinery in order to improve recycling efficiency. - The national recycling programme mainly aimed to educate people, promoting in this way separate collection and recycling in order to achieve national targets.
Scope (waste streams)	Packaging waste
Voluntary or mandatory/legislative?	-
Geographical coverage	National.
Target group (e.g. consumer, households, business, manufacturer)	End users, local authorities and waste management companies
Reference/source	www.moa.gov.cy

Excise tax on primary construction materials	
Principle (one/two lines describing the instrument)	According to the Strategic Waste Management Plan of Cyprus from 2005 an excise tax on the landfilling of construction and demolition waste, excavation and road construction waste was planned.
Structure of incentive (how is it applied and at what levels?)	
Scope (waste streams)	Construction and demolition waste
Voluntary or mandatory/legislative?	
Geographical coverage	National
Target group (e.g. consumer, households, business, manufacturer)	Construction companies and infrastructure developers
Reference/source	Republic of Cyprus (2005): Strategic Waste Management Plan Cyprus. Chapter 9 of Solid and Hazardous Waste Law. www.ucm.org.cy/Depository/Document/556/Document_556_File.doc

ECONOMIC INSTRUMENTS IN CZECH REPUBLIC

5.5 Fees for Waste Disposal and Treatment

5.5.1 landfill fees (and Bans)

Charges for waste disposal in landfills	
Date of introduction	1992
Principle (one/two lines describing the instrument)	The Act 185/2001 transposes EU legislation on waste management. It promotes the prevention of waste disposal and especially hazardous materials and the overall reduction of their quantity.
Current levels of tax, and tax structure	Landfill fees- municipal and other waste – 20,50 Euros/ tonne Landfill fees– Hazardous waste – 70,00 Euros/ tonne Risk component (payable to the Czech Environmental Fund) – Hazardous waste – 185 Euros / tonne
Details of any exemptions	Exemptions include: Carcasses of animals (others than being slaughtered), radioactive waste, waste of plastic explosives, excavated sediments from water reservoirs and river beds, soils and other natural material excavated during construction activities and others.
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	Local fees are charged for collection, transport, sorting and disposal of municipal waste. Approximately 10 Euros are charged per person per year. An additional amount is charged which is determined based on actual costs in the respective location for collection and transport of unsorted municipal waste.
How has the tax changed over time?	
Extent of geographical coverage	National coverage
Plans for future levels of the tax	61 Euros/ tonne in 2013.
Reference/source	CENIA, Czech Environmental Information Agency, http://www.cenia.cz/web/www/web-pub2.nsf/\$pid/CENMSFV3DEIF/\$FILE/poplatky_a_dane_CR.pdf
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for landfilling (excluding landfill tax)	No information found
Source of information	CENIA, Czech Environmental Information Agency, http://www.cenia.cz/web/www/web-pub2.nsf/\$pid/CENMSFV3DEIF/\$FILE/poplatky_a_dane_CR.pdf
Do sources give any explanation for key factors explaining variation?	Maximum fees are determined by estimating the costs resulting in a community for the management of municipal waste and also by the number of individual taxpayers and the volume of the containers for storing waste per individual property or the number of dwellings.
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	

(Means of implementation)	
Plans for future bans (if any)	

5.5.2 Incineration fees (and Bans)

Incineration taxes	
Date of introduction	Not introduced yet.
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	The application of an incineration fee is being considered that could gradually increase up to 12 Euros/ tonnes.
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Reference/source	Jan Nitrogen, Czech ministry of Environment, http://www.enviweb.cz/clanek/paragraf/71505/dopady-pripravovane-novely-zakona-o-odpadech
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	
Source of information	
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	

5.6 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	In 2001 from a total of 162 municipalities, 4 of applied "pure PAYT" to calculate payments made by households. A "combined system" was used by 94 of the 162 municipalities that can be characterised as PAYT (depending on the degree of participation from the waste producers). A number of 64 municipalities used "non-PAYT" system. In 2002 only 1 municipality applied a "pure PAYT" 24 a "combined system" due to the change in legislation.
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	A change in the Czech legislation on waste, obliged municipalities to shift from variable charges to a flat fee per capita. The legislation changed again, and allowed the municipalities again to apply their own fees for the collection of municipal waste.
Reference/source	ICLEI (2005), Solutions - Six new approaches to sustainable urban waste management in Europe Results of the European Urban Waste Management Cluster Projects, available at: http://www.wastesolutions.org/fileadmin/user_upload/wastesolutions/Waste-Solutions-Brochure.pdf
Location of scheme (municipality where it is used)	
Nature of scheme	A dual type of waste collection is used in Kladno: a bring-to-point system which is used for recyclable materials and a pick-up system (refuse collection) is used for residual (mixed) waste.
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	Two types of charging is applied: A fixed charge is applied in the collection of large-scale waste, regular disposal of waste from public litters, collection of separated waste, disposal of dangerous waste. The second type is applied in the collection and disposal of residual (mixed) municipal waste. In the second case the rate depends on the type of used bin and the frequency of collection. If the bin is rented, then the price is also included to the variable part.
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Reference/source	Project "PAYT" (2001) - Variable Rate Pricing based on Pay-As-You-Throw as a Tool of Urban Waste Management, available at: http://web.tu-dresden.de/intecuspayt/files/literature_review.pdf

5.7 Producer responsibility systems

Packaging, Taxes	
Date of introduction	
Principle (one/two lines describing the instrument)	
Scope of the tax	
Current levels of tax, and tax structure	
Details of any exemptions	
How has the tax changed over time?	
Plans for future levels of the tax	
Reference/source	
Packaging, Deposit refunds	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Targets set for the scheme (including planned future targets)	
Scope of scheme	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Packaging, Green Dot scheme	

[Name of existing scheme]																																																					
Year introduced	2002																																																				
Key Legislation	Packaging Act 477/2001 Coll. EKOKOM, http://www.ekokom.cz																																																				
Scope of the scheme	Any type of material and serving for the purpose of holding, protecting, handling, delivering or possibly presenting a product(s) designated for the consumer or another end user.																																																				
Targets set for the scheme (including planned future targets)																																																					
Principle	The operator of the packaging collection scheme EKO-KOM, enters into a contract with entities which put packaging on the market or into circulation. EKO-KOM collects data concerning packaging production and collects payments, the rate of which depend on the amount of the reported packaging production. The operator also enters into a contract with municipalities and entities authorised to handle waste. In this case,EKO-KOM, contributes financially to the systems of collecting, sorting and utilising packaging waste.																																																				
Level of payment to scheme	<p>Registration fees: 65 Euros</p> <p>An advance payment is paid for recovery and recycling of packaging waste in the first quarter in which the contract is in force.</p> <table><tr><th colspan="2">Valid from 01.10.2010</th><th>EUR/tn</th></tr><tr><td rowspan="14">Sales packaging</td><td>Soft plastics</td><td>215,99</td></tr><tr><td>Rigid plastics</td><td>215,99</td></tr><tr><td>Rigid plastics above 5L</td><td>151,18</td></tr><tr><td>Corrugated board</td><td>52,89</td></tr><tr><td>Paper</td><td>106,44</td></tr><tr><td>Glass</td><td>58,67</td></tr><tr><td>Metals Fe</td><td>61,39</td></tr><tr><td>Metals Al</td><td>81,76</td></tr><tr><td>Metals above 5L</td><td>27,32</td></tr><tr><td>Beverage cartons</td><td>150,10</td></tr><tr><td>Combined materials</td><td>215,99</td></tr><tr><td>Wood</td><td>42,14</td></tr><tr><td>Textile</td><td>42,14</td></tr><tr><td>Others</td><td>215,99</td></tr><tr><td rowspan="8">Group packaging</td><td>Plastics</td><td>22,31</td></tr><tr><td>Corrugated board</td><td>12,26</td></tr><tr><td>Paper</td><td>12,26</td></tr><tr><td>Fe metals</td><td>18,74</td></tr><tr><td>Al metals</td><td>18,74</td></tr><tr><td>Combined materials</td><td>22,31</td></tr><tr><td>Wood</td><td>12,50</td></tr><tr><td>Textile</td><td>12,50</td></tr><tr><td>Others</td><td>22,31</td></tr></table>		Valid from 01.10.2010		EUR/tn	Sales packaging	Soft plastics	215,99	Rigid plastics	215,99	Rigid plastics above 5L	151,18	Corrugated board	52,89	Paper	106,44	Glass	58,67	Metals Fe	61,39	Metals Al	81,76	Metals above 5L	27,32	Beverage cartons	150,10	Combined materials	215,99	Wood	42,14	Textile	42,14	Others	215,99	Group packaging	Plastics	22,31	Corrugated board	12,26	Paper	12,26	Fe metals	18,74	Al metals	18,74	Combined materials	22,31	Wood	12,50	Textile	12,50	Others	22,31
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Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Producer led and funded.
Electrical and electronic equipment (EEE)	
Waste act 185/2001 on EEE	
Year introduced	2001
Key Legislation	Waste act 185/2001
Scope of the scheme	WEEE originating from households and others.
Targets set for the scheme (including planned future targets)	
Principle	Transposes the EU legislation
Level of payment to scheme	The producer of EEE shall ensure the financing of the collection, gathering and processing of WEEE. The registration fee for the services provided to the participant by the operator of the collective system has been set forth at the sum of 200 Euros. Producers also are obliged to pay a recycling contribution for historical electronic and electric equipment. This is calculated as follows: the number of units / the quantity of electronic and electric equipment of the pertinent group / subgroup X the amount of this recycling contribution per unit (unit / quantity). The recycling contribution per unit varies according to the type of EEE (minimum 0,10 Euros, maximum 7,30 Euros).
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Government- led and producer funded.
Reference/source	Waste act 185/2001, http://www.mzp.cz/C125750E003B698B/en/waste_management/\$FILE/Waste%20Act_1852001.pdf Ordinance 352/2005 on electric and electronic equipment, http://www.mzp.cz/www/platnalegislativa.nsf/d79c09c54250df0dc1256e8900296e32/B0F272F9E4DF557CC125708F0033497B/\$file/352-05.pdf Electrowin, http://www.elektrowin.cz
End-of-life vehicles (ELV)	
Fees for the collection, treatment, recovery and disposal of ELV	

Year introduced	2009
Key Legislation	Act 185/2001 on waste and Amendment of Some Other Acts.
Scope of the scheme	All ELV as defined by the European law.
Targets set for the scheme (including planned future targets)	Same as EU Directive on ELVs.
Principle	The Act transposes the EU legislation.
Level of payment to scheme	<p>The following fees are charged to the persons that register used vehicles that belong to the categories M1 and N1 of the vehicle registry.</p> <p>Vehicles in category EURO 1 – 205 Euros/ vehicle</p> <p>Vehicles in category EURO 2 – 122 Euros/ vehicle</p> <p>Vehicles which do not belong to the above categories – 409 Euros/ vehicle</p> <p>No fees are charged for vehicles that meet the EURO 3 emission standards or higher (applies on vehicles manufactured after 2000).</p> <p>The fees are collected by the State's Fund for the Environment.</p>
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	No information found.
Producer-led/funded or government-led/funded?	Government -led/ producer funded
Reference/source	<p>Act 185/2001 on waste and Amendment of Some Other Acts</p> <p>http://www.mzp.cz/C125750E003B698B/en/waste_management/\$FILE/Waste%20Act_1852001.pdf</p> <p>Law 383/2008,</p> <p>http://portal.gov.cz/wps/portal/_s.155/702/.cmd/ad/.c/312/.ce/10822/.p/8412/_s.155/702?PC_8412_p=I&PC_8412_l=383/2008&PC_8412_ps=50</p>
Batteries	
Obligations Pertaining to the Batteries and Accumulators Management	
Year introduced	2001
Key Legislation	Act 185/2001 on waste and Amendment of Some Other Acts.
Scope of the scheme	Batteries or accumulators containing more than 0.0005% of mercury by weight, regardless of whether or not incorporated into electrical equipment or other products, with the exception of button cells with a mercury content exceeding 2%, and portable batteries or accumulators containing more than 0,002% cadmium by weight, including batteries and accumulators incorporated into electrical equipment or other products.
Targets set for the scheme (including planned future targets)	
Principle	The act transposes the EU legislation.

Level of payment to scheme	No information identified.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	No information found.
Producer-led/funded or government-led/funded?	Government led and producer funded.
Reference/source	Act 185/2001 on waste and Amendment of Some Other Acts http://www.mzp.cz/C125750E003B698B/en/waste_management/\$FILE/Waste%20Act_1852001.pdf
Paper/cardboard	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Other (if any)	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	

Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	

5.8 Other interesting instruments

e.g. Landfill Allowance Schemes	
Principle (one/two lines describing the instrument)	
Structure of incentive (how is it applied and at what levels?)	
Scope (waste streams)	
Voluntary or mandatory/legislative?	
Geographical coverage	
Target group (e.g. consumer, households, business, manufacturer)	
Reference/source	

ECONOMIC INSTRUMENTS IN DENMARK

6.1 Waste Policy in the MS

In Denmark, the Ministry of the Environment and the Danish Environment Protection Agency sets the overall framework of waste policy and the municipalities determine the local waste treatment schemes. Specifically, the municipalities are responsible for waste management, the collection and reutilization of waste from packaging. The central objective in the Danish waste policy, is that waste prevention comes before reutilization, which again comes before incineration. Disposal and land filling has the lowest priority.

The key pieces of legislation in Denmark are:

- A reform which took place in 2007 and is known as the “new waste sector” (den nye affaldssektor). The new waste sector consists of a broad reform of waste policy which aims in restructuring and liberalising the Danish waste sector. The new organization of the waste sector was concluded in a political agreement in 2007 which formed the basis of new waste regulations (the political agreement is available at http://www.mst.dk/Virksomhed_og_myndighed/Affald/den_nye_affaldssektor/Baggrund/Politisk_aftale.htm)
- Waste Decree of January 2010 (Bekendtgørelse om affald). (Available at <https://www.retsinformation.dk/Forms/R0710.aspx?id=129843>)
- Waste Strategy 2009-2012 (Affaldsstrategi 2009-12). The new Waste Strategy is a follow up to the Government's Waste Strategy 2005-08. The strategy sets the government's overall waste management policy and its priorities in waste management. (Available at: <http://www.mst.dk/NR/rdonlyres/747FBCE2-A3D4-444F-BF60-D1747C36516D/0/Endelig1delafAffaldsstrategi200912.pdf>)
- Decree No. 252 of 31 March 2009 on landfills (Bekendtgørelse nr. 252 af 31. marts 2009 om deponeringsanlæg). This Decree transposes the EU Directive on Landfill of Waste 1999/31/EC. (The Decree is available at <https://www.lovtidende.dk/pdf.aspx?id=124157>).

Denmark has set a target of 65% of waste to be recycled. Today 64% of the waste is recycled. For 2008, a target of 90% for recycling of construction waste was set, 33% for household waste, 65% for industrial waste and 50% for waste from the commercial sector. (Danish Environmental Protection Agency, available at: http://www.mst.dk/Virksomhed_og_myndighed/Affald/Politik+og+strategi/Affaldspolitik+og+grundelementer). A recycling rate of 95% was already achieved for construction and demolition waste in 2006. Although it seems very unambitious to set a target that is below what is already achieved, this is due to the uncertainty of activity in the construction sector which was expected to follow the general economic downturn. The Waste Strategy 2008-2011 sets the following targets: Overall targets for 2012: Minimum 65% recycling and maximum 6% for landfill/disposal. For batteries a collection rate of 45% is set by 2012. Other targets follow EU waste targets. A recycling rate of 95% was already achieved for construction and demolition waste in 2006 (The Waste Strategy 2008-2011, available at: <http://www.mst.dk/NR/rdonlyres/747FBCE2-A3D4-444F-BF60-D1747C36516D/0/Endelig1delafAffaldsstrategi200912.pdf>).

6.2 Waste management performance in the MS

The following figures provide a general overview of the treatment of the municipal waste in 2009:

- 4590 ktonnes of municipal waste was generated.
- 1574 ktonnes of municipal waste was recycled.
- 4% of the municipal waste is landfilled and 51% incinerated.

Source: Eurostat

The figures below refer to other types of waste generated in 2008:

- 107 thousand tonnes of glass waste
- 782 ktonnes of paper and cardboard waste
- 73 ktonnes of plastic waste
- 6008 thousand tonnes of building and construction waste

Source: Eurostat Treatment of waste [env_wastrt] (available at: <http://epp.eurostat.ec.europa.eu/portal/page/portal/waste/data/database>)

Danish Environment Protection Agency- ISAG Udtræksmodul (available at: http://www.mst.dk/Virksomhed_og_myndighed/Affald/Data_om_affald/Statistikker_og_ISAG-dataudtraek/ISAG.htm)

6.3 Fees for Waste Disposal and Treatment

6.3.1 landfill fees (and Bans)

Waste Tax	
Date of introduction	1987
Principle (one/two lines describing the instrument)	A waste tax on landfill and incineration. Initially the tax was the same for landfill and incineration – 40DKK (5.36 €) per tonne, but it has since been altered to make landfill most expensive, incineration second most expensive and recycling, exempt from tax, cheapest.
Current levels of tax, and tax structure	
Details of any exemptions	The following waste types are not covered by the waste tax: Straw, which is transported to incineration plants in clean, separate loads. Clean wood waste and wood chips from wood-processing industry transported to incineration plants in clean, separate loads. Clean soil filling and clean soil used for covering at registered landfills. Hazardous waste and hospital waste in special loads to conventional incineration plants.
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	Landfill tax from 1.1.2010: 475 DKK per tonne (€63)

How has the tax changed over time?	<p>Initially the tax was the same for landfill and incineration – 40DKK per tonne. It has been increased every year, and altered to make landfill most expensive, incineration second most expensive (and recycling, exempt from tax, cheapest).</p> <p>Waste tax rates DKK (Euros) per tonne, 1987-2003:</p> <table><tr><th></th><th>1987</th><th>1990</th><th>1993</th><th>1997</th><th>1998</th><th>1999</th><th>2001</th><th>2003</th></tr><tr><td>Incineration with electricity production</td><td>40(5,36)</td><td>90(12,70)</td><td>160 (21,45)</td><td>210(28,16)</td><td>210(28,16)</td><td>280 (37,54)</td><td>330(44,25)</td><td>330(44,25)</td></tr><tr><td>Other incineration</td><td></td><td></td><td></td><td>260(34,86)</td><td>260(34,86)</td><td>330(44,25)</td><td></td><td></td></tr><tr><td>Landfill</td><td>40(5,36)</td><td>90(12,70)</td><td>335(44,92)</td><td>335(44,92)</td><td>375(50,28)</td><td>375(50,28)</td><td>375(50,28)</td><td>375(50,28)</td></tr><tr><td>Landfill of residues</td><td>0</td><td>0</td><td>0</td><td>210(28,16)</td><td></td><td></td><td></td><td></td></tr></table> <p>Source: Danish EPA, http://www2.mst.dk/udgiv/Publikationer/2004/87-7614-113-6/pdf/87-7614-114-4.PDF</p> <p>For the collection of waste (domestic waste and some recyclable waste fractions) from households and enterprises, a waste collection fee is charged by the municipalities to the real estate owners or tenants. This fee is fixed according to the non-profit cost-coverage principle, on the basis of total disposal costs, i.e. initial and operating costs of collection, transportation, treatment and taxes. The rate of the fee for the collection is waste is normally fixed.</p>		1987	1990	1993	1997	1998	1999	2001	2003	Incineration with electricity production	40(5,36)	90(12,70)	160 (21,45)	210(28,16)	210(28,16)	280 (37,54)	330(44,25)	330(44,25)	Other incineration				260(34,86)	260(34,86)	330(44,25)			Landfill	40(5,36)	90(12,70)	335(44,92)	335(44,92)	375(50,28)	375(50,28)	375(50,28)	375(50,28)	Landfill of residues	0	0	0	210(28,16)				
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Landfill of residues	0	0	0	210(28,16)																																										
Extent of geographical coverage	National																																													
Plans for future levels of the tax	The 475 DKK rate applies for 2010 and 2011. Beside this tax, additional fees will be applied which will be payable to the municipalities to cover the costs of waste handling. The level of the fee will vary from municipality to municipality, and will also depend on the type of sorting of waste at the delivery point.																																													
Problems encountered/ solutions found/ lessons learned from implementation	<p>A Danish study (Andersen, 2009) revealed that as some waste streams have not been regulated separately, industrial and commercial waste and construction and demolition waste were likely to be sensitive to the weight-based waste taxes.</p> <p>For collected waste, a problem that is encountered is that payment is normally calculated on the basis of volume, while the waste tax is based on weight. As a consequence, if the connection between recycling and waste volume and collection frequency cannot be established, the gains of a reduction in the waste tax cannot be estimated.</p> <p>Different accounts on waste amounts were created (gross waste delivered, waste subsequently removed, and net delivered waste). Net waste delivered is the regarded as the most appropriate indicator in estimating waste amounts, as this figure was adjusted for the transfer of waste and the subsequent removal of slag which is re-delivered to landfills.</p>																																													
Perceived costs (financial and administrative) of the instrument	The rate of the waste tax that was applied on 1996 was too low to offset the additional costs connected with collection and recycling, since the market for the residual products is often too low. This was resolved by applying gradually higher taxes.																																													
Reference/source	<p>Andersen, M.S., Dengsøe, N. and Brendstrup, S. (1999): Waste Tax 1987-1996 - an ex-post evaluation of incentives and environmental effects, Danish EPA, available at: http://www2.mst.dk/common/Udgivramme/Frame.asp?http://www2.mst.dk/udgiv/Publications/1999/87-7909-512-7/html/helepubl_eng.htm</p> <p>CEWEP landfill taxes and bans (September 2010), available at: http://www.cewep.eu/media/www.cewep.eu/org/med_557/529_cewep_-_landfill_taxes_and_bans_7september2010_web.pdf</p> <p>Questionnaire sent to the Danish Tax and Customs Administration (SKAT)</p>																																													
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)																																														

Range of fees for landfilling (excluding landfill tax)	Average net price for landfilling: ~€44/tonne (range of €10 - €95) €48 in 2009 according to Forfas Report (see below)
Source of information	CEWEP(2010) landfill taxes and bans, available at: http://www.cewep.eu/media/www.cewep.eu/org/med_557/529_cewep_-_landfill_taxes_and_bans_7september2010_web.pdf Forfas (2010), Benchmarking Analysis and Policy Priorities: Update 2010, available at: http://www.forfas.ie/media/forfas101005-Waste_Management_Benchmarking_Analysis_2010.pdf Danish Ministry of the Environment (1997) Report on the evaluation of the the Danish waste tax introduced on 1987. http://www2.mst.dk/Udgiv/publikationer/1997/87-7810-900-0/pdf/87-7810-900-0.pdf
Do sources give any explanation for key factors explaining variation?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Information on Bans	
Wastes to which the ban is applied	Ban on landfilling of waste suitable for incineration (i.e. combustible waste).
Date of introduction	1 January 1997
(Means of implementation)	The ban has the effect of ensuring all authorities require separation of combustible and non-combustible waste.
Plans for future bans (if any)	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	

6.3.2 Incineration fees (and Bans)

Waste tax

Date of introduction	1st January 1987
Principle (one/two lines describing the instrument)	Reduce and control the development in solid waste amounts.
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	€40 – €50/tonne Incineration tax replaced by a tax on produced heat from waste and a tax on CO2 emissions (fossil part of waste). €44 WtE levy in 2009 (according to Forfas report)
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	PowerPoint presentation supplied by CEWEP Forfas, Waste Management in Ireland: Benchmarking Analysis and Policy Priorities: Update 2010, http://www.forfas.ie/media/forfas101005-Waste_Management_Benchmarking_Analysis_2010.pdf
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	€36 per tonne net fee for thermal treatment (Forfas)
Source of information	Forfas (2010), Waste Management in Ireland: Benchmarking Analysis and Policy Priorities: Update 2010, http://www.forfas.ie/media/forfas101005-Waste_Management_Benchmarking_Analysis_2010.pdf RenoSam and Rambøll (2010), The most efficient waste management system in Europe: Waste-to-energy in Denmark, 2006, http://www.ramboll.com/services/energy%20and%20climate/~media/Files/RGR/Documents/waste%20to%20energy/RenosamhvidbogGB.ashx
Do sources give any explanation for key factors explaining variation?	In an international context the low gate fee in Denmark is attributable partly to the extensive energy recovery from waste and partly to the generally well-operated and efficient facilities in Denmark (RenoSam and Rambøll).
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	

Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	

6.4 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	During the 1990s, 18 Danish municipalities introduced weight- based fees.
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	Most of the schemes are weight-based and in some municipalities an additional fixed fee is charged when a household sets out an amount of waste which is higher by a predefined limit (e.g. two bags instead of one).
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly.	No specific legislation has been identified. The PAYT initiatives consist an effort of the municipalities to introduce the 'polluter-pays-principle' towards the households, with the aim to prevent waste generation and raise the recycling rate for household waste.

Deleted:

Problems encountered/ solutions found/ lessons learned from implementation	<p>At the first stages of the scheme there were cases of illegal dumping and burning of household waste to avoid payments. Some households that participate in the scheme have tried to deliver household mix waste to recycling centers. Gradually the frequency of these activities has been reduced in most of the municipalities. The success of such schemes, seem to rely on certain social and administrative conditions such as the existence robust recycling schemes, social consciousness and well developed administrative procedures. In Denmark, the weight-based fee system has been implemented in areas with single-family houses as it is difficult to apply the scheme in multi-storey houses. Other models, such as 'pay-per-bag' schemes have been identified as more appropriate for blocks and flats.</p> <p>The collection fee was normally based on the volume of the waste, thus giving a small economic incentive to municipalities to reduce their waste. However in some municipalities (e.g. Tinglev and Bogense) a weight- based system was introduced which led to a more significant reduction of waste and increase of recycling rates.</p>										
Perceived costs (financial and administrative) of the instrument	High administrative costs were recorded since individual accounting of waste amounts and fees was required. Municipalities that have applied such schemes, report higher administrative efforts in activities such as writing out the individual accounts for each household and making up the account in case of change of addresses .										
Reference/source	<p>European Environmental Agency (EEA), 2002, Case Studies on waste minimisation practices in Europe, Topic Report 2/2002: Denmark: Weight-related collection schemes for household waste, Annex 1, Copenhagen. Available at http://reports.eea.europa.eu/topic_report_2002_2/en/Topic_report_2-2002_web.pdf</p> <p>Eunomia, Ecotec (2002) - Financing and Incentive Schemes for Municipal Waste Management - Case Studies Final Report to Directorate General Environment, European Commission http://ec.europa.eu/environment/waste/studies/pdf/financingmunicipalwaste_management.pdf</p> <p>Eunomia et al (2009) - International Review of Waste Management Policy: Annexes to Main Report – available at: http://www.environ.ie/en/Publications/Environment/Waste/WasteManagement/FileDownload,21598.en.pdf</p> <p>Danish Ministry of the Environment (1997) Report on the evaluation of the the Danish waste tax introduced on 1987. http://www2.mst.dk/Udgiv/publikationer/1997/87-7810-900-0/pdf/87-7810-900-0.pdf</p>										
Bogense Municipality											
Nature of scheme	A dual weight-based waste collection scheme was introduced in 1993. The scheme targets households, small businesses and institutions. There are two types of waste collected by the scheme from households, residual waste and organic waste. This waste is collected every 14 days. As the 'pay-per-kg fee' applies to mixed household waste, it increases the levels of recycling and home composting.										
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	<p>A fixed fee is charged which covers 5kg of waste, collection and recycling of paper, glass and treatment and disposal costs. In addition a variable fee is charged per kilogram when the disposed waste exceeds 5 kg/fortnight. Specifically, the following fees were applied in 2000:</p> <table border="1"> <thead> <tr> <th>Fee categories</th><th>Fee in DKK , incl. VAT, 25%, and waste tax</th></tr> </thead> <tbody> <tr> <td>Fixed fee for households per year</td><td>1063 DKK (142,53€)</td></tr> <tr> <td>Fixed fee for summerhouse per year</td><td>813 DKK (109,01€)</td></tr> <tr> <td>Variable fee per kg organic/residual waste</td><td>3.75 DKK(0,50€)</td></tr> <tr> <td>Additional wastetainer</td><td>375 DKK(0,50€)</td></tr> </tbody> </table>	Fee categories	Fee in DKK , incl. VAT, 25%, and waste tax	Fixed fee for households per year	1063 DKK (142,53€)	Fixed fee for summerhouse per year	813 DKK (109,01€)	Variable fee per kg organic/residual waste	3.75 DKK(0,50€)	Additional wastetainer	375 DKK(0,50€)
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Additional wastetainer	375 DKK(0,50€)										
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	Organic waste is not collected from summerhouses. There are non exemptions or compensation for households that might have been affected negatively by the scheme (e.g. households with small children).										

Problems encountered/ solutions found/ lessons learned from implementation	During the first years of the scheme there were cases where waste was dumped illegally at parking lots or burnt at oil containers or fireplaces, but now the frequency of these practices have been reduced. Overall, the scheme has led to reductions of waste, improved levels of separation and increased quantities of waste for recycling and composting.
Perceived costs (financial and administrative) of the instrument	High administrative costs were recorded since individual accounting of waste amounts and fees was required.
Reference/source	<p>Scott S. , Watson D. (2006), Introduction of Weight-Based Charges for Domestic Solid Waste Disposal (2000-DS-6-M1), Prepared for the Environmental Protection Agency by the Economic and Social Research Institute. Available at: http://www.epa.ie/downloads/pubs/research/econ/ertdi%20report%2054.pdf</p> <p>Ernst and Young (2002), Analysis of the Application of the Producer Pays Principle to Producers of Household Waste as a Driver Towards Sustainability A Preliminary Discussion Document, available at http://www.esauk.org/publications/reports/ernstandyoung.pdf</p> <p>Eunomia, Ecotec (2002) - Financing and Incentive Schemes for Municipal Waste Management - Case Studies Final Report to Directorate General Environment, European Commission http://ec.europa.eu/environment/waste/studies/pdf/financingmunicipalwaste_management.pdf</p>

6.5 Producer responsibility systems

Packaging, Taxes	
General packaging tax	
Date of introduction	<p>1978: volume-based tax introduced on new packaging for most beverages (i.e. incentive to use refillable packaging).</p> <p>1990: Packaging glass</p> <p>1994 weight based levy on paper and plastic carry bags</p> <p>1 January 1999: weight-based taxes introduced for 13 types of material and packaging (including soap and detergents, lubricants, perfume and margarine, non-carbonated soft drinks, vinegar and edible oils, plastic-foil foodstuff packaging manufactured from soft PVC). From 1 April 2001 adjusted to reflect the environmental impact from each material, based on life-cycle assessments.</p> <p>From 1 July 2000: tax on PVC and phthalates</p>
Principle (one/two lines describing the instrument)	<p>Denmark is the only MS that has opted for the internalisation of packaging waste management costs rather than setting up an industry-run funding system. Packaging is not separated from household waste, and the costs for its management are included in budget of local authorities, apart from costs related to glass.</p> <p>The tax on plastic bags is included in the price charged to retailers, not levied on consumers.</p>
Scope of the tax	Taxes are applied to: beverage containers not subject to the deposit system; packaging of specified chemicals and manufactured consumer products; non-reusable paper and plastic carrier bags, single-use tableware and vending cups, and specified PVC film packaging.

Current levels of tax, and tax structure	<p>The expenditure on the Danish packaging system are covered by a tax levied directly from households and collected by the local authorities:</p> <ul style="list-style-type: none"> For beverage containers not subject to the deposit system: tax per unit of packaging, according to the size and material of the container; For packaging for specified chemicals and manufactured consumer products: tax charged by weight and by material used; the tax rate for each packaging material is based on the results of a life-cycle assessment; A tax is also applied to non-reusable paper and plastic carrier bags with handles, single-use tableware and vending cups, and on specified PVC film packaging. <p>Tax of 22 DKK (2,95€) per kg of plastic bags.</p> <p>The Danish market has collected around 170 million DKK (23 million Euros) so far and has used that money to fund many environmental projects.</p>
Details of any exemptions	
How has the tax changed over time?	<p>The tax is reported to have cut plastic bag usage by 66%. Denmark has had a weight-based levy on plastic carrier bags since 1994 (and also on disposable tableware since 1988). Before the levy was introduced the Danes used over 700 million plastic bags each year, this was drastically reduced to 300 million (approx. 55% reduction) with the levy, but it has since increased to 450 million (approx. 35% reduction) in 2007</p>
Plans for future levels of the tax	
Problems encountered/ solutions found/ lessons learned from implementation	<p>A carry bag in Denmark costs DKK 2.75 (0,37€) for the customer of which only DKK 0.50 (0,07€) is tax. There have been criticism that retailers make profits from the scheme.</p>
Perceived costs (financial and administrative) of the instrument	
Reference/source	<p>Packaging Recovery Organisation Europe, Pro – Europe available at: http://www.pro-e.org/Denmark</p> <p>EIONET – European Topic Centre on Sustainable Consumption and Production, available at: http://scp.eionet.europa.eu/facts/factsheets_waste/2006_edition/Denmark</p> <p>Plasticbageconomics. com, available at: http://www.plasticbageconomics.com/index.php?option=com_content&task=view&id=26&Itemid=40</p> <p>UNEP (2005), Selection, Design and Implementation of Economic Instruments in the Solid Waste Management Sector in Kenya, The Case of Plastic Bags, available at: http://www.unep.org/PDF/Kenya_waste_mngnt_sector/chapter5.pdf</p> <p>Politiken, www.politiken.dk/tjek/tjekmad/tjekmadartikler/ECE653682/vi-oedsler-med-plastikposer</p> <p>Green style, www.greenstyle.dk/shop/cms-1.html</p>
Packaging, Deposit refunds	
Dansk Retursystem (DRS)	
Year introduced	1984 (for beverage containers)
Key Legislation	<p>Denmark transposed the Packaging Directive's provisions on essential requirements and heavy metals limits in Statutory Order N° 298 of 1997.</p> <p>Statutory Order N° 619 (June 2000) implements various provisions of a number of EC waste directives, including the Packaging and Packaging Waste Directive and amends the responsibilities placed on local authorities.</p> <p>Statutory Order on Deposits and Collection etc. of Packaging for Beer and certain Soft Drinks amended in 2007</p>

Targets set for the scheme (including planned future targets)	<p>The return rate is estimated to be as high as 99% for reusable containers of beers and carbonated soft drinks.</p> <p>In its first two years of operation (2003 and 2004) Denmark's new common deposit-return system for disposable beverage packaging achieved a total recovery rate of 80 – 83% for disposable packaging for beer and soft drinks. In 2005, 84% was recycled. The recovery of disposable packaging was thereby falling short of the target of 95% by 1 January 2005. The return rate for refillable packaging is approx. 100%.</p>
Scope of scheme	<p>A deposit-return system operates for one-way beverage container packaging and refillable bottles. Until 2002 only refillable beverage containers were covered; in 2002 it was extended to non-refillable, reusable and disposable beverage containers (e.g. metal cans); in 2005 it was expanded to include "ready-to-drink" beverages (e.g. alcopops, energy drinks, cider products); since 2008 it also covers mineral water bottles.</p> <p>Fruit squash, juice, cocoa, wine and spirits are not covered by the scheme.</p>
Principle	<p>Importers and producers (domestic and external) must pay to register with Dansk Retursystem to sell relevant drink products. Collection/logistics fees are also charged. Registered companies affix the deposit logo to their beverage packaging. There are three types of deposit (see below), each refundable on delivery of the packaging to the store or outlet. The cash values of the refunds are laid down by the Danish Ministry of Environment.</p>
Level of payment to scheme	<p>In 2007 the annual registration fee for importers/producers was 2,000 DKK.</p> <p>On top of the registration fee, for beverage containers sold by the retail/convenience sector, DRS levies a collection and logistic fee to be paid by importer/producer.</p> <p>The cost on packaging for the consumer is:</p> <ul style="list-style-type: none"> • Cans, glass and plastic bottles under 1 litre: DKK 1.00 (0,13€) • Plastic bottles of 0.5 litres: DKK 1.50 (0,20 €) • Cans, glass and plastic bottles of 1 litre and over: DKK 3.00 (0,40€) <p>Take back is by reverse vending machines – some (e.g. smaller) shops do not have machines, so the owners receive empty cans and bottles and repay the deposit themselves if the shops sell cans or plastic bottles made of the same material. Machines also accept labelled packaging even if the shop in which it is located does not itself sell the product.</p>
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	<p>The costs for management of packaging waste are included in budget of local authorities, apart from costs related to glass. Local councils may finance their actual expenses associated with the management of household waste, and those associated with the management of waste from trade and industry, using fees. The fees may cover costs for establishment, operation, administration, investment, planning, and collection of information, etc; fee rates must be calculated so that over time there is a balance between revenues (fees) and the costs of waste management schemes, i.e. a non-profit cost-coverage principle.</p> <p>http://scp.eionet.europa.eu/facts/factsheets_waste/2006_edition/Denmark</p>
Producer-led/funded or government-led/funded?	<p>Private operators (recycling) and local authorities (treatment) are responsible for management of household and commercial packaging waste. Local authorities must ensure that collection schemes are set up (though they do not have to set up the schemes themselves) for paper & board and for plastics transport packaging from all types of business. Separate collection for packaging glass has been required since 1990; for cardboard from private households since 2004 (but only if the council collected less than 55 per cent by volume of recyclable paper and cardboard potentials in two successive calendar years from 2003 onwards).</p> <p>Dansk Retursystem A/S (DRS) is a privately owned non-profit company given responsibility for the deposit and return system by the Danish EPA.</p>
Problems encountered/ solutions found/ lessons learned from implementation	

Perceived costs (financial and administrative) of the instrument	<p>The net-turnover of the private company, Dansk Retursystem, was in mEUR (approx):</p> <p>the first 6 months of 2000: 4.3</p> <p>2001: 12.8</p> <p>2002: 17.0</p> <p>2003: 28.6</p> <p>2004: 29.7</p> <p>EIONET – European Topic Centre on Sustainable Consumption and Production http://scp.eionet.europa.eu/facts/factsheets_waste/2006_edition/Denmark (this source also includes info on separate collection schemes)</p>
Reference/source	Packaging Recovery Organisation Europe, Pro – Europe available at: http://www.pro-e.org/Denmark
Packaging, Green Dot scheme	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Electrical and electronic equipment (EEE)	
DPA-System (Danish Manufacturer Liability System)	
Year introduced	
Key Legislation	<p>The Environmental protection Act: Producer liability for electronic waste. Act no. 385 of 25 may 2005</p> <p>The WEEE Order: Statutory Order no. 362 of 6 April 2010</p> <p>Danish Statutory Order on marketing electrical and electronic equipment and handling of waste electrical and electronic equipment (Electronics Waste Order) No. 362 of 6 April 2010 (as amended) – takes effect in 2011?</p>
Scope of the scheme	All WEEE as defined by the EU WEEE Directive

Targets set for the scheme (including planned future targets)	Producers, importers or any person responsible for management of waste electrical and electronic equipment shall ensure that the following rates of reuse or recycling are met: 1) A minimum of 75 per cent of equipment falling under the categories 1 and 10, 2) A minimum of 65 per cent of equipment falling under the categories 3 and 4 3) A minimum of 50 per cent of equipment falling under the categories 4) A minimum of 80 per cent of waste gas discharge lamps.
Principle	DPA-System is the not-for-profit organisation established under the Danish Environmental Protection Act to administer producer responsibility rules for: EEE, batteries and ELV. It is designed to ensure operation of the national producer registers, and to design and manage a simple and fair producer responsibility scheme for the market players concerned.
Level of payment to scheme	DPA-Systems activities funded by fee payments from producers and importers. Payments to the scheme cover costs, rather than make profit. The fee rates are set annually, and thereafter the volume-based charges are determined by the Environmental Protection Agency on the basis of a proposal from DPA-System. Fee Rates 2010 for WEEE (ex-VAT): <ul style="list-style-type: none"> One-off registration fee: 1000 DKK (134€)(or 1,500 DKK (201€) if registered for both WEEE and batteries) Volume-based fees: Annual fee per kg of WEEE placed on the market: 0.02 DKK/kg + Additional annual fee for equipment to private households: 0.01 DKK/kg (<i>Equipment for households per. kg. Total = 0.03 DKK</i>) NB Minimum Fee (charged if volume-based fee lower than this): 250.00 DKK (33,50€) Special Services (casework/external projects) charged at 750 DKK (100€) per hour The volume-based fee rates (excluding minimum fee) are obtained in principle by the following calculation: Capital needs to administer the scheme (WEEE or BAT) / The expected quantity (in kg) of EEE or batteries sold = The volume-based fee rates. So far, the amount placed on the market has been based on the quantity reported by producers on 31 March; from 2011 the quantity marketed will be estimated by the EPA at the start of the year so the fee rate is known at the beginning of the year.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	80% of payments to DPA-System go towards running the WEEE scheme; 20% to batteries. It is estimated that the capital needs of running the scheme are fully covered by the volume-based fees.
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	

Reference/source	<p>DPA System (2010), Financing, fee structures and cost allocation, available at: http://translate.googleusercontent.com/translate_c?hl=en&tl=en&u=http://www.dpa-system.dk/Renderers/ShowMedia.ashx%3Fid%3D4c4464cf-66ff-46e5-819d-f8639449792a&rurl=translate.google.com&usg=ALkJrhjM8z-AbItY9OuF5CF_wLEDixZ4Vw#4 ;</p> <p>DPA System (2010), Fees for DPA-System (WEEE), available at: http://translate.googleusercontent.com/translate_c?hl=en&tl=en&u=http://www.dpa-system.dk/Renderers/ShowMedia.ashx%3Fi%3DMediaArchive%253A9dd7f7fb-dd4b-4527-a2b4-601a5874bd0b&rurl=translate.google.com&usg=ALkJrhjXaHJ0hCtAvz6y0Fhm2kTAZL_YA</p> <p>Danish Statutory Order on marketing electrical and electronic equipment and handling of waste electrical and electronic equipment (Electronics Waste Order) No. 362 of 6 April 2010 (as amended) – available at: http://www.dpa-system.dk/Renderers/ShowMedia.ashx?id=54f2a12a-73b2-4289-9f14-684242bf8028</p>
End-of-life vehicles (ELV)	
DPA-System (Danish Manufacturer Liability System) – not yet responsible for ELV (as of January 2010)	
Year introduced	2002
Key Legislation	<p>Statutory Order No 782 of 17 September 2002 on collection of environment and scrapping premiums and payment of reimbursement in connection with dismantling and scrapping of vehicles.</p> <p>Statutory Order No 480 of 19 June 2002 on management of waste in the form of motor vehicles and derived waste fractions.</p>
Scope of the scheme	The scheme transposes the EU legislation on ELVs.
Targets set for the scheme (including planned future targets)	Reduce the amount of ELV waste landfilled in Denmark from the current 20% to 5%.
Principle	DPA-System is the organisation established under the Danish Environmental Protection Act to administer producer responsibility rules for: EEE, batteries and ELV. It is designed to ensure operation of the national producer registers, and to design and manage a simple and fair producer responsibility scheme for the market players concerned.
Level of payment to scheme	<p>DPA-Systems activities funded by fee payments from producers and importers.</p> <p>In addition, as of January 1, 2012 a tax of DKK 160 (21,54€) per tonne of landfilled shredder residue will be applied, and as of January 1, 2015 the tax will be increased to DKK 475 (63,7) per tonne, the rate of all other non-hazardous landfilled waste.</p>
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	An annual environmental fee of DKK 90 (12,10€) is charged to the car owners. The fee is integrated to the insurance companies fees as a mandatory tax and is then transferred y to the recycling fund of Danish authorities. This tax is used to offset the fee that is refunded to the last owner of the car whom, when the car is brought to a certified dismantling facility, is paid approximately DKK 1800 (241,35€) from the recycling fund.
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	Shredders in Denmark shred ELVs together with appliances, scrapped metal, and other potential sources of ferrous metals. The resulting shredder residue consists of roughly 10-45% ELVs, depending on the stockpiled shredder input
Perceived costs (financial and administrative) of the instrument	

Reference/source	Moaekley J. et al (2010), An Evaluation of Shredder Waste Treatments in Denmark - Alternative Methods to Landfilling Auto Shredding Residue in Compliance with the Strict Environmental Quota by the European Union http://www.renosam.dk/c/document_library/get_file?uuid=2eed6fb0-5b51-46b4-80bc-cb2d2762e9f2&groupId=19854
Batteries	
DPA-System (Danish Manufacturer Liability System)	
Year introduced	
Key Legislation	Environmental Protection Act; Order on batteries and accumulators and waste batteries and accumulators (Batteries Order) No. 1186 of 10/12/2009
Scope of the scheme	Batteries as defined by the EU Batteries Directive
Targets set for the scheme (including planned future targets)	
Principle	DPA-System is the organisation established under the Danish Environmental Protection Act to administer producer responsibility rules for: EEE, batteries and ELV. It is designed to ensure operation of the national producer registers, and to design and manage a simple and fair producer responsibility scheme for the market players concerned.
Level of payment to scheme	<p>DPA-Systems activities funded by fee payments from producers and importers. Payments to the scheme cover costs, rather than make profit. The fee rates are set annually, and thereafter the volume-based charges are determined by the Environmental Protection Agency on the basis of a proposal from DPA-System.</p> <p>Fee Rate 2010 for batteries (ex-VAT)</p> <ul style="list-style-type: none"> One-off registration fee: 1000 DKK (134€) (or 1,500 DKK (201€) if registered for both WEEE and batteries) Volume based fees: Annual fee per kg of batteries placed on the market: 0.05 DKK + Additional annual fee per kg of portable batteries = 0.08 DKK (<i>Fee for portable batteries per kg. Total = 0.13 DKK</i>). NB Minimum Fee (charged if volume-based fee lower than this): 250 DKK (33,50€) Special Services (casework/external projects) charged at 750 DKK per hour <p>The volume-based fee rates (excluding minimum fee) are obtained in principle by the following calculation: Capital needs to administer the scheme (WEEE or BAT) / The expected quantity (in kg) of EEE or batteries sold = The volume-based fee rates.</p> <p>So far, the amount placed on the market has been based on the quantity reported by producers on 31 March; from 2011 the quantity marketed will be estimated by the EPA at the start of the year so the fee rate is known at the beginning of the year.</p>
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	80% of payments to DPA-System go towards running the WEEE scheme; 20% to batteries. It is estimated that the capital needs of running the scheme are fully covered by the volume-based fees.
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	

Reference/source	DPA System (2010), Financing, fee structures and cost allocation, available at: http://translate.googleusercontent.com/translate_c?hl=en&tl=en&u=http://www.dpa-system.dk/Renderers/ShowMedia.ashx%3Ffi%3DMediaArchive%253A2a0a530b-55bb-4dba-a20c-77d2955259ca&rurl=translate.google.com&usg=ALkJrhbcChC2bY77GitcNIWd8Oa1R4dZQ
Paper/cardboard	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Other (if any)	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	

Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	

6.6 Other interesting instruments

e.g. Landfill Allowance Schemes	
Principle (one/two lines describing the instrument)	
Structure of incentive (how is it applied and at what levels?)	
Scope (waste streams)	
Voluntary or mandatory/legislative?	

Geographical coverage	
Target group (e.g. consumer, households, business, manufacturer)	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	

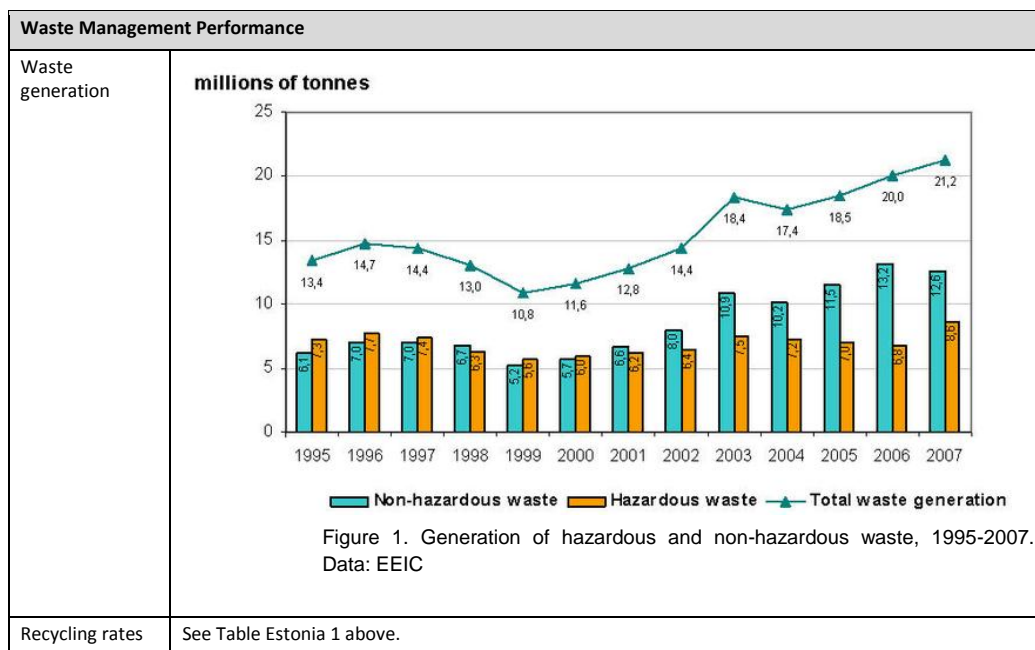
ECONOMIC INSTRUMENTS IN ESTONIA

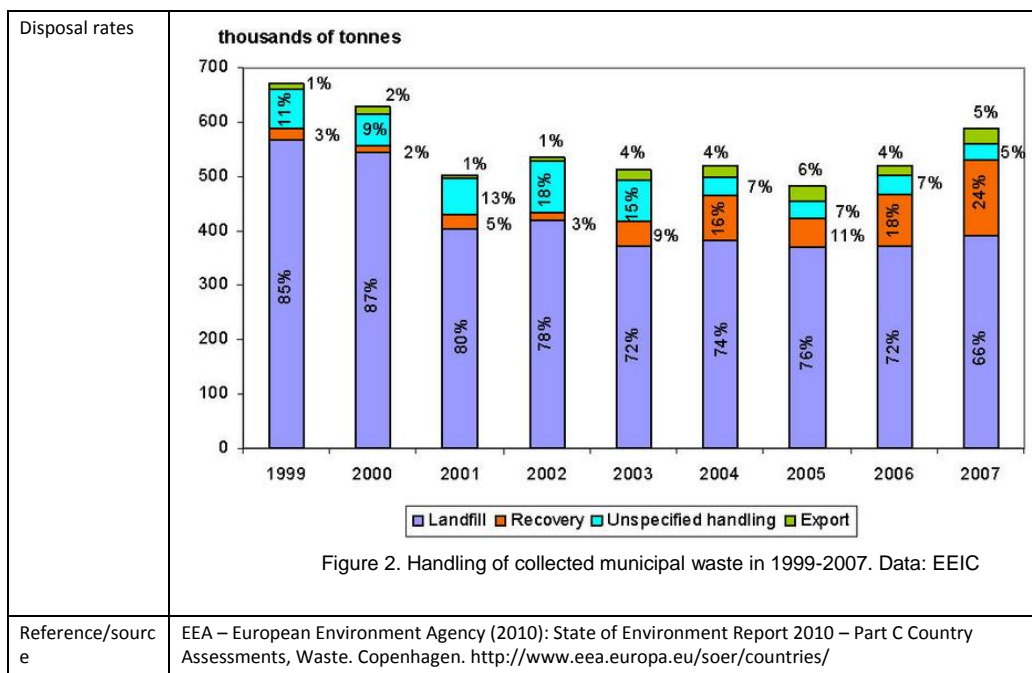
7.1 Waste Policy in the MS

Waste Policy		
Waste legislation	The main piece of waste legislation is the Act on waste management 2004, which sets the frame for waste management in Estonia. More specific provisions, e.g. on certain waste streams or waste treatment methods, are dealt with in a number of waste ordinances which are based on the main waste act.	
	Act/Topic	Main features
	Waste Act (RT I 2004, 9, 52), 2004	The Waste Act is the main document of waste legislation in Estonia. It is structured in 10 chapters: General provisions Waste management planning Special conditions for handling hazardous waste Waste management organised by local governments Financing of development of waste management Waste permits Hazardous waste handling licence Special conditions for collection of metal waste Transboundary movement of waste Maintenance of records and reporting
	Waste Act (RT I 2004, 9, 52), 2004	Landfills are classified according to EU landfill directive 1999/31/EC (Waste Act, Art.34(4)) Prohibition on deposit of untreated waste in landfills (Waste Act, Art.35) Prohibition on deposit of used tyres in landfills (Waste Act, Art.351)
	BMW (Biodegradable municipal waste)	Regulation of Ministry of the Environment (MoE) 16.01.2007, No 4 (RTL 2007, 9, 140) on procedure for the sorting of waste and the bases of classification of sorted waste
	Landfill	Regulation of Ministry of the Environment (MoE) 29.04.2004, No 38 (RTL 2004, 56, 938) on requirements for establishment, operation and closure of landfills
	Waste incineration	Regulation of MoE 04.06.2004, No 66 (RTL 2004, 83, 1316) on requirements for establishment, operation and closure of incineration and co-incineration plants
	Packaging	Packaging Act (RT I 2004, 89, 611) Packaging Excise Duty Act (RT I 1997, 5/6, 31) Regulation of Estonian Government: 26.12.2004 No 346 (RTI 2004, 83, 561) on statutes of the Packaging Register; MoE Regulations: 23.03.2005, No 19 (RTL 2005, 37, 523) on size of deposits for packaging; 15.04.2005, No 24 (RTL 2005, 45, 622) on the markings indicating the size of deposit.
	Construction/demolition waste	Regulated on municipality level with obligatory part of Local government waste management rules (Waste Act , Art.71)

Mandatory targets for recycling	Table Estonia 1: Recycling targets for packaging waste and achieved recycling rate in the year 2006, Estonia		
	Packaging waste fraction	Recycling target in %	Achieved recycling rate in 2006 in %
	Total packaging waste	25	45.7
	Glass	15	48.5
	Plastics	15	33.7
	Paper	15	55.2
	Metals	15	52.5
	Wood	15	75.4
Waste management plans	National Waste Management Plan 2008 – 2013 – http://www.envir.ee/orb.aw/class=file/action=preview/id=1075105/RIIGI+J%C4% C4TMEKAVA+2008-2013.pdf		
	<p>The National Waste Management Plan 2008 – 2013 intends to decrease deposition of waste to landfill and increase recovery of waste</p> <p>Generally, in recent years in Estonia, waste quantities have been growing, mostly due to developments in the field of industry, economy and consumption. However, the total waste generation has to some extent been decoupled from economic growth. Nevertheless, initiatives to promote waste prevention and recovery and reduce disposal of waste are considered to be the most effective options for minimising environmental risks associated with waste generation and management as well as for sustainable use of natural resources. One of the biggest problems is currently linked to the oil shale industry – mining, energy production and chemistry. Another problem is linked to municipal waste management – separate collection, and minimisation of waste disposal, especially disposal of biodegradable municipal waste</p>		
Reference/source	<p>ETC-SCP (2009): Country fact sheet on waste policy: Estonia. http://scp.eionet.europa.eu/facts/factsheets_waste/2009_edition/factsheet?country=EE.</p> <p>EEA – European Environment Agency (2010): State of Environment Report 2010 – Part C Country Assessments, Waste. Copenhagen. http://www.eea.europa.eu/soer/countries/</p>		

7.2 Waste management performance in the MS





7.3 Fees for Waste Disposal and Treatment

7.3.1 landfill fees (and Bans)

Landfill tax on landfilling	
Date of introduction	2005 by Environmental Charges Act
Principle (one/two lines describing the instrument)	The landfill tax has been an essential part of the financial support scheme for environmental investments – including support to build new landfills and close 'old-ones'.
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	<p>In the year 2009 the landfill tax rates for basic non hazardous waste, including residual household were as follows:</p> <ul style="list-style-type: none"> - 10.0 € per tonne on compliant landfills - 20.0 € per tonne on non-compliant landfills - 30.1 € per tonne on old non-compliant landfills

How has the tax changed over time?	<p>Landfill tax for basic non hazardous waste, including residual household:</p> <p>2005 (Pollution Charges Act 2002) : 1.9 € per tonne</p> <p>2006 (Environmental Charges Act 2005): 7.8 € per tonne</p> <p>2008: 8.5 € per tonne</p> <p>2009: 10.0 € per tonne</p> <p>Factor for Non-compliance Landfills:</p> <p>2005: 4</p> <p>2006 – 2009: 2</p> <p>Landfill Tax on old non-compliance:</p> <p>2005: 7.7 € per tonne</p> <p>2006: 15.6 € per tonne</p> <p>2008: 17.0 € per tonne</p> <p>2009: 30.1 € per tonne</p>
Extent of geographical coverage	
Plans for future levels of the tax	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	Estonia waste fact sheet 2008
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for landfilling (excluding landfill tax)	<p>- cover with plastic liner etc. only exceptional, if clear danger to groundwater - then cost level ca 100.000 €/ha</p> <p>- closer cost for bigger landfills > 5 ha up to 300.000 €/ha</p> <p>- average cost of closure of small landfills approximately 20.000 € /ha</p> <p>Financing scheme typically :</p> <p>10 % local municipality(s),</p> <p>90 % Environmental Investments Centre (State)</p> <p>- since 2004 as well ERDF, now Cohesion Fund</p> <p>Total costs of closure of landfills until 2007 approximately 32 M€ (ca 22,8 €/person)</p> <p>In Estonia landfilling of waste currently costs approximately 40 €/t (less on some 'old landfills', still in operation).</p> <p>The landfill tax (ca 10 €/t on sanitary new landfill and ca 30 €/t on 'old-ones') is collected with the 'gate fees of the landfills.</p> <p>For households the average waste management service fee is approximately 65 €/t. On the average household pay 4-8 € per month, which is approximately 3-5 % from living rooms related costs in central heated dwelling houses.</p> <p>This is ensuring 'softer landing with the landfills' – from originally some 200 landfills in the year 2000 to 5 non-hazardous landfills on 2009, a period during which gate fees have changed from 0-10 to 40 €/t.</p> <p>Gate fees for inert/C&D waste: €6.50 (sorted, clean); €42.5 (unsorted, contaminated))</p>
Source of information	http://www.ejkl.ee/content/files/PEek.FEAD.pdf http://www.tormaprugila.ee/et/?4

Do sources give any explanation for key factors explaining variation?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Information on Landfill Bans	
Wastes to which the ban is applied	Estonia introduced a ban on the landfilling of unsorted waste (Waste Act Art. 34(4)) in 2004. The ban of landfill of unsorted municipal waste with basic requirements to the municipalities for organising source separation of paper and cardboard, green garden waste and hazardous waste, as well as packaging waste through the public collection system have been enacted since 2008. Landfilling of non-hazardous waste had decreased by 20 % in 2008, due to higher landfill taxes and decreasing economy.
Date of introduction	
Means of implementation	
Plans for future bans (if any)	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Source of information	CEWEP (2010): Waste-to-Energy in Europe in 2008. http://www.cewep.eu/media/www.cewep.eu/org/med_557/529_cewep_-_landfill_taxes_and_bans_7september2010_web.pdf EEA – European Environment Agency (2010): State of Environment Report 2010 – Part C Country Assessments, Waste. Copenhagen. http://www.eea.europa.eu/soer/countries/

7.3.2 Incineration fees (and Bans)

According to CEWEP (2010) there was no waste incineration in Estonia in 2008.	
Date of introduction	
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	

Extent of geographical coverage	
Plans for future levels of the tax	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	CEWEP (2010): Waste-to-Energy in Europe in 2008. http://www.cewep.eu/media/www.cewep.eu/org/med_557/529_cewep_-_landfill_taxes_and_bans_7september2010_web.pdf
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	
Source of information	
Do sources give any explanation for key factors explaining variation?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	

7.4 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS

What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	<p>Around 30% of households use 'pay per sack schemes'</p> <p>around 10% of households have schemes which charge for the volume of the bin</p> <p>around 40% of households have schemes based upon the frequency of collection</p> <p>around 10% of households have weight- based schemes</p> <p>OR</p> <p>around 30% of of schemes are 'pay per sack schemes'</p> <p>around 10% of schemes charge for the volume of the bin</p> <p>around 40% of schemes are based upon the frequency of collection</p> <p>around 10% of schemes are weight-based.</p> <p>User charge for municipal waste:</p> <p>The rate is determined by the type, quantity and properties of waste collected, and other factors such as the frequency of collection.</p> <p>Estonia has a system of direct contracts between MW generators and MW collection and transportation companies. 'User charge' is a fee for collection, transportation and disposal services and is paid directly to the company (which is usually a private-owned company). This fee includes all the waste management costs, also disposal costs (paid by waste collection companies to landfill operators for operation and closure of landfills) and 'waste pollution charges' (paid by landfill operators to municipality and state budgets 75:25). Waste collection company are the receivers. Municipality has right to establish the limits of fees (NWA § 66)</p> <p>Average fee per person for public waste management Service: 15.33 EUR per person per year</p> <p>The 'user charge' is a fee for collection, transportation and disposal services and is paid directly to the service company (which is usually a private-owned company). This fee includes all the waste management costs, also disposal costs (paid by waste collection companies to landfill operators for operation and closure of landfills) and 'waste pollution charges' (paid by landfill operators to municipality and state budgets 75:25).</p> <p>A waste pollution charge for municipal waste disposal was introduced in 1990.</p> <p>The charge is used for the promotion of waste recovery, financing of waste management projects of the Environment Investment Centre and for local budgets. Revenues are shared: 75% to local budget, and 25% to state budget of the local government</p> <p>The evolution of the waste pollution charge in € per tonne of waste was:</p> <p>2005: 1.92</p> <p>2006: 7.80</p> <p>2007: 7.80</p> <p>2008: 8.50</p> <p>2009: 10.03.</p>
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	WASTE ACT

Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	Estonia wastefact sheet 2008
Location of scheme (municipality where it is used)	
Nature of scheme	
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	<p>The maximum frequency of collection is once every 2 weeks</p> <p>The municipality also provides:</p> <p>A food waste collection twice a week in small buckets</p> <p>A weekly collection of plastic and cans in 60 l sacks</p> <p>A fortnightly collection of paper and card in a 140 l bin</p> <p>There is a dense network of 'bring sites' for the collection of glass containers</p> <p>The average fee per person for public waste management service is 15.33 € per person per year. The actual fee depends on municipality and type of container</p>
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.recestonia.ee/jaatmed/eng2.pdf

7.5 Producer responsibility systems

Packaging Excise Duty Act RT I 1997, 5/6, 31	
Date of introduction	1997
Principle (one/two lines describing the instrument)	<p>Excise duty on packaging (hereafter excise duty) is imposed on packaging of goods put on the market in Estonia or acquired in another Member State of the European Union and imported into Estonia.</p> <p>The packaging excise duty must be paid only for the amount of packaging material that is missing from the foreseen recovery target.</p> <p>The instruments concerning packaging waste separate collection and recovery are a deposit system (introduced in 2005) and a packaging excise duty (introduced in 1997).</p> <p>Estonian Packaging Excise Duty Act, RT I 1997, 5/6, 31; 2005, 37,288) establishes special packaging fee for sales packaging if the required reuse or recovery rate is not achieved.</p>
Scope of the tax	
Current levels of tax, and tax structure	<p>RATES OF PACKAGING EXCISE DUTY</p> <p>Taxable packaging Excise duty rate in € per kilogram</p> <ol style="list-style-type: none"> 1) glass and ceramics : 0.64 2) plastic : 2.56 3) metal : 2.56 4) paper and cardboard, including composite cardboard : 1.28 5) other packaging: 1.28

Details of any exemptions	
How has the tax changed over time?	
Plans for future levels of the tax	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.recestonia.ee/jaatmed/eng2.pdf http://www.envir.ee/orb.aw/class=file/action=preview/id=1079696/Packaging+Excise+Duty+Act+%28consolidated+text+Sept+2008+%282010+am%29%29.pdf http://www.envir.ee/959589
Packaging	
Deposit refunds Estonian Packaging Act, RT I 2004, 41, 278	
Year introduced	2005
Key Legislation	Packaging ACT
Targets set for the scheme (including planned future targets)	<p>Also, the Packaging Act introduced in June 2004 sets recovery targets for all packaging placed on the market and deposit system for one way and multi-use packaging of beer, alcohol drink with low ethanol content and soft drinks in glass, plastic and metal packaging as of January 1, 2005. The recovery targets are:</p> <p>50% recovery by 2004 60% recovery by 2010</p>
Scope of scheme	<p>The Packaging Act provides the general requirements for packaging and the use of packaging, the measures preventing or reducing the generation of packaging and packaging waste, the organisation of a system for recovery of packaging and packaging waste and the liability for failure to comply with the established requirements.</p> <p>different solutions for the packaging of low-alcohol beverages and soft drinks (deposit) and “other sales packaging”</p>
Principle	<p>In Estonia all no- and low alcoholic beverages an beers, ciders and perrys in plastic and glass bottles and metal cans are obliged to be sold with deposit.</p>
Level of payment to scheme	<p>Deposit rates:</p> <p>Glass, plastic (PET) > 0,5 l: 0.06 € Metal cans, plastic until 0,5 l: 0.03 €</p> <p>Retail handling Fee 2007-2008 (Deposit packaging Take-back compensation for retailers, pyid by Deposit Organisation: Manual: 0.017 € per unit Reverse vending machines (RVM): 0.028 € per unit Retail handling Fee 2009-2010 (Deposit packaging Take-back compensation for retailers, pyid by Deposit Organisation: Manual take back: 0.0077 € per unit Reverse vending machines (RVM) unpressed: 0.019 € per unit RVM pressed over 50 %: 0.027 € per unit RVM Refillables: 0.0256 € per unit</p>

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	Recovering of packaging has been promoted with the enforcement of the Packaging Excise Duty Act on alcoholic and non-alcoholic beverage packaging. If the enterprises, which produce or import these products, fail to set up packaging and packaging waste collection or recovery system minimally for 60% of volume, they are charged excise duty. Enforcement of this economic instrument has been a strong stimulus for recovery of beverage, but this effects only part of packaging waste. Deposit Company – Eesti Pandipakend
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.recestonia.ee/jaatmed/eng2.pdf http://www.envir.ee/orb.aw/class=file/action=preview/id=1079695/Packaging+Act+%28consolidated+text+Sept+2008+%282010+am%29%29.pdf http://www.envir.ee/orb.aw/class=file/action=preview/id=1092013/P-Eek-Deposit-EST-pres-Riga-8-12-2008.pdf
Packaging, Green Dot scheme	
Estonian Recovery Organization (ERO) and Estonian PackCycling (EPC)/Eesti Pakendiringlus	
Year introduced	2004
Key Legislation	Packaging Act
Scope of the scheme	The Packaging Act introduced in June 2004 sets recovery targets for all packaging placed on the market and deposit system for one way packaging of beer, alcohol drink with low ethanol content and soft drinks in glass, plastic and metal packaging as of January 1, 2005.
Targets set for the scheme (including planned future targets)	The existing norms of the Packaging Act require collection and recovery of 50% of total packaging put in the market by packaging operator (packer and importer) in 2004, up to 2010 - 60%, and from 2012 - to comply with all EU norms. 2006 data: Total recycling rate 45,7% (target 25%) Total recovery rate 50,1% (target 50%) Rate of recycling for each type of packaging: Glass 48,5% (goal 15%) plastic 33,7% (goal 15%) Paper 55,2% (goal 15%) Metals 52,5% (goal 15%) Wood 75,4% (goal 15%)
Principle	The introduction of the Packaging Act has also triggered introduction of Compliance Scheme in Estonia. The packaging recovery organization, called "Estonian Recovery Organization" has been established by producers, importers and retailers operating in Estonia. Once a company concludes a Client Contract, it has a right to attach the Green Dot to packaging circling in the ERO system. The Green Dot as a financing mark on packaging shows that industry and trade are making a financial contribution to the system.

Level of payment to scheme	<p>Estonian Recovery Organization (ERO) is a non-profit organization. It finances its activities by recovery fee. Once a company concludes a Client Contract, it has a right to attach the Green Dot to packaging circling in the ERO system. In compliance with the user-pays principle, the recovery fees are calculated on the basis of the material used, the weight of items sold. They also take account of the different costs incurred for collecting and sorting the packaging materials and, in the case of plastics, for recycling. The companies pay only for those items of packaging they put on to the Estonian market.</p> <p>Recovery fees 2007</p> <table> <tr> <td>Sales packaging</td><td>€/kg</td></tr> <tr> <td>Glass and ceramics</td><td>0.1</td></tr> <tr> <td>Paper and carton, including beverage carton (for milk)</td><td>0.11</td></tr> <tr> <td>Beverage ca</td><td></td></tr> <tr> <td>ton</td><td>0.41</td></tr> <tr> <td>Plastic</td><td>0.41</td></tr> <tr> <td>Metal</td><td>0.26</td></tr> <tr> <td>Wood</td><td>0.04</td></tr> <tr> <td>Transport and group packaging</td><td></td></tr> <tr> <td>Paper, carton, corrugated board</td><td>0.11</td></tr> <tr> <td>Plastic</td><td>0.12</td></tr> <tr> <td>Me</td><td></td></tr> <tr> <td>al</td><td>0.13</td></tr> <tr> <td>Wood</td><td>0.04</td></tr> </table>	Sales packaging	€/kg	Glass and ceramics	0.1	Paper and carton, including beverage carton (for milk)	0.11	Beverage ca		ton	0.41	Plastic	0.41	Metal	0.26	Wood	0.04	Transport and group packaging		Paper, carton, corrugated board	0.11	Plastic	0.12	Me		al	0.13	Wood	0.04
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Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?																													
Producer-led/funded or government-led/funded?	According to the Packaging Act the number of recovery organizations is not limited, but they have to fulfil requirements and get a license for operation from Estonian Ministry of Environment. The law says that all manufacturers, packers and importers are entitled to transfer the fulfilment of packaging recycle norms to a non-governmental organization established by themselves. If producers or importers haven not joined such organization, they have to organize recovery of their packaging themselves.																												
Problems encountered/ solutions found/ lessons learned from implementation																													
Perceived costs (financial and administrative) of the instrument																													
Reference/source	http://www.pro-e.org/Select_your_country1.html																												
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MTÜ EES-Ringlus MTÜ Eesti Elektroonikaromu (biggest) Ekogaisma SIA Eesti filiaal (only lamps)																													
Year introduced																													

Key Legislation	Waste Act and three WEEE Decrees (The Decree of National Register, Governmental Decree on signing, collecting and recycling targets of WEEE, A Decree of the Environment Minister on treatment of WEEE)
Scope of the scheme	
Targets set for the scheme (including planned future targets)	<p>The Waste Act contains provisions relating to the financial guarantee, the principle of sharing the costs of historical WEEE and the principles of a collective system</p> <p>Governmental Decree on signing, collecting and recycling targets of WEEE was published on 29 December 2004 and entered into force on 1 January 2005. Estonia, like all other EU member states shall meet the collection target set in WEEE Directive, but Estonian law hasn't made producers responsible for achieving the collection target which is set by the WEEE Directive. So there is no any responsibility about collection amounts for Estonian producers.</p>
Principle	

Level of payment to scheme	Reutilization rates from 01.01.2007 excluding VAT (18%)																																																																																																																										
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Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	Eesti Elektroonikaromu is a biggest collector of WEEE in Estonia. There are over 60 collecting places/points all over Estonia on the list of Eesti Elektroonikaromu.
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.elektroonikaromu.ee/web/?cat_ID=2
End-of-life vehicles (ELV)	
[Name of existing scheme]	
Year introduced	
Key Legislation	Waste Act (definition of producer and product of concern, general obligations for producer); Regulation of Government No 154, 06.07.2006 (restricted hazardous substances and exemptions); Regulation of Minister of Environment No 89, 08.07.2004 (requirements for treatment of ELV); Regulation of Government No 79, 17.07.2010 (specifies which vehicles belong under producer responsibility, targets for recycling and recovery and deadlines for achievement of these targets, requirements for returning ELV to the producer) (replaces the Regulation of Government No. 352, 13.12.2004) Regulation of Government No 135, 23.07.2009 (Register of Product of Concern and registration of producers) (replaces the Regulation of Government No. 28, 30.01.2006).
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	Collection of ELV by Waste Act producer is required to ensure the collection, recycling, recovery or disposal of waste resulting from products of concern manufactured, resold or imported thereby and shall have a sufficient guarantee for these obligations. Guarantee can be: 1) participation in collective schemes, 2) recycling insurance or 3) closed bank account.
Level of payment to scheme	Producer must bear all costs of collection and treatment of ELV. Costs of such waste shall be divided between these producers who are in market now in proportion to their market share. Market share can find out from Register of Products of Concern.

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	Estonia waste sheet 2008
Batteries	
MTÜ EES-Ringlus and MTÜ Eesti Elektroonikaromu	
Year introduced	
Key Legislation	<p>Waste Act (definition of producer and product of concern, general obligations for producer, general requirements for waste handling);</p> <p>2. Regulation of Government No. 154, 06.07.2006 (restricted hazardous substances and exemptions);</p> <p>3. Regulation of Government No. 135, 23.07.2009 (Register of Product of Concern and registration of producers) (replaces the Regulation of Government No. 28, 30.01.2006);</p> <p>4. Regulation of Minister of Environment No. 5, 10.01.2008 (requirements for treatment of batteries);</p> <p>5. Regulation of Minister of Environment No. 64, 21.12.2007 (requirements for labelling batteries);</p> <p>6. Regulation of Government No. 124, 07.08.2008 (requirements for collection and returning the batteries, collection rates and targets for recycling and recovery, deadlines for achievement of rates and targets).</p> <p>Registration of battery producers started from 13 February 2006.</p>
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	<p>By Waste Act producer is required to ensure the collection, recycling, recovery or disposal of waste resulting from products of concern manufactured, resold or imported thereby and shall have a sufficient guarantee for these obligations. Guarantee can be:</p> <ol style="list-style-type: none"> 1) participation in collective schemes, 2) recycling insurance or 3) closed bank account. <p>Producer must bear all costs of collection and treatment of waste batteries and accumulators. Producers have also obligation to collect and treat all waste batteries and accumulators resulting from batteries and accumulators placed to the market before 1 May 2004 (so called "historical waste"). Costs of such waste shall be divided between these producers who are in market now in proportion to their market share. Market share can find out from Register of Product of Concern.</p>
Level of payment to scheme	

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	Estonia waste sheet 2008
Paper/cardboard	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	

Other (if any)	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	

7.6 Other interesting instruments

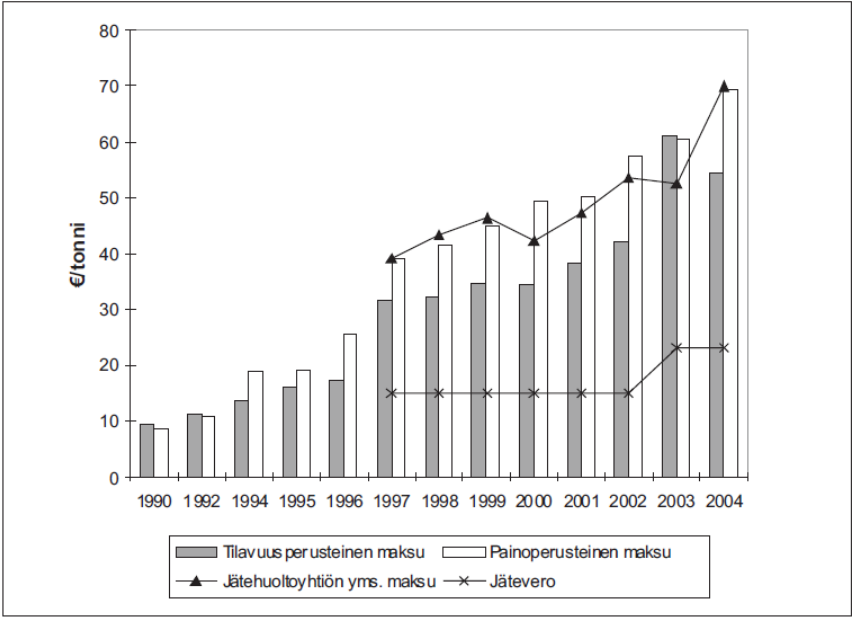
Principle (one/two lines describing the instrument)	
Structure of incentive (how is it applied and at what levels?)	
Scope (waste streams)	
Voluntary or mandatory/legislative?	
Geographical coverage	
Target group (e.g. consumer, households, business, manufacturer)	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	

ECONOMIC INSTRUMENTS IN FINLAND

8.1 Fees for Waste Disposal and Treatment

8.1.1 landfill fees (and Bans)

Jäteverolaki (495/1996), vanha laki [Waste Tax Act (495/1996), old act]																								
Jäteverolaki (1126/2010) [Waste tax Act (1126/2011)]																								
Date of introduction	(Old) Waste Tax Act in force 1996-2010, Waste Tax Act since 1.1.2011																							
Principle (one/two lines describing the instrument)	Old Waste Tax Act: for waste landfilled in municipal landfills and also in the landfills operated by other party than waste producer. Excluding landfilling industrial waste in the own landfill Waste Tax Act since 1.1. 2011, for all landfilled waste listed according the waste list of Act The landfill tax was implemented to stimulate material reuse, and to reduce landfilling.																							
Current levels of tax, and tax structure	Since 1.1.2011 40 €/tonne After 1.1 2013 50 €/tonne																							
Details of any exemptions	Old Waste Act: Soil and rock material landfills and waste recovery sites were out of the scope. Exemptions were diisposed contaminated soil, waste paper cleaning waste, air protection waste of power plants, waste recovered in landfill construction except glas waste and uncrushed concrete waste. Waste Tax Act since 1.1.2011: Soil and rock material landfills and waste recovery sites are out of the scope. Exemptions are disposed waste paper cleaning waste and waste recovered in landfill construction except glass waste and uncrushed concrete waste, and as well as hazardous waste.																							
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	Biodegraballe municipal waste <table><tr><td>Year</td><td>In total</td><td>Material recovery</td><td>Co-incineratio</td><td>Incineration</td><td>Landfill</td></tr><tr><td>2008</td><td>1979250t</td><td>689757t</td><td>224975t</td><td>89865t</td><td>974652t</td></tr><tr><td>2009</td><td>1835918t</td><td>720082t</td><td>229314t</td><td>77205t</td><td>809308t</td></tr></table>						Year	In total	Material recovery	Co-incineratio	Incineration	Landfill	2008	1979250t	689757t	224975t	89865t	974652t	2009	1835918t	720082t	229314t	77205t	809308t
Year	In total	Material recovery	Co-incineratio	Incineration	Landfill																			
2008	1979250t	689757t	224975t	89865t	974652t																			
2009	1835918t	720082t	229314t	77205t	809308t																			
How has the tax changed over time?	Until end of 2002: 15 € From beginning of 2003: 23 € From brginnig 2005: 30 €																							

Extent of geographical coverage	Whole of Finland
Plans for future levels of the tax	Waste Act Tax since 1.1.2011, monitoring and surveillance, and possible adjusting the list of wastes under tax, impose tax to new waste classes based on monitoring.
Reference /source	
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for landfilling (excluding landfill tax)	<p>Based on a study covering all landfill sites the average treatment fees for landfill sites were 69.5 € to 74.4 € per tonne (depending on the quality of the waste) and 44.4 € per tonne for biowaste.</p>  <p>The figure show how landfill fees have changed between 1990-2004. The gray column are the fees per volume and white pillar is per weighth. Triangle line is the costs that waste treatment companies take and the line with crosses is the landfill tax. The volume based fees have been converted to weight with the coefficient 0.35 t/m³.</p>
Source of information	<p>Ministry of the Environment (2005), Jäteveron vaikuttavuuden arviointi, Number 162, Helsinki 2005, http://www.ymparisto.fi/download.asp?contentid=42668&lan=fi</p> <p>Proposal for new waste tax act of state council at 2010.</p> <p>http://www.vm.fi/vm/fi/04_julkaisut_ja_asiakirjat/03_muut_asiakirjat/20100702Lausun30394/Luonnos_hallituksen_esitykseksi_Eduskunnalle_jaeteverolaiksi.pdf</p>

Do sources give any explanation for key factors explaining variation?	The landfill tax has a considerable impact on fees charged, which support the recovery market.
Information on Bans	
Wastes to which the ban is applied	Bans: unpretreated waste, household waste or similar when the biodegradable fraction has not been separately collected, liquid waste, exploding-oxydising etc. waste, infectable waste and tyre waste may not be deposited in a landfill.
Date of introduction	1996-2005
(Means of implementation)	
Plans for future bans (if any)	Finland is redesigning a stricter ban which will be implemented in the near future. Aim is to introduce in 2011 an Act (with short transition period) to ban landfilling of biowaste.

8.1.2 Incineration fees (and Bans)

[Name of existing tax]	
Date of introduction	There is no incineration tax.
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	There are no plans to introduce an incineration tax, based on the report of the Working Group evaluating potential change to waste taxation. However, State support for electricity generated through incineration of renewable fuels.
Reference/source	
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	

Range of fees for incineration (excluding incineration tax)	
Source of information	
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	

8.2 PAY-AS-YOU-THROW SCHEMES

Overview of PAYT schemes in the MS	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	Municipality sets their own fees for collections. All municipalities have PAYT schemes in place. These schemes are combined with a standard fee, which is a fixed fee per year per house type. This fee covers the collection of recycled waste, maintenance/development of the waste collection infrastructure as well as information campaigns and is payable by all households. The PAYT schemes are a menu of different payments where the fees relate to the volume of the bin with additional charges for additional collections etc. There exists also the possibility to use collection points that are based in more remote areas. In these cases the residents have to transport their waste themselves to the collection point. The fees for this service are fixed and adjusted on yearly basis.
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	See above.
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	The waste act does not require a PAYT scheme. It only suggests in general the type of fees (based on type of container, type of collection equipment etc.) municipalities can use.
Reference/source	http://www.finlex.fi/fi/laki/ajantasa/1993/19931072 http://www.kiertokapula.fi/files/attachments-archived/ohjelmat/jatemaksutaksa_2011_hyvinkaa.pdf
Location of scheme (common to all municipalities)	
Nature of scheme	A pick and mix menu of options.

Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	<p>For the municipalities of Kerava, Järvenpää, Tuusula Mäntsälä (north of Helsinki) the fees are:</p> <ul style="list-style-type: none"> • 140 litre container is 4,20 €/emptying • 240 litre container is 5,90 €/emptying • 360 litre container is 7,50 €/emptying • 600 litre container is 10,70 €/emptying <p>For comparison the fees for the Kuopio municipality (East of Finland) the fees are cheaper, and are.</p> <ul style="list-style-type: none"> • 140 litre container is 3,17 €/emptying • 240 litre container is 3,78 €/ emptying • 360 litre container is 4,53 €/ emptying • 660 litre container is 5,92 €/ emptying
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	It is possible for the municipality to set a different fee in individual cases where it can be proven that the fee is unreasonable (too small or too large). The general criteria are based on the service provided and the type/amount created. Social criteria are not mentioned.
Reference/source	http://www.jatekukko.fi/www/fi/liitetiedostot/hinnastot/Hyva_tietaa/2009-2010/hyva_tietaa_Kuopio.pdf

8.3 PRODUCER RESPONSIBILITY SYSTEMS

Packaging, tax and deposit for drink containers	
Date of introduction	Tax for production of drink containers through the Act 1037/2004.
Principle (one/two lines describing the instrument)	The aim of the tax is to encourage fillers and importers to be part of recognised return deposit system for drink containers. See also the section on the deposit system of bottles below.
Scope of the tax	Covers all beverage containers (see exemptions)
Current levels of tax, and tax structure	The tax is payable for beverage containers. The tax is currently set at 0.51 € per litre.
Details of any exemptions	tax is not payable for drink containers that are part of recognised return deposit system. It is also possible for the filler or importer of the beverage to set up a collection system. In any case a tax exemption will require an application to and acceptance by the Council of the Tampere region.
How has the tax changed over time?	The tax has not changed since 2004. However, for three years a tax of 0.085 € per litre was in place to cover drink containers from the deposit system that were recycled to be used as raw material. After the three year period this tax was abolished.
Plans for future levels of the tax	

Reference/source	<p>Information about the tax and deposit on drink containers for the Environment Institute website: http://www.environment.fi/default.asp?contentid=217722&lan=fi</p> <p>Act 1037/2004 on the tax for drink containers. http://www.finlex.fi/fi/laki/alkup/2004/20041037</p> <p>Information about the tax and deposit on drink containers for the Environment Institute website: http://www.ymparisto.fi/default.asp?contentid=226685&lan=fi&clan=fi</p>
Packaging, Deposit refunds	
Year introduced	1993 and 2005
Key Legislation	The deposit system for bottles is determined by the Waste Act (1072/1993) and the targets for drink containers are covered by the Act (180/2005) on the return system of drink containers.
Targets set for the scheme (including planned future targets)	<p>The aim of the deposit return scheme is that the it is maintained so that at least 90 % of drink containers are returned to be reused, that 90 % of the metal drink containers are returned to be recycled and that of disposable drink containers 80 % are returned for recycling.</p> <p>The tax and the deposit system have promoted the return of drink containers to 98 %.</p>
Scope of scheme	Covers all drink containers
Principle	To be part of the scheme the filler or importer of the beverage has to be part of a recognised collection system or set up a collection system of their own. In order to do this an application has to be accepted by the Council of the Tampere region.
Level of payment to scheme	<p>The following deposits are to be paid:</p> <ul style="list-style-type: none"> • 0.15 € for metal drink containers • 0.20 € for 0.35 to 1 litre plastic drink containers • 0.4 € for at least 1 litre plastic drink containers • 0.10€ for other all other drink containers

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Government led but producer funded.
Reference/source	targets for drink containers is covered by the decision on the "return system of drink containers" http://www.finlex.fi/fi/laki/alkup/2005/20050180
Packaging and packaging waste	
[Name of existing scheme]	
Year introduced	1997
Key Legislation	The producer responsibility of packaging and packaging waste is determined by the Waste Act (1072/1993) and the Council of State decision on packaging and packaging waste (962/1997). Both are based on the Directive 94/62/EU.
Scope of the scheme	As defined in the Directive 94/62/EU with the exception that only those producers with a turnover of EUR 1 M or more hold a producer responsibility
Targets set for the scheme (including planned future targets)	As defined in the Directive 94/62/EU
Principle	Producers have to arrange the collection, transport and treatment of packaging waste.
Level of payment to scheme	There are registration fees and annual fees based on the firm's turnover, and recovery fees based on the packaging quantities sold to the market. Please see the fees for 2011 in the web page of the Environmental Register of packaging PYR Ltd: http://www.pyr.fi/eng/pyr/fees.html
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	After implementation of new waste law (estimated summer 2013), producers will pay 100 % for costs of waste management. Present cost coverage is not possible to estimate.
Producer-led/funded or government-led/funded?	Producer led and funded, accepted and supervised by government.
Electrical and electronic equipment (EEE)	
[Name of existing scheme]	
Year introduced	2005
Key Legislation	The producer responsibility of WEEE is determined by the Waste Act (1072/1993) and the Decree 852/2004. Both are based on the Directive 2002/96/EU
Scope of the scheme	As defined in the Directive 2002/96/EU in addition of B-to-C luminaires.
Targets set for the scheme (including planned future targets)	As defined in the Directive 2002/96/EU
Principle	Producers have to arrange the collection, transport and treatment of WEEE-waste.
Level of payment to scheme	Producers pay 100 % for costs of waste management of B-to-C –waste. For B-to-B, producers and end users may agree for sharing of costs. Costs has large variability due to large variability of equipment and their waste management expenses. Joining fee is typically less than 500 euros (only once). Annual fees from 0 to 500 euros and waste management expenses from less than 0 (income) to 1000 euros/ton of waste.

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	For B-to-C it is close to 100 %, For B-to-B, there is no estimate.
Producer-led/funded or government-led/funded?	Producer led and funded, accepted and supervised by government
Reference/source	National authority: http://www.ymparisto.fi/default.asp?contentid=380266&lan=FI&clan=en
End-of-life vehicles (ELV)	
[Name of existing scheme]	
Year introduced	2004
Key Legislation	The producer responsibility of ELV is determined by the Waste Act (1072/1993) and the Decree 581/2004. Both are based on the Directive 2000/53/EU
Scope of the scheme	As defined in the Directive 2000/53/EU
Targets set for the scheme (including planned future targets)	As defined in the Directive 2000/53/EU
Principle	Producers have to arrange the collection, transport and treatment of ELV and provide CoD for the last owner of the vehicle.
Level of payment to scheme	Producers pay 100 % of the expenses. Joining fee typically less than 1000 euros (only once) and less than 5 euros per car sold.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	Close to 100 %.
Producer-led/funded or government-led/funded?	Producer led and funded, accepted and supervised by government
Reference/source	National authority: http://www.ymparisto.fi/default.asp?contentid=380266&lan=FI&clan=en
Batteries	
[Name of existing scheme]	
Year introduced	2008
Key Legislation	The producer responsibility of batteries and accumulators is determined by Waste Act (1072/1993) and the Government Decree on Batteries and Accumulators (422/2008). Both are based on the Directive 2006/66/EY.
Scope of the scheme	As defined in the Directive 2006/66/EY.
Targets set for the scheme (including planned future targets)	As defined in the Directive 2006/66/EY.
Principle	Producers have to arrange the collection, transport and treatment of batteries and accumulators with the exception that distributors of portable batteries and accumulators have to arrange the collection of portable batteries and accumulators.
Level of payment to scheme	Producers pay 100 % for costs of waste management of portable and automotive batteries and accumulators. For industrial batteries and accumulators producers and end users may agree for sharing of costs. Joining fee (paid only once) is from 300 euros to 3000 euroa depending on producer organisation. Annual fees are about 200 euros and waste management expenses from less than 0 (income) to 1500 euros/ton of waste.

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	For portable and automotive batteries and accumulators it is close to 100 % and for industrial batteries and accumulators, there is no estimate.
Producer-led/funded or government-led/funded?	Producer-led funded, accepted and supervised by government.
Reference/source	National authority: http://www.ymparisto.fi/default.asp?contentid=380266&lan=FI&clan=en
Paper	
[Name of existing scheme]	
Year introduced	1999
Key Legislation	The producer responsibility of waste paper is determined by the Waste Act (1072/1993) and the Council of State decision on the recycling of waste paper (883/1998).
Scope of the scheme	Covers newspapers, magazines, office paper and other similar paper products and concerns professional manufacturers and importers of paper used for manufacturing of printing paper and other paper products.
Targets set for the scheme (including planned future targets)	The decision (883/1998) sets an obligation to collect and recycle at least 75 % of paper sold and consumed in Finland annually.
Principle	Producers have to arrange the collection, transport and the treatment of waste paper.
Level of payment to scheme	There are neither joining nor recovery fees in 2011.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	The value of waste paper so high at the moment that it covers the costs.
Producer-led/funded or government-led/funded?	Producer led and funded, accepted and supervised by government.
Reference/source	National authority: http://www.ymparisto.fi/default.asp?contentid=380266&lan=FI&clan=en
Used tyres	
[Name of existing scheme]	
Year introduced	1996
Key Legislation	The producer responsibility of tyres is determined by the Waste Act (1072/1993) and the Council of State decision on the recycling of used tyres (1246/1995).
Scope of the scheme	Covers tyres of motor and other vehicles and equipments and concerns manufacturers and importers of vehicle tyres as well as retreaders of tyres.
Targets set for the scheme (including planned future targets)	The decision (1244/1995) sets an obligation to recycle 90 % of all vehicle tyres removed from use annually.
Principle	Producers have to arrange the collection, transport and the treatment of used tyres.
Level of payment to scheme	Tyre recycling is financed by a recycling fee, which the consumer pays when buying a new tyre. The fee varies from 1,89 euros (for tyres used in motor-bikes) to 64,11 euros (for tyres used in forest machines). There are no joining fees.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	Producers pay 100 % for costs of waste management.

Producer-led/funded or government-led/funded?	Producer led and funded, accepted and supervised by government.
Reference/source	National authority: http://www.vmparisto.fi/default.asp?contentid=380266&lan=FI&clan=en
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	

8.4 OTHER INTERESTING INSTRUMENTS

e.g. Landfill Allowance Schemes	
Principle (one/two lines describing the instrument)	
Structure of incentive (how is it applied and at what levels?)	
Scope (waste streams)	
Voluntary or mandatory/legislative?	
Geographical coverage	
Target group (e.g. consumer, households, business, manufacturer)	
Reference/source	

ECONOMIC INSTRUMENTS IN FRANCE

9.1 Waste Policy in the MS

Please address the following questions:

4. What are the key pieces of **waste legislation** in France?

Law of 15th of July 1975 modified by the Law of 13 July 1992, Decret on household packaging of 1st April 1992, Code of Environment Livre V Title IV Chapter 1°, General Code of local collectivities, texts transposing the European Directives

5. Does the MS have any **mandatory targets for recycling** of waste streams (and mechanisms to enforce them)?

The mandatory targets are those set up by EU Directives :

WEEE : from 50 to 75 % depending on devices

Packaging : 75 %

Batteries : 65% of the average weight of lead-acid batteries, 75% of the average weight of nickel-cadmium batteries and 50% of the average weight of other types of waste batteries.

ELV : 80%

6. Are there national (or if relevant regional) **waste management plans** in place?

According to article L541-11 of the Code of Environment , National plans of waste elimination must be set up by the Ministry of Environment for several types of waste.

At the regional level, there are Regional plans of special industrial waste elimination and Regional plans of medical waste with infectious risks. Their names will be changed to : Regional plans of hazardous waste prevention and management (PREDD) (art. L. 541-13 of the Code of Env.)

At the sub-regional level (department level), there are Departemental plans of household waste management (PREDMA in French) which will become Departemental plans of non-hazardous waste prevention and management (art. L. 541-14 of the Code of Env.)

Plans of C&D and public works waste prevention and management: This plans are set at the sub-regional level (departments) and aim at evaluating the amount of waste arising, the capacity of treatment of the department, identify the practices of professionals and issue recommendations.

Source : www.developpement-durable.gouv.fr/Les-outils-de-planification.html

C&D waste : Circulaire of 15th of February 2000

9.2 Waste management performance in the MS

Please provide headline data on the following (in addition to that provided in the spreadsheet of Eurostat data circulated by IEEP):

- Waste generation: 34,504,000 tonnes of municipal solid waste in 2009
- Recycling amounts in 2008:

7,949 tonnes of ferrous metal recycled in France

712 tonnes of non-ferrous metal

5,677 tonnes of paper and cardboard

2,365 tonnes tonnes of glass
251 tonnes of plastics
<ul style="list-style-type: none"> Disposal (landfill and incineration) of municipal waste (2008):
Incineration with energy recovery: 13 million tonnes
Incineration without energy recovery : 0,5 million tonnes
Landfilling: 21,1 million tonnes
Please provide links to any data sources used.
Sources: CGDD, June 2009, le point sur la renovation de la TGAP
Eurostat
SINOE Database www.sinoe.org
ADEME, Le recyclage en France, données 2008

9.3 Fees for Waste Disposal and Treatment

9.3.1 landfill fees (and Bans)

[Tax on landfilling operations for municipal waste] subdivision of the General Tax on Polluting Activities (TGAP)	
Date of introduction	1st of January 1999
Principle (one/two lines describing the instrument)	This tax aims at encouraging recycling and contributes to the funding of a « waste plan » aiming at reducing waste generation.
Current levels of tax, and tax structure	11 - 20 € per tonne. The tax is adjusted based on the sites' environmental performance i.e. 17 euros/ tonne : the site is certified EMAS or ISO 14001
Details of any exemptions	Exemption for installations working as bioreactors: the containers ("casiers") receiving waste must be equipped with devices for biogas management and the duration of use mentioned in the official authorisation must not exceed 18 months.
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	The tax referred to under this section applies only to municipal waste
How has the tax changed over time?	1995-2008 : 9,15 € per tonne for authorised landfill sites and 36 € per tonne for non-authorised landfill sites. 7,50 € per tonne if the landfill site is registered under EMAS or ISO 14000 certifications
Extent of geographical coverage	France-wide
Plans for future levels of the tax	Plans are for the tax to increase as follows: 2012 -2013 : from 15 to 30 € per tonne 15 €: more than 75% of biogas recovered 24 €: EMAS or ISO 14001 certification 30 €: Other cases In 2014 : from 20 to 30 € per tonne (20€, 24€, 30€) In 2015 : from 20 to 40 € per tonne (20€, 32€, 40€)

Problems encountered/ solutions found/ lessons learned from implementation	The tax increase resulted in raising concerns among landfill operators
Perceived costs (financial and administrative) of the instrument	88 millions € in 2009
Reference/source	Loi de finance 2009, article 29 www.budget.gouv.fr/presse/dossiers_de_presse/plf2009/dispositions_fiscales/tgap.pdf Decree n° 2009-1441 of 24th November 2009
Information on Fees – Non hazardous waste	
Range of fees for landfilling (excluding landfill tax)	Average price of 52 €/tonne The fee level ranges between 11 and 111 €/tonne among French collectivities involved in waste management but 80% of the fees range between 40 and 70 €/tonne
Source of information	ADEME, March 2006, Landfill fees for non hazardous waste managed by collectivities in 2005 (Le prix de la mise en décharge des déchets non dangereux gérés par les collectivités en 2005)
Do sources give any explanation for key factors explaining variation?	These large discrepancies are caused by several factors: <ul style="list-style-type: none"> - Market conditions at local level (supply and demand, competition, etc.) - Differences in the level of technicity of landfill sites - Differences in capacity - Extent of the collectivities' needs. For instance, the fees are lower for cities which have significant needs. However beyond a certain point (around 10 000 tonnes), fees start to increase again. - Capacity of negotiation of the collectivity
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Information on Bans	
Wastes to which the ban is applied	Ban on landfilling non-residual waste. Article L 541-1 of the Code of Environment defines non-residual waste as waste -resulting or not from the treatment of a waste- which cannot be further treated (by extraction of a recoverable part of it or by the reduction of its polluting or hazardous properties) according to the present technical and economical conditions
Date of introduction	1 st of July 2002
(Means of implementation)	
Plans for future bans (if any)	
Problems encountered/ solutions found/ lessons learned from implementation	There are different definitions of residual waste within France and the ban is not always fully respected
Perceived costs (financial and administrative) of the instrument	

9.3.2 Incineration fees (and Bans)

[Tax on incineration facilities for municipal waste, subdivision of the General Tax on Polluting Activities (TGAP)]	
Date of introduction	2010
Principle (one/two lines describing the instrument)	Increase the costs of incineration relative to less environmentally impacting kinds of treatments
Current levels of tax, and tax structure	<p>2.4 - 11.2 € per tonne</p> <p>The tax is adjusted based on the sites' environmental performance.</p> <p>The tax level can be reduced based on the energy performance of the plant, its certification (ISO 14001 or EMAS), the transportation mode used to transport waste to the plant, the respect of limit values of emissions in the air. A reduction is also applied when waste is transported to the final treatment plant by railway or by inland waterway.</p> <p>Tax level for 2011, in €/tonne:</p> <p>Plant certified ISO 14000 : 6,40 €</p> <p>Energy efficiency (according to limits set up by law) : 5,60 €</p> <p>Emissions of Nox < 80 mg/Nm3 : 5,60 €</p> <p>Combination of 2 components : 3,20 €</p> <p>Reduction linked to inland waterways or railway transportation: 0,80€</p>
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	This tax covers only municipal waste
How has the tax changed over time?	The tax has been introduced in 2009 and the rate has remained flat since then. However, the rate is planned to increase by 2013.
Extent of geographical coverage	France-wide
Plans for future levels of the tax	<p>2011 – 2012 : no evolution</p> <p>From 2013 to 2015 : from 3 to 14 € per tonne</p>
Problems encountered/ solutions found/ lessons learned from implementation	The tax increase resulted in raising discontent among incineration plants operators
Perceived costs (financial and administrative) of the instrument	54 million € in 2009
Reference/source	<p>Loi de finance 2009, article 29</p> <p>www.budget.gouv.fr/presse/dossiers_de_presse/plf2009/dispositions_fiscales/tgap.pdf</p>
Information on Fees	
Range of fees for incineration (excluding incineration tax)	<p>Between about 50 and 120 €/tonne</p> <p>Example: price for the incineration of one tonne of waste in the Lunel-Viel incinerator after 2005 : 95 € per tonne</p>

Source of information	<p>A study is currently lead by ADEME and AMORCE about incineration fees in French collectivities tu update the current data. The study is expected to cover:</p> <ul style="list-style-type: none"> - The fees applied in practice - Discrepancies observed - Determining factors <p>And it will analyse the incineration tax's effects on the fees and their price-signal effect. The results will be displayed in October 2011.</p>
Do sources give any explanation for key factors explaining variation?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	

9.4 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS– Redevance pour l'enlèvement des ordures ménagères (REOM) incitative	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	<p>The REOM system, which has some of the characteristics of a pay as you throw scheme, is in place in 30 municipalities and will be extended to 17 others during the course of 2011</p> <p>The REOM system containing an incentive aspect is not widely used since its use is only optional and since a large majority of municipalities is satisfied with the schemes currently in place,</p>

What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	<ul style="list-style-type: none"> - Pay per sack schemes - Purchasing a “vignette” (sacks labelling) <p>These 2 systems have not been considered as efficient by the collectivities who tried them. In one of them, waste escaped out of the collectivity, and for the other system, high dissatisfaction was experienced from its inhabitants.</p> <p>Therefore the systems used are mostly the following:</p> <ul style="list-style-type: none"> - Charge for the volume of the bin - Charge for the weight of the bin - Charge for the frequency of collection
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	The Grenelle I law (2009) states that the REOM and TEOM must contain an incentive component within the next 5 years
Problems encountered/ solutions found/ lessons learned from implementation	<p>Adverse behaviours: people disposing their waste on the street, or in other collectivities, at their workplace or in neighbour's containers.</p> <p>It appears to be difficult to set up a weight-based system in collective buildings, because of the number of inhabitants and the necessity to establish a precise inventory</p>
Perceived costs (financial and administrative) of the instrument	
Reference/source	<p>ADEME, 2006, Dossier la redevance incitative</p> <p>Ministère de l'écologie et du développement durable 2005, Causes et effets du passage de la TEOM à la REOM</p>
Ribeauvillé (municipality where it is used)	
Nature of scheme	Weight-based schemes. 120 or 240 Liters containers are allocated to each household. They are equipped with electronic chips which record the weight of waste collected and the date of collection. Information is then transmitted to the city which charge the household in accordance.
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	<p>The price is composed of a fix part, and a variable part based on the weight of waste disposed of by households.</p> <p>Prices :</p> <ul style="list-style-type: none"> - Containers maintenance and rent : <ul style="list-style-type: none"> 120 l : 5,00 € 240 l : 8,00 € 770 l : 25,00 € - Fix part : 82,80 € - Variable part : <ul style="list-style-type: none"> 0,50 € for regular collection (per collection) 1,10 € for additional collection (per collection) 0,27 € per kg
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	People who can bring evidence that they do not use the waste collection system can be exonerated.

Problems encountered/ solutions found/ lessons learned from implementation	<ul style="list-style-type: none"> - Difficulties linked to the establishment of a precise inventory of the inhabitants - Despite awareness raising campaigns, a large number of households complained after having received the first bill. 25% of them saw their bill increasing by more than 15 € - During the first 2 years, some inhabitants disposed their household waste at their workplace or left it on the floor next to containers. After some time, people seem to have integrated the new system and do no longer attempt to escape it <p>Green patrols and municipal police have been given the authority to fine offenders. For a first offence, the fine is 37 €, raised to 1500 € in case of recidivism</p> <ul style="list-style-type: none"> - The collectivity faced unpaid bills from some households
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.cc-ribeauville.fr/vie-locale/collecte-dechets.htm ADEME Direction générale Alsace, La mise en place de la redevance incitative à la Communauté de Communes de Ribeauvillé, Fiche n°27

9.5 Producer responsibility systems

Packaging, Taxes	
Date of introduction	There is no tax on packaging in France
Principle (one/two lines describing the instrument)	
Scope of the tax	
Current levels of tax, and tax structure	
Details of any exemptions	
How has the tax changed over time?	
Plans for future levels of the tax	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Packaging, Deposit refunds	
Year introduced	There is no national deposit refund scheme in France
Key Legislation	
Targets set for the scheme (including planned future targets)	
Scope of scheme	
Principle	

Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Packaging, Green Dot scheme	
[Système collectif de reprise]Eco-emballages, Adelphe, Cyclamed	
Year introduced	1992
Key Legislation	Law of 15 July 1975, modified by the Law of 13 July 1992 – Decret on household packaging of 1 st April 1992
Scope of the scheme	All packaging from households
Targets set for the scheme (including planned future targets)	Recycling target: 55 % in 2008 and 75 % in 2012.
Principle	Fillers of packaging pay for the collection, recycling and recovery of packaging. The money is paid to a central organism (Eco Emballage, Adelphe and Cyclamed are the authorised eco organisms).The scheme compensates local authorities for their role in collecting household packaging
Level of payment to scheme	<p>Fillers pay a fee to the central system based on the quantity of packaging they place on the market. The fee is based on the packaging weight;</p> <p>Paper-cardboard 16,33 € cents/kg</p> <p>Aluminium 6,06 € cents/kg</p> <p>Steel 3,02 € cents/kg</p> <p>Glass 0,48 € cents/kg</p> <p>Plastics 23,78 € cents/kg</p> <p>Others 16,33 € cents/kg</p> <p>Then, the fee is based on a contribution by packaging</p> <p>The result is the sum of these two elements.</p>
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The law is a government one. The scheme, however, is operated by private actors authorised by public authorities.
Problems encountered/ solutions found/ lessons learned from implementation	

Perceived costs (financial and administrative) of the instrument	
Electrical and electronic equipment (EEE)	
[Household WEEE]	
Year introduced	2006
Key Legislation	Décret n° 2005-829 of 20 July 2005 Articles R 543-172 to R 543-206 of the Environnement Code
Scope of the scheme	Household WEEE
Targets set for the scheme (including planned future targets)	Collection target : 6 kg/inhab./year for household WEEE in 2010, +1kg/year/inhab. until 2014 Depending on the categories of WEEE, the recycling rates vary between 50 %, 65 % ou 75 % and the recovery rates between 70 %, 75 % ou 80 %
Principle	4 eco-organisms authorised by public authorities ensure the organisation of waste management from collection to treatment. A coordinator ec-organism ensures that costs borne by the collectivities for separate collection are compensated.
Level of payment to scheme	The level of payment varies from an eco organism to another. It is established by eco-organism under the control of public authorities and within the framework of their authorization. It is based on the waste real end-of-life costs and to the system put in place by each organism. Example of level of payments for different devices: Flat screen TV: 4 to 8 € Laptop: 0,30 to 1 € Lamp; 0,18 €
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The law is a government one. The scheme, however, is operated by private actors authorised by public authorities.
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	ADEME, La responsabilité élargie du producteur, Panorama 2010 MEEDDM, 22th of February 2010, Balance sheet of the WEEE management system on the period 2006-2009 and new challenges for 2010-2014"
End-of-life vehicles (ELV)	
[End of life vehicules – household and professional]	
Year introduced	2006
Key Legislation	Décret n° 2003-727 of the 1 st of August 2003 Articles R 543-153 to R 543-171 of the Environnement Code
Scope of the scheme	End of life vehicles

Targets set for the scheme (including planned future targets)	Implicit collection target : 100 % Reuse and recycling target : 80 % in 2006 and 85 % by 2015 Reuse and recovery target : 85 % in 2006 and 95 % by 2015
Principle	No eco-organism. There are 1 413 dismantlers and 58 shredders authorised. Usually the costs borne by these actors are compensated by the sale of material. A legal text recently published obliges the producers to put in place ELV centers. These will be in charge of taking back used vehicles, depolluting them and dismantling certain parts for reuse. The authorised centers will be able transfer the waste material to shredders or dismantlers only after these operations have been performed, This legal text puts France in compliance with EU law.
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The law is a government one. The scheme, however, is operated by private actors authorised by public authorities
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	ADEME, La responsabilité élargie du producteur, Panorama 2010
Batteries	
[Batteries and accumulators]	
Year introduced	2001
Key Legislation	Décret n° 2009-1139 of the 22th of September 2009 Articles R 543-124 to R 543-136 of the Environnement Code Decret n° 2011-153 du 4 février 2011
Scope of the scheme	All types of batteries and accumulators
Targets set for the scheme (including planned future targets)	Collection targets : 25 % in 2012 et 45 % in 2016 Minimal recycling target of 50 %, 65 % or 75 % of the medium weight of batteries and accumulators depending on their category
Principle	Batteries producers can opt for a collective system and finance the end-of-life of their products through contributions to eco-organisms (two eco organisms are authorised : Corepile, Screlec) or opt for individual schemes.
Level of payment to scheme	Starting from 0,279 €HT per kg of batteries put on the market
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The law is a government one. The scheme, however, is operated by private actors authorised by public authorities.

Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	ADEME, La responsabilité élargie du producteur, Panorama 2010
Paper/cardboard	
[paper]	
Year introduced	2006
Key Legislation	Article L 541-10-1 of the Environnement Code Articles D 543-207 to D 543-212 of the Environnement Code
Scope of the scheme	Printed papers from households and papers intended to be printed
Targets set for the scheme (including planned future targets)	No specific targets
Principle	Producers or printed papers pay for the collection, recycling and recovery of printer paper waste to a unique ec-organism.
Level of payment to scheme	37 € HT per tonne starting from 5 tonnes or more of paper put on the market
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The law is a government one. The scheme, however, is operated by private actors authorised by public authorities.
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	39 million € have been allocated to collectivités in 2009
Reference/source	ADEME, La responsabilité élargie du producteur, Panorama 2010 www.aacc.fr
Other	
[Tyres]	
Year introduced	2004
Key Legislation	Décret n° 2002-1563 of the 24 th of Décembre 2002 Articles R 543-137 to R. 543-152 of the Environnement Code
Scope of the scheme	Tyres (household and professional) (cars, lorries, motorcycles planes etc.) except those for cycles and moped
Targets set for the scheme (including planned future targets)	Implicit collection and recovery targets: 100 %

Principle	A majority of tyres producers finance the management and treatment of the end-of-life of tyres through contributions to collective schemes (eco-organisms authorised by public authorities). A minority of them make agreements directly with private companies ensuring waste pneumatics management and treatment.
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The law is a government one. The scheme, however, is operated by private actors authorised by public authorities
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	ADEME, La responsabilité élargie du producteur, Panorama 2010
Other	
[Non-used medicines]	
Year introduced	2009
Key Legislation	Article L 4211-2 of the Public Health Code Décret n° 2009-718 of the 17 th of June 2009 Article R 4211-28 of the Public Health Code
Scope of the scheme	Non-used drugs for human use and for individuals use
Targets set for the scheme (including planned future targets)	Collection target + 2 % per year starting from January 2010 (= +13 % compared to 2008)
Principle	Drug producers pay for the collection and recovery of non-used medicines. The money is paid to an authorised eco-organism: Cyclamed. Waste collection is ensured by the pharmacies.
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The law is a government one. The scheme, however, is operated by private actors authorised by public authorities
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	ADEME, La responsabilité élargie du producteur, Panorama 2010

Other	
Textiles	
Year introduced	2007
Key Legislation	Décret 2008-602 of the 25th of June 2008 Article L 541-10-3 of the Environnement Code Articles R 543-214 to R 543-224 of the Environnement Code
Scope of the scheme	Clothing textiles, household linen, shoes from households
Targets set for the scheme (including planned future targets)	Collection and treatment target : 50 % of quantities put on the marketplace Recycling and reuse targets of separated waste : 70 %
Principle	1 eco-organism authorised
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The law is a government one. The scheme, however, is operated by private actors authorised by public authorities.
Reference/source	ADEME, La responsabilité élargie du producteur, Panorama 2010
Planned future schemes	
[4 schemes: household gas cylinders, household medical waste, furnitures, household chemical waste]	
Year introduced	2011
Key Legislation	Several legal texts (Decrets) to be published
Scope of the scheme	Medical waste with infecting risks used by patient in self-treatment, gas cylinders for household use, household waste from chemical products likely to pose health and environmental problems, furnitures from household or professionals
Targets set for the scheme (including planned future targets)	undefined
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The law is a government one. The scheme, however, is operated by private actors authorised by public authorities .
Reference/source	ADEME, La responsabilité élargie du producteur, Panorama 2010

9.6 Other interesting instruments

e.g. Landfill Allowance Schemes

Principle (one/two lines describing the instrument)	
Structure of incentive (how is it applied and at what levels?)	
Scope (waste streams)	
Voluntary or mandatory/legislative?	
Geographical coverage	
Target group (e.g. consumer, households, business, manufacturer)	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	

ECONOMIC INSTRUMENTS IN GERMANY

10.1 Waste Policy in the MS

Please address the following questions:

7. What are the key pieces of **waste legislation** in the MS? (please provide titles/references and links, and a very brief summary of the main objectives and elements of the legislation)

- a. *Kreislaufwirtschafts- und Abfallgesetz (basic law)*: <http://www.gesetze-im-internet.de/krw-abfg/>; lays down the principles of waste management in Germany, the waste management hierarchy, the share of public authorities and private waste managers in the collection/treatment of waste. It is also the basis for the different ordinances governing specific waste streams
- b. *Gewerbeabfallverordnung (ordinance on commercial waste)*: <http://bundesrecht.juris.de/bundesrecht/gewabfv/gesamt.pdf>, lays down principles of separate collection and treatment of waste streams, if a separate collection of waste streams is not done the mixed waste needs to be treated in a way that guarantees the attainment of certain recovery targets
- c. *Verpackungsverordnung (waste packaging ordinance)*: transposes the EU Packaging Waste Directive
- d. *Elektro- und Elektronikaltgerätegesetz (law on WEEE)*: transposes the WEEE Directive
- e. *Batteriegesetz (Law on Batteries)*: transposes the Battery Directive
- f. *Altfahrzeugegesetz (Law on End of life vehicles)*: transposes the ELV Directive
- g. *Deponieverordnung (Landfill Ordinance)*: transposes the Landfill Directive, strictly limits the types of waste eligible for landfill, most importantly it bans the disposal of mixed municipal waste in landfills.
- h. *17. Bundesimmissionsschutzverordnung (17th Federal Immission Protection Ordinance)*: lays down requirements for the operation of waste incineration plants.

8. Does the MS have any **mandatory targets for recycling** of waste streams (and mechanisms to enforce them)? (please list any mandatory targets additional to, or higher than, those specified in EU Directives, associated deadlines, and outline information on any enforcement mechanisms)

- a. *There are mandatory targets for recovery of the part of municipal waste not coming from private households ("commercial waste")*

9. Are there national (or if relevant regional) **waste management plans** in place? (please provide titles/references and links, and a very brief summary of the main objectives and elements of the plan)

- a. *The regions ("Länder") develop regional waste management plans. There is no national waste management plan, there will be a national waste prevention programme, though.*

10.2 Waste management performance in the MS

Please provide headline data on the following (in addition to that provided in the spreadsheet of Eurostat data circulated by IEEP):

- Waste generation; Please find data sets in separate paper – not to be cited.

- Recycling rates (overall and for individual materials); (also please look in the separate paper – not to be cited)
 - As for landfilling the absolute bottom was attained in 2009 when only 35 million tons of waste (all waste) were put in landfills. This was the lowest rate since 1975 (see http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/DE/Presse/pm/2011/01/PD11_032_321_templateId=renderPrint.psmi). In 2008 41,6 million tons were put to landfill after 43,1 million tons in 2007. (see http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/DE/Presse/pm/2009/06/PD09_208_321_templateId=renderPrint.psmi). The disposal of mixed municipal waste is no longer legal, therefore no data thereon. (Further information in separate paper, this is on municipal waste – not to be cited)
- The focus should be on municipal waste (where the most complete data sets are available), but where possible data on construction & demolition waste should be included.
- Where regional/local EIs have been identified (in particular regional variation of taxes and local pay-as-you-throw schemes), please try to find data at the regional/local level.
- Please provide links to any data sources used.**

Number of incinerations

At the beginning of 2010 in Germany 70 municipal waste incineration plants were in service. All are generating electric power, process steam or district heating. Approximately 19.1 million tonnes of waste were thermally treated in 2009.

Source: EEA, http://www.eea.europa.eu/soer/countries/de/soertopic_view?topic=waste; CEWEP, http://www.cewep.eu/information/data/studies/138.Map_European_Waste-to-Energy_Plants_in_.html

10.3 Fees for Waste Disposal and Treatment

10.3.1 landfill fees (and Bans)

[Name of existing tax]	
Date of introduction	No landfill tax
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	

Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	Insert sources of information
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for landfilling (excluding landfill tax)	<p>In Germany, untreated municipal waste may not be put in landfills anymore, municipal waste has to be incinerated before or under certain conditions be treated in Mechanical-Biological Treatment Plants. Many German regions completely forego landfilling of municipal waste.</p> <p>The ranges for landfill fees for waste that is residual from the treatment amount to 60 to 220 Euro/ton:</p>
Source of information	http://www.voithpaper.de/media/vp_de_twogether17_05_meri_d.pdf
Do sources give any explanation for key factors explaining variation?	no
Problems encountered/ solutions found/ lessons learned from implementation	The amount of waste put in landfills has drastically decreased in the last five years, as a result the landfill ban of mixed municipal waste is well enforced.
Perceived costs (financial and administrative) of the instrument	The landfill ban on mixed municipal waste has triggered a major change in the waste management infrastructure in many German regions. Compared to the former low-level landfilling, waste incineration or other qualified treatment modes are certainly more expensive. Thus, there has been an abundant debate on this issue and much pressure from specific stakeholders to allow far-reaching exemptions at the time when the laws have been debated but the landfill ban for municipal waste was sustained.
Information on Bans	
Wastes to which the ban is applied	<p>In Germany the Landfill Directive was transposed in a manner that made requirements for landfills stricter as compared to the Landfill Directive. The national government enacted two ordinances in 2001 and 2002: the Waste Landfilling Ordinance aimed to close the loopholes in the 1993 administrative regulation and the Ordinance on Landfills and Long-term Storage transposed the technical parts of the Landfill Directive that were not already implemented in German legislation. The Waste Landfilling Ordinance fixed the transition period to 1 June 2005 and allowed landfilling residues of MBT with an organic content above 3 %. In addition, strict technical standards for Mechanical-Biological Treatment were introduced, resulting in treatment costs similar to incineration. As a supporting measure, an amendment of the Recycling Management and Waste Act introduced a simplified permit procedure for waste treatment facilities other than landfills in order to enable federal states to establish pre-treatment capacity faster. From 2009 onwards the ordinances have been unified in the Landfill Ordinance.</p> <p>There is a landfill ban for waste wood in the Waste Wood Ordinance.</p>
Date of introduction	1 February 2001 (in a version that permitted many exceptions the ban existed from 1993). The ban has taken effect without exception from 1 July 2005.
(Means of implementation)	The requirements of the Waste Landfill Ordinance ensure that only such municipal waste can be put to landfill that have been properly treated beforehand, i.e. via mechanical-biological treatment or incineration.
Plans for future bans (if any)	

Problems encountered/ solutions found/ lessons learned from implementation	This landfill disposal especially of municipal waste has almost ceased. The implementation seems to work fine after a long debate before the landfill ban came into effect.
Perceived costs (financial and administrative) of the instrument	

10.3.2 Incineration fees (and Bans)

[Name of existing tax]	
Date of introduction	None
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	e.g. Across Germany, fees vary from just 80 Euro to 250 Euro (single extreme cases go below these limits), the median figure lies about at 174 Euro. In recent times, prices have fallen for a few installations (specifically for those that have over-capacities and need to acquire waste).
Source of information	http://www.abfallforum.de/downloads/Vortrag_Alwest_Kassel_2007.pdf
Do sources give any explanation for key factors explaining variation?	The price very much depends on the capacity of the plant and whether the plant can procure enough waste to make full use of its capacity.

Problems encountered/ solutions found/ lessons learned from implementation	The fact that some waste incinerators need to “acquire” waste in order to fill their capacities, might hinder in some cases to increase separate collection of waste and increase recycling.
Perceived costs (financial and administrative) of the instrument	
Information on Bans	
Wastes to which the ban is applied	No ban but certainly additional requirements for the incineration of hazardous waste.
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Renewable Energy Sources Act (Erneuerbares Energien Gesetz, EEG)	
Principle (one/two lines describing the instrument)	The German Act on Renewable Energies is a feed-in tariff to encourage the use of new energy technologies.
Date of introduction	Introduced in 2000, several times revised, last revision will get in force: 2012
Structure of incentive (how is it applied and at what levels?)	<p>The feed-in tariff has the objective to support production of electric energy from renewable energy source. The tariff varies between different energy sources and partly depends on the size of the systems. The tariffs are lowered every year to encourage more efficient production of renewable energy.</p> <p>Different types of waste are included in the source: biomass, i.e. old wood, natural waste from agriculture, forestry and fish production, vegetable oil, organic waste. The tariff is between 7 and 12 cents per kWh.</p> <p>Sewage and landfill gas: 5,8 cents to 8,6 cents per kWh</p> <p>From 2012 energy from organic waste via fermentation gets a higher feed-in tariff, between 14,0 and 16,0 cents per produced kWh.</p> <p>Incineration of mixed municipal waste is not included.</p>
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	The scheme is not financed by governmental budget, the costs are allocated to the final consumer.
Reference/source	http://www.bmu.de/erneuerbare-energien/downloads/doc/40508.php http://www.bmu.de/files/pdfs/allgemein/application/pdf/eeg_2012.pdf http://www.resaping-res-policy.eu/downloads/RE-SHAPING%20Renewable%20Energy%20Policy%20Country%20profiles%202009.pdf

10.4 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS

What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	No information.
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	<p>From experience, especially a bin volume-based system or more rarely a sack volume-based systems are used. Frequency-based systems exist but are rather common in rural areas and not in big cities where the collection routine is more firm. Weight-based systems are the exception (they exist e.g. in Dresden).</p> <p>In order to promote waste recycling, there have been court cases where waste holders have complained to be obliged to pay a fee adapted to a 80 liter tonne for residual waste that is collected once a week, where they produce much less waste. The courts have sustained their argumentation and thus the municipal statutes have to foresee payments adapted to a 40 liter ton.</p> <p>In many cases especially for residual waste and biowaste there is a basic fee and a variable fee, the latter is supposed to promote waste prevention and recovery.</p>
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	There is no such federal legislation, but at times the regional waste laws lay down that the design of the waste fees should promote waste prevention and recovery (such as § 8 of the Berlin Waste Law or § 6 of the Waste Law in Saxony-Anhalt).
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Location of scheme (municipality where it is used)	
Nature of scheme	Bin-volume based scheme
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	<p>The city of Stuttgart has laid down a two-week collection rhythm for residual waste for the tonne types: 60l, 120l and 240l also in estates that do not have a biotonne. If more waste is produced than can be collected in this modus, the waste holder has to buy an additional waste plastic sack which is collected at the normal waste collection day.</p> <p>In addition to residual waste, biowaste and waste paper is collected by the public service.</p>
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	In specifically motivated cases and upon application from the waste holder, the collection routine can be lowered to weekly for bin size 120 and 240 l.
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.stuttgart.de/item/show/17183

Location of scheme (municipality where it is used)	
Nature of scheme	Weight-based scheme
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	In Saarbrücken, a weight-based scheme has been instituted from 1 January 2011. Residual waste and biowaste are weighted when collected. While a fixed basic fee remains inflexible and is calculated according to the collection rhythm and the tonne size, only the variable fee changes according to the waste collected. This applies for residual waste. For biowaste only the weight collected counts to calculate the waste fees.
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	No
Reference/source	http://www.zke-sb.de/de/abfall/informationen_zur_muellverwiegung

10.5 Producer responsibility systems

Packaging, Taxes	
Date of introduction	None.
Principle (one/two lines describing the instrument)	
Scope of the tax	
Current levels of tax, and tax structure	
Details of any exemptions	
How has the tax changed over time?	
Plans for future levels of the tax	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Packaging, Deposit refunds	
[Name of existing scheme]	
Year introduced	1 of Jan 2003
Key Legislation	Ordinance on Packaging, Deposit on beverage packaging
Targets set for the scheme (including planned future targets)	

Scope of scheme	A deposit is levied on non-environmentally friendly one-way beverage packaging for mineral water, beer, alcoholic mix-drinks, refreshment drinks (0,1 -3 liters).
Principle	You pay the deposit with the purchase of the drink and get it back when you return it. Until 2012 the deposit is not levied on such beverages that are made of biodegradable synthetics consisting to a minimum of 75% of renewable substances if the producer/retailer of this packaging takes part in the dual system, the German collection/treatment system for overall packaging.
Level of payment to scheme	25 cents for all packaging above
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Producer-led funded (producers and retail)
Problems encountered/ solutions found/ lessons learned from implementation	The system is rather complex. The Packaging Ordinance was amended a few times, especially with regard to what business has to take back which beverage packaging (i.e. only for those beverages that the shop sells or all?)
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.bmu.de/files/pdfs/allgemein/application/pdf/pfandpflicht_faq_de_bf.pdf
Packaging, Green Dot scheme	
[Name of existing scheme]	
Year introduced	<ul style="list-style-type: none"> - Duales Sytems Deutschland GmbH: 28.09.1990 - Competition, meanwhile nine compliance schemes
Key Legislation	Packaging Ordinance.
Scope of the scheme	All packaging as far as it is subject to German waste law. Obligation for manufacturers and fillers to arrange participation in one of the 9 existing compliance systems for their sales packaging that is aimed at private consumers. This is to be documented by a Certification of Compliance covering the entire quantity of packaging involved and certifying participation in a dual compliance system for packaging in a dual compliance system for packaging recycling. The participation fee in a compliance system is calculated by material and weight of the packaging. Optimised sorting and recovery technologies have decreased the overall cost for the system of packaging recycling in Germany by more than 50% compared to 1998.
Targets set for the scheme (including planned future targets)	For packaging of consumer goods, the following targets apply – to be attained at the latest by 31 Dec 2008: 65 weight% have to be recovered 55 weight% have to be recycled. Specific recycling targets apply to the different materials: Wood 15, Synthetics 22,5, Metals 50 und Glass/Paper/Card 60

Principle	The collection, sorting and recycling of used sales packaging is financed via participation payments paid to the dual systems by trade and industry manufacturers and distributors. Payment is only made for packaging placed on the market in Germany.
Level of payment to scheme	The respective payment is based entirely on the material used and the weight of packaging.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	Costs are covered.
Producer-led/funded or government-led/funded?	The law is a government one. The scheme, however, is operated by industry.
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Electrical and electronic equipment (EEE)	
[Name of existing scheme] Double/responsibility	
Year introduced	2005
Key Legislation	Elektro- und Elektronikaltgerätegesetz
Scope of the scheme	Electrical and electronic equipment, scope in line with the WEEE Directive
Targets set for the scheme (including planned future targets)	Collection of 4 kg of WEEE per year and person Recovery targets between 70 and 80 % according to WEEE type Recycling targets between 50 and 80% according to WEEE type
Principle	<p>The municipal collection services are responsible for the collection of WEEE from private households and similar sources (B2C WEEE). Citizens are obliged to separate WEEE from other waste and bring it to the designed collection points. Since the coming-into-effect of the Elektro- und Elektronikaltgerätegesetz the collection of WEEE is free of charge.</p> <p>The "Stiftung Elektro-Altgeräte Register" (stiftung ear) registers the producers of EEE and monitors the collection of WEEE and coordinates the provision of collection points for WEEE. The EAR also calculates the mass of WEEE for which a single producer has to finance and organize the treatment (recycling/recovery).</p> <p>The producers are responsible to have the WEEE sold by them collected from the municipal collection sites and properly treated. The contracts are negotiated with waste managers e.g. by the different sectors of the industry.</p>
Level of payment to scheme	<p>Producers have to pay a fee to register with the EAR, the system charged with running the WEEE recycling/treatment system</p> <p>The level of payment for the collection and treatment per producer varies according to the contracts with waste management firms.</p>
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	Not known.
Producer-led/funded or government-led/funded?	The system is producer-based and funded but controlled by government authorities.

Problems encountered/ solutions found/ lessons learned from implementation	The Federal Environmental Agency sees to it that all the producers are registered and therefore prevents producers from not complying with their responsibilities “free-riders”). .
Perceived costs (financial and administrative) of the instrument	
Reference/source	Federal Ministry for the Environment, EAR http://www.koord.hs-mannheim.de/horizonte/h32_Schmidt.pdf
End-of-life vehicles (ELV)	
[Name of existing scheme]	
Year introduced	1998, amended in 2002 in order to transpose the ELV Directive
Key Legislation	End-of life-vehicle-Ordinance
Scope of the scheme	The 2002 ordinance covered M1 and N1 vehicles but contrary to the ELV Directive limited the scope of the ordinance for vehicles designed for special use to vehicles with a maximum weight of 3.5 tonnes (see § 1 para. 3 ELV Ordinance 2002). Upon complaints by the European Commission, the German Government extended the scope of the Directive to all M1 vehicles making use of the clause in Art. 3 No. 4 of the ELV Directive, which says “Special purpose vehicles as defined in the second indent of Art. 4(1)(a) of Directive 70/156/EEC shall be excluded from the provision of Article 7 of this Directive”. The German 2002 ordinance made a free take back system obligatory only for cars registered according to the German registering procedure. In addition, free take back could be denied if the German car documents (“Fahrzeugbrief”) are not handed over. The EU Commission did not regard the restriction to cars run in accordance with German national procedures compatible with EU law and principles. Upon complaints by the European Commission, the amendment to the ELV Ordinance extended the obligation to take back ELVs on a cost-free basis to cars registered in the European Union. The free take back of an ELV can be denied if the car papers (German document or EU Document) have not been handed in.
Targets set for the scheme (including planned future targets)	Recycling and recovery targets (at least 80 % reuse and recycling, 85 % reuse and recovery as from 1 January 2006.
Principle	The German ELV-ordinance foresees a take-back obligation (§3 para.1) in line with the requirements of the ELV Directive. Car producers have to take back all the vehicles of their brand in an authorised permitted collection facility or an authorised dismantling facility designated by the car producer. At the collection or dismantling facility, the owner is given a certificate of destruction. The take back system for end-of life cars is explicitly required to be cost free. The German ordinance also requires the installation of a “sufficiently comprehensive network of authorised collection facilities or authorised dismantling facilities”.
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	All costs are covered.
Producer-led/funded or government-led/funded?	Producer-led

Problems encountered/ solutions found/ lessons learned from implementation	<p>No practical problems with the cost-free take-back system have been reported. The take-back system overall works effectively. Dismantling facilities even report the problem of the decreasing number of ELVs being presented for dismantling (problem: illegal waste shipment), which makes it hard for them to fill their capacities. In effect the car manufacturers have to bear the costs of the take-back system.</p> <p>On the basis of data from the statistical federal office and calculations from the Umweltbundesamt the following recycling levels have been identified for End-of-life vehicles.</p> <ul style="list-style-type: none"> • 89,2 % for re-use and recycling • 92,9 % for re-use and recovery <p>Some occasional enforcement problems of the ELV-Ordinance by the local authorities were reported. For example the submission of a certificate of deconstruction in line with the ELV ordinance as a precondition of car deregistration is not always respected.</p> <p>The fraction of shredded material from ELVs used to be put on landfills in many cases until a landfill ban came into effect for this fraction in 2009, now this fraction also contributes to achieving the recovery targets.</p>
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.europarl.europa.eu/comparl/envi/pdf/externalexpertise/end_of_life_vehicles.pdf , Federal Environmental Agency, http://www.umweltbundesamt-daten-zur-umwelt.de/umweltdaten/public/theme.do?nodeId=2304
Batteries	
[Name of existing scheme]	
Year introduced	2009
Key Legislation	Law on Batteries (BatterieG) – formerly a battery ordinance had existed dating from 1998.
Scope of the scheme	All kinds of batteries (a few exceptions for batteries used in military or space-related contexts).
Targets set for the scheme (including planned future targets)	All established take-back systems (see below) have to attain a collection target of 35% by 2012 and of 45% by 2016.
Principle	Since 1 December 2009 the new battery law has taken effect, which replaced the former battery ordinance. The new law has instituted a new battery registry that is meant to help ensure the compliance of producers and importers of batteries with their obligations stemming from producer responsibility. Producers had to register at the 28 February 2010 at the latest. Non-registration is subject to penalty fines. There is a collective system of battery take-back (GRS) and parallel producer-specific take back systems.
Level of payment to scheme	Not known
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Producer-led
Problems encountered/ solutions found/ lessons learned from implementation	The new law is quite recent and needs to be analysed.
Perceived costs (financial and administrative) of the instrument	

Reference/source	Federal Environmental Agency, http://www.umweltbundesamt.de/abfallwirtschaft/battg/index.htm
Paper/cardboard	
[Name of existing scheme]	
Year introduced	No federal legislation for the separate collection of paper from households so far. Regional level in a few cases lays down the obligation to collect paper/cardboard separately (e.g. Berlin). Paper is in fact collected separately in most cases. Similar principles apply to glass and less frequently to bio waste.
Key Legislation	Few provisions on the regional level for the separate collection of paper in household waste, mostly such obligations are included in the municipal waste management statutes
Scope of the scheme	
Targets set for the scheme (including planned future targets)	The current draft of the new "Circular Economy Law" transposing the Waste Framework Directive foresees precise recycling and re-use targets for municipal waste at the federal level, i.e. 65% for municipal waste. In order to attain this objective, the (enhanced) separate collection and recycling of paper will be of primary importance. The new draft of the "Circular Economy Law" also foresees a separate collection obligation for bio waste.
Principle	
Level of payment to scheme	The collection of paper is mostly realised via municipal collection systems.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Government-led
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Other (if any)	
[Name of existing scheme]	
Year introduced	2003
Key Legislation	Gewerbeabfallverordnung (Ordinance on Commercial Waste)
Scope of the scheme	Commercial Waste
Targets set for the scheme (including planned future targets)	For commercial waste there is a federal obligation to collect separately paper, glass, metals, plastics and bio waste. As an alternative, the waste need not be collected separately if the mixed waste is treated in a specific "pre-treatment" plant that sorts the materials and allows a recovery level of 85%.
Principle	
Level of payment to scheme	

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Other (if any)	
Waste Oil	
Year introduced	1987, amended version from 2002
Key Legislation	Waste Oil Ordinance (Altölverordnung, AltölV)
Scope of the scheme	Oil for machinery, engines, turbines
Targets set for the scheme (including planned future targets)	These days, already all occurring waste oil is disposed. From the total 490,000 t of waste oil in 2008 76 % were recycled (373.000 t). The rest was subjected to recovery (used as fuel), mostly in the cement and chalk industry.
Principle	Oil for machinery, engines, turbines can only be sold, if on the packaging is signed that after use the oil has to be brought back to a receiving office for waste oil. System is organised on basis of private recycling companies.
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Producer-led/funded
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.bmu.de/files/english/pdf/application/pdf/altoel_verord_160202_en.pdf http://www.bmu.de/abfallwirtschaft/abfallarten_abfallstroeme/altoel/doc/2994.php
Other (if any)	
Waste from Building & Construction Industry	
Year introduced	1995-2005
Key Legislation	Negotiated agreement between industry and government
Scope of the scheme	Waste from building & construction sector

Targets set for the scheme (including planned future targets)	In 1997 50 percent of rubble from Building & Construction Sector was bought to landfills, until 2005 this part decreased to 10 percent.
Principle	Agreement between industry and government. Two thirds of waste in building and construction industry is excavated soil, which can easily be reused. Other one third (rubble, road scarification material, etc.) has to be treated before it can be reused.
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	Industry covers costs.
Producer-led/funded or government-led/funded?	Producer-led/funded
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	

10.6 Other interesting instruments

e.g. Landfill Allowance Schemes	
Principle (one/two lines describing the instrument)	
Structure of incentive (how is it applied and at what levels?)	
Scope (waste streams)	
Voluntary or mandatory/legislative?	
Geographical coverage	
Target group (e.g. consumer, households, business, manufacturer)	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	

ECONOMIC INSTRUMENTS IN GREECE

11.1 Fees for Waste Disposal and Treatment

11.1.1 landfill fees (and Bans)

Landfill fees	
Date of introduction	J.M.D. 50910/2727/2003 on «measures and conditions on solid waste management - National and Regional Management Plan»
Principle (one/two lines describing the instrument)	The local authorities, individually or as members of municipal associations set the pricing policy for the waste collection and disposal.
Current levels of tax, and tax structure	The price which is charged to the waste producers (households, commercial sector etc) is calculated based on the surface of the property from which the waste is collected (flat rate). There is no connection between the fees paid and the amount of waste set out. For example, the municipalities in the region of Attiki are charged by the landfills up to 6% of their yearly income, regardless of the quantity of waste.
Details of any exemptions	
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	The fee usually covers the expenses for all the services provided by the municipality. Thus, municipalities very rarely differentiate between waste management expenses and other services, since they mainly aim to balance the projected overall municipal expenses. As a result citizens cannot evaluate the quality of the services provided by the municipality and no motive to reduce the waste quantities is being offered.
How has the tax changed over time?	No info
Extent of geographical coverage	Local and regional
Plans for future levels of the tax	There are discussions to set the level of the fees according to the amount of waste produced. With the introduction of new mechanical recycling plants, which will be built and operated by the private sector, it is expected that the the landfill fees will increase significantly.
Reference/source	Hellenic Solid Waste Association - http://www.eedsa.gr
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for landfilling (excluding landfill tax)	As there is a lack of diversity of solid waste management facilities (except landfills) the gate fee refers to the cost of disposal in landfills. Gate fees vary between 10 and 37 Euros/t, depending on the landfill. For waste disposed by the private companies the fees are higher and can reach 60 Euros/t.
Source of information	Karagiannidis Avraam, Pricing for the solid waste management - Economic instruments for reducing the contributory charges , http://portal.tee.gr/portal/page/portal/teetkm/DRASTHRIOTHTES/EKDHLVSEIS/PROSEXEIS/EKDHLWSEIS/DIAXEIRHSH%20STEREWN%20APOBLHTWN%20HELECO/Tab1/karagiannidis.pdf
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	

Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	

11.1.2 Incineration fees (and Bans)

[Name of existing tax]	
Date of introduction	
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Reference/source	
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	
Source of information	
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	

11.2 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS

What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	Pilot project identified in the municipality of Elefsina, covering 1.500 households in predefined zones. The commercial and service sectors within these zones are also included in the target group.
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	No information identified.
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	
Reference/source	
Elefsina Municipality	
Nature of scheme	Under the HEC – PAYT LIFE+ Environment Policy and Governance Project entitled “Development of Pay As You Throw Systems in Hellas, Estonia and Cyprus” a pilot PAYT is being developed in Elefsina Municipality.
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	The scheme is based on a partial reimbursment of municipality taxes for the participants of the scheme. The exact amount is not specified.
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Reference/source	LIFE+ Environment Programme - Pay as you throw - http://www.payt.gr

11.3 Producer responsibility systems

Packaging, Taxes	
Date of introduction	
Principle (one/two lines describing the instrument)	
Scope of the tax	
Current levels of tax, and tax structure	
Details of any exemptions	
How has the tax changed over time?	

Plans for future levels of the tax	
Reference/source	
Packaging, Deposit refunds	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Targets set for the scheme (including planned future targets)	
Scope of scheme	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Packaging, Green Dot scheme	
Scheme on packaging and waste packaging	
Year introduced	2001
Key Legislation	Law 2939/01 for packaging and waste packaging
Scope of the scheme	The scheme has a national coverage and it targets all packaging operators.
Targets set for the scheme (including planned future targets)	<p>The targets of the scheme are:</p> <ul style="list-style-type: none"> • Prevention of waste by reducing the volume of packaging • Reduction of packaging waste that is disposed in landfills • Setting of quantitative targets on recycling of packaging • Setting of eco-labelling for packaging.
Principle	Law 2939/01 obliges the economic actors (producers, importers) to organize or participate in collective (or individual) systems of alternative waste management (i.e. return, collection, transportation and recovery systems) in order to achieve specific quantitative targets.

Level of payment to scheme	<p>Packaging producers and users that participate in collective management schemes are obliged to contribute financially to the functioning of the scheme.</p> <p>The calculation of the financial contributions is based on information on packaging that the participant in the collective management scheme has recorded and submitted to the operator of the scheme. In case when quantities of secondary paper-cardboard packaging are recycled, a financial contribution of 2€/ton is charged as a certification fee. The entrance fee for the participants is determined on a yearly basis. For 2011 the entrance fee is fixed at 150 Euros/tonne. The total financial contribution per packaging to the scheme is equal to the sum of the contributions per material and per weight and the fixed fees which were explained above.</p> <p>The basis for the financial contribution of the participants is as follows:</p> <table> <tr> <td>Fixed contribution (€cents)</td><td>0.04</td></tr> </table> <p>Contribution by weight (€/ton):</p> <table> <tr> <td>Cardboard & Paper</td><td>52.50</td></tr> <tr> <td>Paper cartons for liquids</td><td>57.00</td></tr> <tr> <td>Plastic</td><td>66.00</td></tr> <tr> <td>Aluminium</td><td>8.80</td></tr> <tr> <td>Metal</td><td>21.00</td></tr> <tr> <td>Glass</td><td>10.90</td></tr> <tr> <td>Wood</td><td>9.50</td></tr> <tr> <td>Other</td><td>66.00</td></tr> </table>	Fixed contribution (€cents)	0.04	Cardboard & Paper	52.50	Paper cartons for liquids	57.00	Plastic	66.00	Aluminium	8.80	Metal	21.00	Glass	10.90	Wood	9.50	Other	66.00
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Glass	10.90																		
Wood	9.50																		
Other	66.00																		
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?																			
Producer-led/funded or government-led/funded?	The scheme was established and is being monitored by the Ministry of Environment. An organisation called Hellenic Recovery Recycling Corporation (HERRCO) was founded in December 2001 by industrial and commercial enterprises which, either supply packaged products to the Greek market, or manufacture different packaging items.																		
Reference/source	<p>Law 2939 /01 for packaging and waste packaging - http://www.minenv.gr/anakyklosi/law/00/law2939.pdf</p> <p>European Investment Bank, Instruments for Solid Waste Management in Greece. March 2010 http://www.eib.org/attachments/documents/jessica-instruments-for-solid-waste-management-in-greece-en.pdf</p> <p>Hellenic Recovery Recycling Corporation – HE.RR.co - http://www.herrco.gr/default.asp?siteID=1&pageid=20&langid=2</p>																		

Electrical and electronic equipment (EEE)																																																				
WEEE management in Greece																																																				
Year introduced	2001																																																			
Key Legislation	Provisions of Law 2939/01 and P.D.s 117/2004 and 15/2006.																																																			
Scope of the scheme	Producers of Electric and Electronic equipment who have to pay the legally required financial contribution to "Appliances Recycling S.A.". The scheme also involves local authorities in order to set collection points for citizens.																																																			
Targets set for the scheme (including planned future targets)	The rate of recovery shall be increased to a minimum of 70% - 80 % by an average weight per appliance The exact rate depends on the category of electronic equipment.																																																			
Principle	All EEE producers and distributors are required to organise and finance the collection and recovery of the WEEE resulting from the products they have put on the Greek market.																																																			
Level of payment to scheme	<div>The table below presents the applicable contributions:</div> <table><thead><tr><th>Type of product</th><th>Contribution per unit of weight (€/tonne) without V.A.T</th><th>V.A.T. (23%)</th><th>Contribution per unit of weight (€/tonne) including V.A.T</th></tr></thead><tbody><tr><td>Large household appliances</td><td>72,03</td><td>16,57</td><td>88,60</td></tr><tr><td>Small household appliances</td><td>80,51</td><td>18,52</td><td>99,03</td></tr><tr><td>IT and telecommunications equipment</td><td>254,24</td><td>58,48</td><td>312,72</td></tr><tr><td>Consumer equipment</td><td>254,24</td><td>58,48</td><td>312,72</td></tr><tr><td>Lighting equipment</td><td>125</td><td>28,75</td><td>153,75</td></tr><tr><td>Lamps</td><td>0,101 (per piece)</td><td>0,02</td><td>0,124 (per piece)</td></tr><tr><td>Electrical and electronic tools (excluding the stable industrial tools of large scale)</td><td>101,7</td><td>23,39</td><td>125,09</td></tr><tr><td>Toys, leisure and sports equipment</td><td>152,54</td><td>35,08</td><td>187,62</td></tr><tr><td>Medical devices</td><td>50</td><td>11,50</td><td>61,50</td></tr><tr><td>Monitoring and control instruments</td><td>152,54</td><td>35,08</td><td>187,62</td></tr><tr><td>Automatic Dispensers</td><td>76,27</td><td>17,54</td><td>93,81</td></tr></tbody></table>				Type of product	Contribution per unit of weight (€/tonne) without V.A.T	V.A.T. (23%)	Contribution per unit of weight (€/tonne) including V.A.T	Large household appliances	72,03	16,57	88,60	Small household appliances	80,51	18,52	99,03	IT and telecommunications equipment	254,24	58,48	312,72	Consumer equipment	254,24	58,48	312,72	Lighting equipment	125	28,75	153,75	Lamps	0,101 (per piece)	0,02	0,124 (per piece)	Electrical and electronic tools (excluding the stable industrial tools of large scale)	101,7	23,39	125,09	Toys, leisure and sports equipment	152,54	35,08	187,62	Medical devices	50	11,50	61,50	Monitoring and control instruments	152,54	35,08	187,62	Automatic Dispensers	76,27	17,54	93,81
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Producer-led/funded or government-led/funded?	Government led, producer funded.																																																			

Reference/source	Ministry of Environment, Energy and Climate Change - http://www.minenv.gr/anakyklosi/v.menu/ahhe/ahhe.html European Investment Bank, Instruments for Solid Waste Management in Greece. March 2010 http://www.eib.org/attachments/documents/jessica-instruments-for-solid-waste-management-in-greece-en.pdf Appliances recycling SA, http://www.electrocycle.gr/gb/
End-of-life vehicles (ELV)	
P.D. 116/2004 "On measures and terms for recycling of end of life vehicles"	
Year introduced	2004
Key Legislation	P.D. 116/2004 "On measures and terms for recycling of end of life vehicles"
Scope of the scheme	National coverage. The scheme targets the owners of E.L.V.
Targets set for the scheme (including planned future targets)	No later than 1 January 2015, for all end-of life vehicles, the reuse and recovery shall be increased to a minimum of 95 % by an average weight per vehicle and year.
Principle	This scheme is the only approved and licensed system for the alternative management vehicles of ELV. The scheme is a non-profit company set up in 2004 by the 33 official vehicle dealers in Greece.
Level of payment to scheme	The delivery of vehicles by users is free of charge as long as the vehicle is intact and unchanged.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Government led and producer funded
Reference/source	Alternative Management of Vehicles Greece : http://www.edoe.gr European Investment Bank, Instruments for Solid Waste Management in Greece. March 2010 http://www.eib.org/attachments/documents/jessica-instruments-for-solid-waste-management-in-greece-en.pdf
Batteries	
P.D. 115/2004 "on measures and terms for recycling of batteries and accumulators"	
Year introduced	2004
Key Legislation	P.D. 115/2004 «on measures and terms for recycling of batteries and accumulators»
Scope of the scheme	
Targets set for the scheme (including planned future targets)	

Principle	Manufacturers, importers and recyclers of batteries and accumulators, are responsible to organise individual schemes or to participate in collective alternative management schemes.
Level of payment to scheme	The costs for collection, transportation, recycling, awareness raising activities and shipment of batteries abroad for recycling are covered by the importers and producers of batteries.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Government led and producer funded.
Reference/source	Ministry of Environment, Energy and Climate Change - http://www.minenv.gr/anakyklosi/v.menu/hs.&.sisoreftes/hs.&.sisoreftes.html
Paper/cardboard	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Other (if any)	
Rewarding Recycling	
Year introduced	2008

Key Legislation	Rewarding recycling has been approved as an agency of a national scope for the organization, development and operation of the Collective Alternative Management and Recycling System of Packaging and Waste, based on decision no. 193471/31.12.2008
Scope of the scheme	National coverage. The scheme targets mainly households.
Targets set for the scheme (including planned future targets)	
Principle	Equipment for 'Sorting at Source' empty packages is placed in municipalities, super markets, schools and other high consumption intensive places. The scheme is based only on citizens' voluntary participation. The scheme provides financial incentives for consumers and retail stores to promote recycling of packaging of consumer goods.
Level of payment to scheme	A reward is offered for every recovered package. This reward can be used either for purchases in cooperating stores or to be donated for the promotion of a social cause.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Producer led and funded
Reference/source	Rewarding recycling, Collective System of Rewarding Alternative Packaging Management, http://www.antapodotiki.gr
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	

Producer-led/funded or government-led/funded?	
Reference/source	

11.4 Other interesting instruments

e.g. Landfill Allowance Schemes	
Principle (one/two lines describing the instrument)	
Structure of incentive (how is it applied and at what levels?)	
Scope (waste streams)	
Voluntary or mandatory/legislative?	
Geographical coverage	
Target group (e.g. consumer, households, business, manufacturer)	
Reference/source	

ECONOMIC INSTRUMENTS IN HUNGARY

12.1 Fees for Waste Disposal and Treatment

12.1.1 landfill fees (and Bans)

Landfill taxes	
Date of introduction	No landfill tax has been identified in Hungary
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Reference/source	CEWEP Country Report 2010 Hungary
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste) Charge on waste disposal	
Range of fees for landfilling (excluding landfill tax)	Average net fee for landfilling 28 € per tonne (VAT 25%) (no landfill tax only fee) Level currently applied to residual municipal waste: 35 € per tonne 2008: 33.6 € per tonne (including VAT 20%) 2009: 35 € per tonne (including VAT 25%)
Source of information	CEWEP Country Report 2010 Hungary CEWEP Landfill taxes & bans 2010
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	Tyre, rubber scrap
Date of introduction	From 1.07. 2003 for tyre, from 1.07.2006 for rubber scrap
(Means of implementation)	No information found
Plans for future bans (if any)	From 2015 for non pretreated waste

12.1.2 Incineration fees (and Bans)

[Name of existing tax]	
Date of introduction	
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Reference/source	
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste) Charge on hazardous waste	
Range of fees for incineration (excluding incineration tax)	Incineration of fluid hazardous waste: 0.20 - 0.24€ per kg Incineration of solid hazardous waste: 0.24 - 0.32€ per kg
Source of information	www.foes.de based on OECD/EEA database on environmentally related taxes, fees and charges, other economic instruments and voluntary approaches used in environmental policy and natural resources management
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	

12.2 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS

What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	No PAYT scheme has been identified in Hungary.
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	
Reference/source	
Location of scheme (municipality where it is used)	
Nature of scheme	
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Reference/source	

12.3 Producer responsibility systems

Packaging, Taxes	
Product charge on packaging materials (based on basic material, except for beverage packaging and shopping bags)	
Product charge on packaging materials (commercial: beverages and shopping bags)	
Date of introduction	1995, revision 1.1.2008
Principle (one/two lines describing the instrument)	

Scope of the tax	based on basic material, except for beverage packaging and shopping bags: Aluminium packaging Combined materials packaging Glass packaging Other metal packaging Packaging of other types Paper, wood and textile packaging Plastic packaging commercial: beverages and shopping bags: Glass Layered beverage packaging Metal Other composite packaging Other packaging materials Plastic packaging (except for plastic shopping bag) Plastic shopping bag
Current levels of tax, and tax structure	No information found
Details of any exemptions	
How has the tax changed over time?	
Plans for future levels of the tax	
Reference/source	Database of EEA and OECD General Information on all types of Instruments by Environmental Domain
Packaging, Deposit refunds	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Targets set for the scheme (including planned future targets)	
Scope of scheme	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Packaging, Green Dot scheme	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	

Targets set for the scheme (including planned future targets)	Same as EU Directive
Principle	Scheme coordinated by ÖKO-Pannon Nonprofit PLC, founded in 1996 by producers of packaged products as well as manufacturers of packaging materials ÖKO-Pannon coordinates the selective collection and recovery of household, industrial and commercial waste at the national level. The majority of the Nonprofit PLC's income is made available to cover the additional expenses incurred by the operation of the system for selective waste collection and for the implementation of educational programs aimed at promoting environmental awareness among adults and children who are residents of the regions participating in the system of ÖKO-Pannon.
Level of payment to scheme	Annual licence fees which differ according to the type of packaging (commercial/non-commercial; different materials)
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Producer-funded. ÖKO-Pannon Nonprofit PLC is the exclusive owner of the rights to use the Green Dot trademark in Hungary.
Electrical and electronic equipment (EEE)	
Product charge on electric and electronic products	
Year introduced	1995, amended in 2004
Key Legislation	The WEEE Directive was transposed into the Hungarian legislation by the Government Decree 264/2004 on the Take back of Waste of Electrical Electronic Equipment on 23. September 2004. Ministerial Decree no. 15/2004 on the Detailed Regulation of the Treatment of Waste of Electrical Electronic Equipment, which outlines the implementation of the Government Decree, was issued on 8. October 2004. The product Fee Legislation - Act LVI of 1995. on Environmental Protection Product Charges dates back to 1995 but has been amended to include WEEE categories as well starting from 1. January 2005. Government Decree 211/2005 (X.5.), the amendment of Government Decree 53/2003 (IV.11.) on the Exemption from the Environmental Product Charges, is the legislation on the basis of which ELECTRO-COORD Magyarország Kht. can provide exemption from the Environmental Product Charge to its members and partners.
Scope of the scheme	Large household appliances (excluding cooling appliances) Small household appliances IT & Telecommunication equipment, including mobile phones Consumer electronics Lighting equipment, gas-discharge lamps Tools Toys, leisure and sport articles Monitoring and controlling articles Cooling appliances
Targets set for the scheme (including planned future targets)	
Principle	Manufacturers and importers joining the association are requested to pay an initial joining fee calculated on the basis of their past turnovers. In addition to this each partner pays a yearly waste management fee that is calculated individually on the basis of each company's individual market share.
Level of payment to scheme	

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	http://www.weee-forum.org/att/members/info_members_info_electro-coord_43.pdf
End-of-life vehicles (ELV)	
[Name of existing scheme]	
Year introduced	No information found
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Batteries	
Product charge on batteries	
Year introduced	1995, revision 1.1.2008
Key Legislation	
Scope of the scheme	No information found
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Paper/cardboard	

[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Other	
Product charge on tyres	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	

Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	

12.4 Other interesting instruments

Recognition of energy produced in Waste-to-Energy and RDF plants as renewable	
Principle (one/two lines describing the instrument)	e.g. (Tradable) allowance scheme to reduce amount of biodegradable municipal waste sent to landfill, Sanctions applied for non-compliance.
Structure of incentive (how is it applied and at what levels?)	e.g. Market for allowances exists – prices move with the balance of supply and demand.
Scope (waste streams)	e.g. Biodegradable municipal waste
Voluntary or mandatory/legislative?	e.g. Applies in England and Northern Ireland – system of permits is non-tradable in Wales
Geographical coverage	e.g. Applies in England, Wales and Northern Ireland – scheme suspended in Scotland
Target group (e.g. consumer, households, business, manufacturer)	e.g. Local authorities
Reference/source	

Subsidy or market based instruments (Please specify e.g. green certificates, feed in tariffs) special price for WtE (similar to renewable)

ECONOMIC INSTRUMENTS IN IRELAND

13.1 Fees for Waste Disposal and Treatment

13.1.1 landfill fees (and Bans)

Landfill levy	
Date of introduction	1 June 2002
Principle (one/two lines describing the instrument)	The levy is designed to encourage diversion from landfill and generate revenues to support waste minimisation and recycling initiatives. All levies are remitted to the Environment Fund.
Current levels of tax, and tax structure	As of 1 February 2010: €30/tonne
Details of any exemptions	Non-hazardous C&D waste or excavation spoil used for landfill site engineering, restoration or remediation purposes; stabilised waste from composting of biodegradable municipal waste; street cleaning waste; waste deposited elsewhere without appropriate authorisation and subsequently removed by a local authority for disposal; waste from local clean-up activities by community or environmental groups; residues from filtration during the extrusion of recycled polymeric material; non-metallic residues from shredding of ELV, white goods and other metal waste; and dredge spoil.
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	As of 1 February 2010: €30/tonne
How has the tax changed over time?	<p>Authorised landfills:</p> <p>From 1 June 2002 €15 per tonne</p> <p>From 1 July 2008 €20 per tonne</p> <p>From 31 December 2009 €25 per tonne</p> <p>From 1 February 2010 €30 per tonne</p> <p>Unauthorised landfills:</p> <p>From 28 July 2006 €20 per tonne</p> <p>From 31 December 2009 €25 per tonne</p> <p>From 1 February 2010 €30 per tonne</p>
Extent of geographical coverage	National

Plans for future levels of the tax	<p>Previously the tax could only increase by €5 per annum, but on 11 January 2011 the Environment Ministry published the Environment (Miscellaneous Provisions) 2011 Bill, which will provides for greater flexibility in setting the levy. It allows central government to increase the levy to up to €120 per tonne without changing legislation, to use the tax to drive the diversion of waste from landfill.</p> <p>Target levels for the tax:</p> <p>in 2011: €50/tonne and</p> <p>in 2012: €75/tonne</p>
Reference/source	<p>http://www.environ.ie/en/Environment/Waste/LandfillLevy/</p> <p>CEWEP landfill taxes and bans (September 2010), http://www.cewep.eu/media/www.cewep.eu/org/med_557/529_cewep_-_landfill_taxes_and_bans_7september2010_web.pdf</p> <p>Relevant legislation:</p> <p>The Waste Management (Landfill Levy) Order 2010 (SI 13 of 2010)</p> <p>The Waste Management (Landfill Levy) Order 2009 (S.I. 496 of 2009)</p> <p>Waste Management (Landfill Levy) Regulations 2008 (S.I. 199 of 2008)</p> <p>http://www.environ.ie/en/Environment/News/MainBody,25130,en.htm</p>
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for landfilling (excluding landfill tax)	<p>Average net price for landfilling: €60 (CEWEP)</p> <p>According to Forfas report (see below) the 'advertised net fee' for landfill was €112 in 2010, but the indicative range of negotiated prices (based on 6 sties) was €56 to €81.</p>
Source of information	<p>CEWEP landfill taxes and bans (September 2010), http://www.cewep.eu/media/www.cewep.eu/org/med_557/529_cewep_-_landfill_taxes_and_bans_7september2010_web.pdf</p> <p>Forfas, Waste Management in Ireland: Benchmarking Analysis and Policy Priorities: Update 2010, http://www.forfas.ie/media/forfas101005-Waste_Management_Benchmarking_Analysis_2010.pdf</p>
Do sources give any explanation for key factors explaining variation?	<p>The Forfas report suggests very large volumes of waste landfilled could secure greater discounts while smaller quantities could be charged higher rates. It also suggests that costs are temporary, dependent on supply and demand, and on the specific economic needs of the private landfill operators and there is no guarantee they will continue (particularly when the EPA expects the number of open landfills to decline in the short-term).</p>
Information on Bans	

Wastes to which the ban is applied	<p>(2) (a) liquid waste</p> <p>(b) waste which, in the conditions of landfill, is explosive, corrosive, oxidising, highly flammable or flammable as defined in Annex III of Council Directive 91/689/EEC ,</p> <p>(c) infectious healthcare waste, assessed as likely to cause disease in humans or animals, arising from medical or veterinary establishments, and waste specified under category 14 of Annex 1.A of Council Directive 91/689/EEC,</p> <p>(d) any other waste which does not satisfy such waste acceptance criteria as shall, from time to time, be determined in accordance with Annex II of Council Directive 91/689/EEC.</p> <p>(3) (a) Subject to paragraph (b), whole used tyres (other than tyres used as on-site engineering material) shall not be accepted or disposed of at a landfill facility.</p> <p>(b) In the case of a landfill facility other than a new landfill facility or a landfill facility for hazardous waste, the requirements of paragraph (a) shall apply no later than 16 July 2009.</p> <p>(4) Shredded used tyres shall not be accepted or disposed of after -</p> <p>(a) 16 July 2006, in a new landfill facility or a landfill facility for hazardous waste,</p> <p>(b) 16 July 2009, in a landfill facility other than one referred to in paragraph (a).</p> <p>(5) (a) Subject to paragraph (b), waste that has not been subject to treatment (other than inert waste for which treatment is not technically feasible, or any other waste the treatment of which will not reduce its volume or the risk of environmental pollution) shall not be accepted or disposed of in a landfill facility.</p> <p>(b) In the case of a landfill facility other than a new landfill facility or a landfill facility for hazardous waste, the requirements of paragraph (a) shall apply no later than 16 July 2009.</p> <p>+++++</p> <p>Also, as of July 2009 no landfill that accepts municipal waste can take in waste that has not been pre-treated.</p> <p>Table 25 Generic Facility Type – Municipal Solid Waste Pre-treatment Obligations</p> <table><tr><th>Principal disposal route</th><th>Minimum pre-treatment required</th><th>Required material diversion</th><th>Date</th></tr><tr><td>Landfill</td><td>1a. Separated at source. Diversion of BMW from landfill disposal stream, (e.g. home composting, 2nd and 3rd bin, Civic Amenity Sites, etc.,) (see Note 1) and 1b. Treatment of the biodegradable element of 'black bin' pre-landfilling (See Note 2)</td><td>Biodegradables</td><td>2010, 2013 & 2016 for all landfills accepting MSW to the extent necessary to achieve the diversion obligations ^{Note 3}. Viz, ■ For report years 2010, 2011 and 2012, a maximum of 40% by weight of MSW accepted at the landfill facility for disposal shall comprise BMW ■ For report years 2013, 2014 and 2015, a maximum of 24% by weight of MSW accepted at the landfill facility for disposal shall comprise BMW; ■ For report years 2016, and subsequent years, a maximum of 15% by weight of MSW accepted at the landfill facility for disposal shall comprise BMW.</td></tr><tr><td></td><td>2. 2 Bin collection system</td><td>Other recyclables (glass, metals, plastics)</td><td>16-7-09 for a landfill existing on 16-7-2001 16-7-2001 for all other landfills (including major extensions)</td></tr><tr><td></td><td>3. Mechanical treatment of black bin (in large urban centres)</td><td>Metals ^{Note 4} SRF Other</td><td>By 1-1-2016</td></tr></table>	Principal disposal route	Minimum pre-treatment required	Required material diversion	Date	Landfill	1a. Separated at source. Diversion of BMW from landfill disposal stream, (e.g. home composting, 2 nd and 3 rd bin, Civic Amenity Sites, etc.,) (see Note 1) and 1b. Treatment of the biodegradable element of 'black bin' pre-landfilling (See Note 2)	Biodegradables	2010, 2013 & 2016 for all landfills accepting MSW to the extent necessary to achieve the diversion obligations ^{Note 3} . Viz, ■ For report years 2010, 2011 and 2012, a maximum of 40% by weight of MSW accepted at the landfill facility for disposal shall comprise BMW ■ For report years 2013, 2014 and 2015, a maximum of 24% by weight of MSW accepted at the landfill facility for disposal shall comprise BMW; ■ For report years 2016, and subsequent years, a maximum of 15% by weight of MSW accepted at the landfill facility for disposal shall comprise BMW.		2. 2 Bin collection system	Other recyclables (glass, metals, plastics)	16-7-09 for a landfill existing on 16-7-2001 16-7-2001 for all other landfills (including major extensions)		3. Mechanical treatment of black bin (in large urban centres)	Metals ^{Note 4} SRF Other	By 1-1-2016
Principal disposal route	Minimum pre-treatment required	Required material diversion	Date														
Landfill	1a. Separated at source. Diversion of BMW from landfill disposal stream, (e.g. home composting, 2 nd and 3 rd bin, Civic Amenity Sites, etc.,) (see Note 1) and 1b. Treatment of the biodegradable element of 'black bin' pre-landfilling (See Note 2)	Biodegradables	2010, 2013 & 2016 for all landfills accepting MSW to the extent necessary to achieve the diversion obligations ^{Note 3} . Viz, ■ For report years 2010, 2011 and 2012, a maximum of 40% by weight of MSW accepted at the landfill facility for disposal shall comprise BMW ■ For report years 2013, 2014 and 2015, a maximum of 24% by weight of MSW accepted at the landfill facility for disposal shall comprise BMW; ■ For report years 2016, and subsequent years, a maximum of 15% by weight of MSW accepted at the landfill facility for disposal shall comprise BMW.														
	2. 2 Bin collection system	Other recyclables (glass, metals, plastics)	16-7-09 for a landfill existing on 16-7-2001 16-7-2001 for all other landfills (including major extensions)														
	3. Mechanical treatment of black bin (in large urban centres)	Metals ^{Note 4} SRF Other	By 1-1-2016														
Date of introduction	July 2002 (see Statutory Instrument 336 of 2002), replaced by SI 395 of 2004.																

(Means of implementation)	<p>National Regulation (see Article 49 of the Waste Management (Licensing) Regulations 2004. SI 395 of 2004).</p> <p>See http://www.irishstatutebook.ie/2004/en/si/0395.html</p> <p>New EPA pre-treatment guidance restricts the amount of Biodegradable Municipal Waste landfills can accept to align with the Landfill Directive limits. This condition is included in the landfill's operating licence.</p> <p>See also: http://www.epa.ie/downloads/advice/waste/municipalwaste/name.26146.en.html</p>
Plans for future bans (if any)	None
Source	<p>CEWEP landfill taxes and bans (September 2010), http://www.cewep.eu/media/www.cewep.eu/org/med_557/529_cewep_-_landfill_taxes_and_bans_7september2010_web.pdf</p> <p>WRAP Landfill bans, appendices, http://www.wrap.org.uk/downloads/Landfill_Bans_Feasibility_Research_Appendices_Final.7d4ad9a5.8866.pdf</p>

13.1.2 Incineration fees (and Bans)

[Name of existing tax]	
Date of introduction	No merchant Incinerators in operation in Ireland
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	On 11 January 2011 the Environment Ministry published the Environment (Miscellaneous Provisions) 2011 Bill, which gave local authorities the powers to charge a levy on waste being incinerated. Revenues from the levy, starting at €30 per tonne, will go to an environment fund. Once enacted, the law will also allow central government to increase the levy (and the landfill levy) to up to €120 per tonne without changing legislation,
Reference/source	
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	

Range of fees for incineration (excluding incineration tax)	<i>E.g. Across the UK, fees vary from just over £40 per tonne to over £120 per tonne. The median figure for facilities of recent origin is around £80 per tonne (NB Figures found may refer to a calculation of the cost (i.e. a modelled cost) as opposed to the actual fee charged to those disposing of waste. Please try to keep in mind this distinction. If modelled costs are all that is available, please quote these, note that they are modelled costs, and note the source. This information will not, we think, be easy to gather in all countries, so any information is probably better than no information.)</i>
Source of information	<i>e.g. Review of gate fees carried out by Eunomia on behalf of WRAP</i>
Do sources give any explanation for key factors explaining variation?	<i>E.g. Older incinerators have lower gate fees. Of the newer generation, larger facilities have slightly lower gate fees. Some evidence is now emerging of contracts being awarded for excess capacity at UK incinerators, and these appear to be around £40 per tonne. These contracts may be shorter-term than those agreed with procuring municipalities.</i>
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	<i>(NB Here, the intention is to understand whether the ban genuinely applies to the materials specified, or whether there are exemptions or loopholes. This information may be difficult to find, however.)</i>
Plans for future bans (if any)	<i>e.g. Under consideration in Scotland and Wales</i>

13.2 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	<p>Waste collection in Ireland is undertaken by both the Private Sector and the Public sector.</p> <p>For household waste the Private sector collect 60% of the national collected tonnage. The Private sector also collect the majority of the commercial waste in the country (90%+).</p> <p>The majority of household schemes are fixed fee collections. The majority of the commercial waste collections are weight based fees.</p> <p>The public can also pay to deposit municipal waste at Civic Amenity facilities.</p>
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	N/A
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly.	No

Reference/source	EPA National Waste Report for 2009 (pp 22 to 26) http://www.epa.ie/downloads/pubs/waste/stats/name,30613,en.html
Location of scheme (municipality where it is used)	
Nature of scheme	Weekly and fortnightly. Three bin service in place for 24% of serviced households (Organics, dry recyclables and residual waste). Two bin service in place for 72% of households served (residual and dry recyclables bins).
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	Varies significantly throughout the State depending on service provider and client needs.
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	State waiver in place for families in certain social welfare categories.
Reference/source	EPA National Waste Report for 2009 (pp 22 to 26) http://www.epa.ie/downloads/pubs/waste/stats/name,30613,en.html Waiver : http://www.citizensinformation.ie/en/environment/waste_management_and_recycling/domestic_refuse.html

13.3 Producer responsibility systems

Packaging, Taxes															
Date of introduction	<i>e.g. 2007</i>														
Principle (one/two lines describing the instrument)	<i>e.g. A carbon-based tax to internalise externalities associated with packaging use</i>														
Scope of the tax	<i>e.g. Covers most packaging materials (plastics, glass, card...)</i>														
Current levels of tax, and tax structure	<table> <tr> <td><i>e.g Paper</i></td><td><i>€40 per tonne</i></td></tr> <tr> <td><i>Card</i></td><td><i>€40 per tonne</i></td></tr> <tr> <td><i>Aluminium</i></td><td><i>€400 per tonne</i></td></tr> <tr> <td><i>Steel</i></td><td><i>€120 per tonne</i></td></tr> <tr> <td><i>Glass</i></td><td><i>€30 per tonne</i></td></tr> <tr> <td><i>Plastics</i></td><td><i>€90 per tonne</i></td></tr> <tr> <td><i>Wood</i></td><td><i>€10 per tonne</i></td></tr> </table>	<i>e.g Paper</i>	<i>€40 per tonne</i>	<i>Card</i>	<i>€40 per tonne</i>	<i>Aluminium</i>	<i>€400 per tonne</i>	<i>Steel</i>	<i>€120 per tonne</i>	<i>Glass</i>	<i>€30 per tonne</i>	<i>Plastics</i>	<i>€90 per tonne</i>	<i>Wood</i>	<i>€10 per tonne</i>
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<i>Plastics</i>	<i>€90 per tonne</i>														
<i>Wood</i>	<i>€10 per tonne</i>														

Details of any exemptions															
How has the tax changed over time?	<i>e.g. The tax is relatively new so the current levels are as they were when the tax came into force</i>														
Plans for future levels of the tax															
Reference/source	<i>e.g. VROM</i>														
Packaging, Deposit refunds															
[Name of existing scheme]															
Year introduced	<i>e.g. 1997</i>														
Key Legislation	<i>e.g. Law on Packaging recovery</i>														
Targets set for the scheme (including planned future targets)	<i>e.g. The law establishes a minimum return rate of 85% of all beverage containers. No further increases are planned</i>														
Scope of scheme	<i>e.g. All glass, metal and PET drinks containers other than wine bottles and milk bottles</i>														
Principle	<i>e.g. Fillers of packaging pay for the operation and logistics required to run the deposit scheme. The money is paid to a central scheme. The central scheme then compensates those retail outlets which play a role in the packaging take-back. The deposit is set by the central scheme and is designed to achieve the target take-back rate. The central scheme retains the revenue accruing from unreturned deposits.</i>														
Level of payment to scheme	<i>e.g. Fillers pay a fee to the central system based on the quantity of packaging they place on the market. The fees vary by material as follows:</i> <table> <tr> <td><i>Paper</i></td><td><i>€10 per tonne</i></td></tr> <tr> <td><i>Card</i></td><td><i>€10 per tonne</i></td></tr> <tr> <td><i>Aluminium</i></td><td><i>€45 per tonne</i></td></tr> <tr> <td><i>Steel</i></td><td><i>€80 per tonne</i></td></tr> <tr> <td><i>Glass</i></td><td><i>€30 per tonne</i></td></tr> <tr> <td><i>Plastics</i></td><td><i>€200 per tonne</i></td></tr> <tr> <td><i>Wood</i></td><td><i>€10 per tonne</i></td></tr> </table>	<i>Paper</i>	<i>€10 per tonne</i>	<i>Card</i>	<i>€10 per tonne</i>	<i>Aluminium</i>	<i>€45 per tonne</i>	<i>Steel</i>	<i>€80 per tonne</i>	<i>Glass</i>	<i>€30 per tonne</i>	<i>Plastics</i>	<i>€200 per tonne</i>	<i>Wood</i>	<i>€10 per tonne</i>
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Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	<i>e.g. The municipalities play no role in the scheme; all costs are covered by the packaging producers.</i>														
Producer-led/funded or government-led/funded?	<i>e.g. The scheme is industry led and was implemented by fillers in order to meet the Government targets.</i>														

Reference/source																																							
Packaging, Green Dot scheme																																							
Repak																																							
Year introduced	1997 (affiliated to Pro Europe /Grune Punkt in 1999)																																						
Key Legislation	Waste Management Act (1996); Waste Packaging Regulations (1997 to 2003) (most recent amendment = Waste Management (Packaging) Regulations 2003)																																						
Scope of the scheme	e.g. All packaging as defined under EU law																																						
Targets set for the scheme (including planned future targets)	To recover and recycle a total of 60% of all packaging placed on the market by the end of 2008; by that time Repak reported a recycling rate of 64% (thus achieving the EU 2011 target 3 years early).																																						
Principle	<i>e.g. Fillers of packaging pay for the collection, recycling and recovery of packaging. The money is paid to a central scheme. The scheme then compensates local authorities for their role in collecting household packaging.</i> Repak is approved by government as Ireland’s sole Packaging Compliance Scheme; it facilitates producer responsibility in the area of packaging and packaging waste recovery and recycling. It is a membership based scheme that offers legal compliance with the regulations to obligated producers.																																						
Level of payment to scheme	<p>Fees are directly related to the quantity and types of packaging supplied by members on the Irish market. They are calculated annually based on the previous year’s statistics of packaging supplied and levied twice yearly (in January and July). Two types of fees are charged:</p> <p>Participation fees – flat fee per tonne, irrespective of material, and relative to the member’s activity/activities in the supply chain. For 2010/2011 (ex-VAT):</p> <table><tr><th>Activity in Supply Chain</th><th>Cent per KG</th><th>Fee type</th></tr><tr><td>Manufacturer</td><td>0.205</td><td>Participation fee</td></tr><tr><td>Converter</td><td>0.205</td><td>Participation fee</td></tr><tr><td>Brandholder/Importer</td><td>See below</td><td>material-specific fee</td></tr><tr><td>Distributor/Wholesaler</td><td>0.205</td><td>Participation fee</td></tr><tr><td>Retailer</td><td>0.410</td><td>Participation fee</td></tr></table> <p>Material Specific Fees – depend on the type and quantity (weight) of the materials used. The main burden is borne by the brandholder (manufacturer/packer filler/importer). Fees include a licence to mark the Green Dot on all primary packaging. For 2010/2011 (ex-VAT):</p> <table><tr><th>Material</th><th>Cent per KG</th></tr><tr><td>Paper</td><td>2.273</td></tr><tr><td>Glass</td><td>0.918</td></tr><tr><td>Aluminium</td><td>8.362</td></tr><tr><td>Steel</td><td>7.851</td></tr><tr><td>Plastic</td><td>8.916</td></tr><tr><td>Wood</td><td>1.060</td></tr><tr><td>Composite A (Paper/Plastic)</td><td>7.578</td></tr><tr><td>Composite B (Steel/Aluminium)</td><td>11.148</td></tr></table> <p>Note: The minimum Fee for 2009 was €980.00 + 21% VAT.</p>			Activity in Supply Chain	Cent per KG	Fee type	Manufacturer	0.205	Participation fee	Converter	0.205	Participation fee	Brandholder/Importer	See below	material-specific fee	Distributor/Wholesaler	0.205	Participation fee	Retailer	0.410	Participation fee	Material	Cent per KG	Paper	2.273	Glass	0.918	Aluminium	8.362	Steel	7.851	Plastic	8.916	Wood	1.060	Composite A (Paper/Plastic)	7.578	Composite B (Steel/Aluminium)	11.148
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Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	<i>e.g. Yes – the rules set down in the scheme determine that the municipalities shall be reimbursed for 40% of the costs of the operation of the recycling scheme. The central scheme is the recipient of the revenue from the sale of the materials collected.</i> <i>(NB The answer to this question is likely to be an important determinant of the economic effect of the scheme – the aim is to understand whether the producer responsibility scheme covers all of the necessary costs, or whether the municipalities pay for a significant share of costs.)</i>
Producer-led/funded or government-led/funded?	Voluntary agreement between Irish Industry and the Government of Ireland, in response to the EU Packaging Directive. It is a membership based, 'not-for-profit' limited company.
Source	http://www.pro-e.org/ireland1.htm
Electrical and electronic equipment (EEE)	
WEEE Ireland ERP Ireland	
Year introduced	2005
Key Legislation	Waste Management Act (1996) Waste Management (Waste Electrical and Electronic Equipment) Regulations 2005 – S.I. No. 340 of 2005
Scope of the schemes	All items of electrical and electronic equipment (EEE) dependent on electric currents or electromagnetic fields in order to work properly; and designed for use with a voltage rating not exceeding 1,000 volts for alternating current (AC) and 1,500 volts for direct current (DC) with certain exemptions.
Targets set for the schemes (including planned future targets)	Collection target of 4kg per person per year. WEEE Ireland collected 9.13kg of household WEEE per head of population in 2009. ERP Ireland collected approximately 9 kg of electronic waste per person in Ireland in 2009
Principle	Both schemes are not for profit organisations, founded by Producers of electrical and electronic appliances in order to comply with the legal obligations imposed by the WEEE Directive 2002/96/EC and are approved WEEE compliance schemes. The schemes organise the treatment and recycling of waste electrical and electronic equipment from authorised collection points, on behalf of their Producer members.
Level of payment to scheme	Fees are calculated based on the EEE turnover of the company and the length of time they have placed EEE on the Irish market.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	When a product is placed on the market, the producer provides a financial guarantee showing that the full cost of the environmentally sound management of waste electrical and electronic equipment will be financed when it's discarded by the final user.
Producer-led/funded or government-led/funded?	Voluntary agreement between Irish Industry and the Government of Ireland, in response to the EU WEEE Directive. Both schemes are membership based, 'not-for-profit' limited companies.
Reference/source	http://www.environ.ie/en/Environment/Waste/WEEE/
End-of-life vehicles (ELV)	

Year introduced	2006
Key Legislation	Enabling legislative provisions were incorporated into the Protection of the Environment Act 2003 - which inserted a new part VA in the Waste Management Act 1996 - to facilitate the transposition and implementation in Ireland of this Directive. Following a period of public consultation, the Waste Management (End-of-Life Vehicles) Regulations 2006 (S.I. No. 282 of 2006) were made and came into effect on 8th June 2006. The regulations fully transpose the provisions of Directive 2000/53/EC on end-of-life vehicles and are intended to facilitate its implementation in Ireland.
Scope of the scheme	To establish national collection systems for the recovery and treatment of end-of-life vehicles. Typically, an end-of-life vehicle will be a passenger car or a light commercial van that the registered owner wishes to dispose of as waste. From 1 January 2007 owners of intact end-of-life cars and vans can deposit them free-of-charge at authorised treatment facilities.
Targets set for the scheme (including planned future targets)	achieve recovery and recycling targets of - 85% reuse / recovery by average weight per vehicle deposited for appropriate treatment by 1 January 2006 (to include 80% materials recycling), and - 95% reuse / recovery by 1 January 2015 (to include 85% materials recycling);
Principle	The regulations introduce new environmental standards to ensure that when a vehicle is scrapped, as much material as possible is recovered and recycled and that it takes place in a way that does not harm the environment – prescribed targets for reuse / recovery and reuse / recycling are required in accordance with the provisions of Directive 2000/53/EC.
Level of payment to scheme	n/a
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	All end-of-life vehicles are dismantled, treated and recovered by industry at no cost to the final holder / owner of that vehicle and in a manner that does not cause environmental pollution;
Producer-led/funded or government-led/funded?	Producers (vehicle importers) enter into contracts with the Authorised Treatment Facilities(ATFs)
Reference/source	http://www.environ.ie/en/Environment/Waste/ProducerResponsibilityObligations/EndOfLifeVehicles/
Batteries	
WEEE Ireland	
ERP Ireland	
Year introduced	2008
Key Legislation	Waste Management (Batteries and Accumulators) Regulations (S.I. No 268 of 2008) (pdf 334kb) as amended by the Waste Management (Batteries and Accumulators)(Amendment) Regulations 2008 (SI No 556 of 2008) (pdf, 103kb)
Scope of the scheme	Both schemes organise for the collection and treatment of waste batteries and accumulators from authorised collection points, on behalf of their Producer members.

Targets set for the scheme (including planned future targets)	<p>Each producer shall be required to collect, as a minimum, no later than –</p> <ul style="list-style-type: none"> • 26 September 2012, 25%, and • 26 September 2016, 45% <p>of the quantity by type of portable battery he or she places on the market.</p> <p>Recycling efficiency targets as per Article 12 of the Batteries Directive are still be finalised at EU level.</p>
Principle	<p>Both schemes are not for profit organisations, founded by Producers of batteries and accumulators and electrical and electronic appliances in order to comply with the legal obligations imposed by the Waste Batteries Directive 2006/66/EC and are approved battery compliance schemes.</p> <p>The schemes organise the treatment and recycling of waste batteries and accumulators from authorised collection points, on behalf of their Producer members.</p>
Level of payment to scheme	Based on batteries placed on the market.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	<p>Producers are required to finance any net costs arising from –</p> <ul style="list-style-type: none"> • the collection, storage, treatment and recovery and/or disposal of waste batteries and/or accumulators including those incorporated into EEE and/or battery packs, and • any public information campaign on the collection, storage, treatment and recovery and/or disposal of portable batteries and/or portable.
Producer-led/funded or government-led/funded?	Voluntary agreement between Irish Industry and the Government of Ireland, in response to the EU Batteries Directive 2006/66/EC. Both schemes are membership based, 'not-for-profit' limited companies.
Reference/source	http://www.environ.ie/en/Environment/Waste/ProducerResponsibilityObligations/Batteries/
Other- Tyres	
TRACS	
Year introduced	2008
Key Legislation	<i>Waste Management (Tyres and Waste Tyres) Regulations 2007</i>
Scope of the scheme	TRACS is a voluntary compliance scheme for tyre industry operators to monitor the movement of tyres within the industry and promote legitimate reuse and recycling of waste tyres. By joining TRACS, tyre industry operators, suppliers, and waste collectors will fulfill their obligations under the Regulations.
Targets set for the scheme (including planned future targets)	To monitor the movement of tyres and waste tyres within the industry and therefore stop uncontrolled movement of waste tyres
Principle	TRACS is a voluntary compliance scheme for tyre industry operators to monitor the movement of tyres within the industry and promote legitimate reuse and recycling of waste tyres. By joining TRACS, tyre industry operators, suppliers, and waste collectors will fulfill their obligations under the Regulations.
Level of payment to scheme	Q1&Q2 2011 €0.08 per unit that imported Q3&Q4 2011 €0.10 per unit of tyre that imported

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	The purpose of the scheme is not to cover the costs of collection, recycling and recovery but to monitor the movement of tyres and waste tyres within the industry and therefore stop uncontrolled movement of waste tyres.
Producer-led/funded or government-led/funded?	Voluntary agreement between Tyre Producers and the Government of Ireland, in response to the Waste Tyres Regulations. The scheme is a membership based, 'not-for-profit' limited company.
Reference/source	http://www.environ.ie/en/Environment/Waste/ProducerResponsibilityObligations/Tyres/
Other- Farm Plastics	
Irish Farm Film Producers Group	
Year introduced	1997
Key Legislation	The scheme, which was underpinned by the Waste Management (Farm plastics) Regulations 1997, was revised and replaced by the Waste Management (Farm Plastics) Regulations, 2001
Scope of the scheme	The IFFPG was established with the support of the Irish Farmers Association and comprises representatives of film manufacturers and importers and is the sole approved body for the recovery of farm plastics.
Targets set for the scheme (including planned future targets)	The Farm Plastics Producer Responsibility Initiative (PRI) requires that 60% of all plastic placed on the market is recovered. IFFPG are exceeding this target.
Principle	IFFPG is a not-for-profit organisation and is at present the sole approved body in Ireland for the purposes of operating a compliance scheme for the recovery of farm plastics and currently collects approximately 19,000 tonnes of farm plastics waste for recycling from over 30,000 farmers annually.
Level of payment to scheme	Under the IFFPG scheme, producers apply a levy (€127/tonne) on the sale of farm plastics which in turn is transferred to the IFFPG for use in funding the collection and recovery of farm plastics waste.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	The cost of collection, recycling and recovery are covered by the levy and a weight based farmer collection fee.
Producer-led/funded or government-led/funded?	Voluntary agreement between Farm Film Producers and the Government of Ireland, in response to the Farm Plastics Regulations. The scheme is a membership based, 'not-for-profit' limited company.
Reference/source	http://www.environ.ie/en/Environment/Waste/ProducerResponsibilityObligations/FarmPlastics/
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	

Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	

13.4 Other interesting instruments

Plastic Bag Levy	
Principle (one/two lines describing the instrument)	The levy is designed to encourage consumers to make more environmentally friendly choices by encouraging them to use reusable bags. It aims to reduce the number of plastic bags which end up as litter and generates revenues to support waste minimisation and recycling initiatives. All levies are remitted to the Environment Fund.
Structure of incentive (how is it applied and at what levels?)	As of 4 March 2002: 15 cent/bag As of 1 July 2007: 22 cent/bag On 11 January 2011 the Environment (Miscellaneous Provisions) 2011 Bill was published. Once enacted it will allow local authorities greater flexibility in setting the plastic bag levy, raising it to 70 cent/bag. There are however no plans to increase the plastic bag levy for the time being. (The Bill also provides for greater flexibility in setting the landfill levy, and for the introduction of a levy on incineration – see sections above).
Scope (waste streams)	Bags made wholly or in part of plastic and which are suitable for use by a customer at the point of sale in a supermarket, service station or other sales outlet. Includes biodegradable bags. Plastic shopping bags designed for re-use are exempt from the levy provided the retailer charges at least 70 cent for the bag.
Voluntary or mandatory/legislative?	Mandatory/legislative
Geographical coverage	National
Target group (e.g. consumer, households, business, manufacturer)	Consumer. The levy was deemed to have had an immediate effect on consumer behaviour with a decrease in plastic bag usage from an estimated 328 bags per capita to 21 bags per capita overnight.

Reference/source	http://www.environ.ie/en/Environment/Waste/PlasticBags/ http://www.environ.ie/en/Environment/News/MainBody.25130.en.htm
e.g. Landfill Allowance Schemes	
Principle (one/two lines describing the instrument)	e.g. (Tradable) allowance scheme to reduce amount of biodegradable municipal waste sent to landfill, Sanctions applied for non-compliance.
Structure of incentive (how is it applied and at what levels?)	e.g. Market for allowances exists – prices move with the balance of supply and demand.
Scope (waste streams)	e.g. Biodegradable municipal waste
Voluntary or mandatory/legislative?	e.g. Applies in England and Northern Ireland – system of permits is non-tradable in Wales
Geographical coverage	e.g. Applies in England, Wales and Northern Ireland – scheme suspended in Scotland
Target group (e.g. consumer, households, business, manufacturer)	e.g. Local authorities
Reference/source	

ECONOMIC INSTRUMENTS IN ITALY

14.1 Fees for Waste Disposal and Treatment

14.1.1 landfill fees (and Bans)

[Name of existing tax]	
Date of introduction	1996
Principle (one/two lines describing the instrument)	The instrument mirrors the system of the EU Landfill Directive and categorises waste. The levels of the landfill tax are adapted to these categories. Italy introduced a landfill tax in 1996. The national regulation defines the upper and lower level of the tax but the regions determine the precise level within these limits. The regions also decide the destination of the tax revenues. The tax has an environmental dimension as regions can spend up to 20 % of the revenue on improving the waste management system, financing regional environmental protection agencies or protecting natural areas (see for this EEA, 2009, Diverting Waste From Landfill)
Current levels of tax, and tax structure	€ 1–10 inert waste € 5–10 other waste (MSW excluded) € 10–25 MSW, depending on Region
Details of any exemptions	
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	The levels of the tax vary from region to region and is in the range of 10-25 Euro.
How has the tax changed over time?	
Extent of geographical coverage	All Italy
Plans for future levels of the tax	
Reference/source	CEWEP: http://www.cewep.eu/storage/med/media/data/taxes/293_CEWEP_-_LandfillTaxesbans_February2010_final-website.pdf?fCMS=60a9a1372cc004a7d6ec2808c0797dd0
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for landfilling (excluding landfill tax)	In Italy the ranges of prices for landfills go from 60 to 120 Euro.
Source of information	CEWEP
Do sources give any explanation for key factors explaining variation?	No.
Information on Bans	
Wastes to which the ban is applied	Combustible waste > 13 MJ/kg from 1st January 2011. Other waste streams according to Landfill Directive/Council Decision establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to Directive 1999/31/EC

Date of introduction	As for combustible waste < 13 MJ/kg 1 st January 2011
(Means of implementation)	
Plans for future bans (if any)	Not known.

14.1.2 Incineration fees (and Bans)

Number of incinerations

At the beginning of 2010 in Italy 49 municipal waste incineration plants were in service. Approximately 4.5 million tonnes of waste were thermally treated in 2009.

Source: CEWEP, http://www.cewep.eu/information/data/studies/138.Map_European_Waste-to-Energy_Plants_in_.html

[Name of existing tax]	
Date of introduction	None
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Reference/source	
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	Varying ranges are given in the literature found, as the issue is politically highly controversial, one can probably say that ranges are between 130 and 250 Euro/tons.
Source of information	Different websites, but not very robust.
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	NO
Date of introduction	

(Means of implementation)	
Plans for future bans (if any)	
Green Energy – Feed-in tariff	
Date of introduction	2007 – end 2012
Principle (one/two lines describing the instrument)	Feed-in tariff
Structure of incentive (how is it applied and at what levels?)	This tariff is explicitly designed to promote small systems. The period of payment is limited in time. It amounts to 15 years and starts at the date of commissioning.
Scope (waste streams)	The tariff system includes biogas and biomass plants with a capacity between 0,1 and 1 MW. Paid for biogas and biomass: 28 cents per kWh, for fluid biofuels, landfill gas and gas resulting from purification processes: 18 €/ct/kWh
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	The costs of the feed-in tariff system are paid by the consumers.
Reference/source	http://www.res-legal.de/en/search-for-countries/italy/more-about/land/italien/ueberblick/foerderung.html Renewable energy policy country profiles: http://www.reshaping-res-policy.eu/downloads/RE-SHAPING%20Renewable%20Energy%20Policy%20Country%20profiles%202009.pdf http://ec.europa.eu/environment/waste/compost/pdf/Biowaste_recycling_targets_final_final.pdf
Green Energy – Green certificates (Certificati Verdi)	
Date of introduction	2007-end 2012
Principle (one/two lines describing the instrument)	Green certificates: in Italy electricity from renewable sources is mainly promoted through a quota system. Producers and importers of electricity are obliged to prove that a certain quota of the electricity produced or imported by them was generated from renewable energy sources.
Structure of incentive (how is it applied and at what levels?)	The quota can be reached by own generating "green electricity", which is rewarded with tradable green certificates (certificati verdi). On the other hand the quota may be satisfied by purchasing green certificates. The period for which certificates are issued is limited to 15 years for all systems commissioned after 31 December 2007. Between 2007 to 2012. The quota increases by 0.75 percentage points and depends on the electricity produced and imported in the previous year. From 2012 the quota will linearly decrease until becoming equal to 0 in 2015.
Scope (waste streams)	The certificates system includes biogas and biomass plants. Recyclable waste is included, also biomass and biogas from agricultural, livestock and forestry products, landfill gas, gas resulting from exhaust purification, and other types of biogas.
Problems encountered/ solutions found/ lessons learned from implementation	

Perceived costs (financial and administrative) of the instrument	Green certificates create additional costs to producers and importers. These costs are given through electricity prices to consumers.
Reference/source	http://www.res-legal.de/en/search-for-countries/italy/more-about/land/italien/ueberblick/foerderung.html Renewable energy policy country profiles: http://www.reshaping-res-policy.eu/downloads/RE-SHAPING%20Renewable%20Energy%20Policy%20Country%20profiles%202009.pdf http://ec.europa.eu/environment/waste/compost/pdf/Biowaste_recycling_targets_final_final.pdf

14.2 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	<p>In Italy the law in principle stipulates to split the fees into a fixed part and a variable part. The variable part is calculated according to the quantity of waste produced, which can be based on volume, exact weight but also on estimations according to specific statistical methods. The latter method seems to be the most widely applied, which hampers initiatives to prevent waste as there is no “real” link between fees and de facto produced waste. The fee as such is called Tariffa Igiene Ambientale and covers waste collection/treatment and the cleaning of streets.</p> <p>As one example, the statutes for the calculation of the variable part of the tariff in the Florence area (Tuscany), say that the variable part of the fee refers to the quantity of separately collected or mixed waste. Where the local authorities have no experience with individual calibration techniques, they can apply a presumptive model, taking as reference the average waste production per person in the municipality.</p> <p>Basis for the calculation of the variable part for commercial waste is often the dimension (m²) of a commerce (shop, installation). Also for households the dimension of a household plays a role.</p>
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	Yes (since end of 1990s)
Reference/source	
Location of scheme (municipality where it is used)	
Nature of scheme	
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Reference/source	

14.3 Producer responsibility systems

Packaging, Taxes	
Date of introduction	None
Principle (one/two lines describing the instrument)	
Scope of the tax	
Current levels of tax, and tax structure	
Details of any exemptions	
How has the tax changed over time?	
Plans for future levels of the tax	
Reference/source	
Packaging, Deposit refunds	
[Name of existing scheme]	
Year introduced	None
Key Legislation	
Targets set for the scheme (including planned future targets)	
Scope of scheme	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Packaging, Green Dot scheme	
[Name of existing scheme]	
National consortium for recovery/recycling of packaging (Consorzio imballaggi (Conai).	
Year introduced	1997
Key Legislation	Decreto Decreto Legislativo 5 febbraio 1997 n. 22 (Decreto Ronchi)

Scope of the scheme	CONAI, National Packaging Consortium, is a private consortium of firms working towards the recovery and recycling of packaging issued for consumption on national territory, with the aim of meeting statutory targets. CONAI says to guarantee target achievement at the lowest economic cost of all the European consortia, working as a market subsidiary. http://www.conai.org/hpm00.asp																												
Targets set for the scheme (including planned future targets)	Statutory targets At least 60% are recovered, between 55% and 80% are recycled, for the following streams the following recycling standards apply: 60% glass, 60% paper and card, 50% metals, 26% plastics (only regarding the plastics part), 35% woods																												
Principle	In order to guarantee the recovery of packaging from public collection, CONAI has stipulated a framework agreement (Accordo Quadro) with ANCI, the national association of Italian municipalities, that lays down conditions for the take-back of packaging waste collected by town councils. Within the ANCI-CONAI agreement, the Consortia may stipulate appropriate contracts with municipalities and waste collection service companies for the take-back of used packaging. To date, 7,000 municipalities have signed contracts and over 90% of the population is now served within the framework. Since 2000 the quantity of packaging waste from separate collection managed by the consortium system has more than quadrupled. A contribution to CONAI has to be paid by the producers of the packaging who put the packaging first on the market																												
Level of payment to scheme	The level of payments for the different types of packaging For 2011, the following rates apply: Contribution to CONAI for packaging made of glass 17,82 Euro/ton; for steel 31,00 Euro/ton; for alluminium 52,00 Euro/ton, for plastics 140 €/ton, for wood 8,00 €/ton. Paper packaging is about 22,00 €/ton. http://www.conai.org/hpm01.asp?CgiAction=Display&IdCanale=104&IdNotizia=2034&IdSession=0 Si rammenta che tutte le dichiarazioni, a partire dalla prima di competenza 2010, andranno presentate utilizzando la modulistica aggiornata con i nuovi Contributi.																												
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	By the ANCI-CONAI agreement CONAI guarantees the take-back and separate collection of municipal packaging. This is granted by extra fees per material: <table><tr><td>Material</td><td>Euro(max)</td><td>Euro(min)</td><td>max impurity (%)</td></tr><tr><td>Steel</td><td>82,68</td><td>37,89</td><td>20</td></tr><tr><td>Aluminium</td><td>422,46</td><td>172,24</td><td>15</td></tr><tr><td>Paper</td><td>90,48</td><td>45,24</td><td>10</td></tr><tr><td>Wood</td><td>13,78</td><td>6,9</td><td>10</td></tr><tr><td>Plastic</td><td>315,76</td><td>34,44</td><td>20</td></tr><tr><td>Glass</td><td>37,20</td><td>0,50</td><td>5</td></tr></table>	Material	Euro(max)	Euro(min)	max impurity (%)	Steel	82,68	37,89	20	Aluminium	422,46	172,24	15	Paper	90,48	45,24	10	Wood	13,78	6,9	10	Plastic	315,76	34,44	20	Glass	37,20	0,50	5
Material	Euro(max)	Euro(min)	max impurity (%)																										
Steel	82,68	37,89	20																										
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Wood	13,78	6,9	10																										
Plastic	315,76	34,44	20																										
Glass	37,20	0,50	5																										
Producer-led/funded or government-led/funded?	Producer-funded based on legislation																												
Electrical and electronic equipment (EEE)																													
[Name of existing scheme]																													
Year introduced	2005																												
Key Legislation	Decreto Legislativo 25 luglio 2005, n. 151																												
Scope of the scheme	According to the WEEE Directive																												

Targets set for the scheme (including planned future targets)	<p>a) WEEE of categories of 1 and 10 Annex I, at least 80% recovery and 75% re-use and recycling;</p> <p>b) WEEE of categories 3 and 4 Annex I, at least 75% of recovery and 65% re-use and re cycling;</p> <p>c) WEEE of categories 2, 5, 6, 7 e 9 dell'allegato 1 A, the targets of recovery are 70%, those of re cycling and reuse are 50%;</p> <p>d) for all gas discharge lamps the rate of component, material and substance reuse and recycling shall reach a minimum of 80 % by weight of the lamps.</p>
Principle	<p>To comply with their WEEE-management duties under Legislative Decree no. 151 of 2005, the EEE producers must set up or join a Collective System (such system are e.g. ReMedia Consortium or Ecodom).</p> <p>As of November 2007, the costs of collecting and treating WEEE are payable by the Producers who, through the Collective System they have joined, meet their legal duties</p> <p>Collective Systems are in general non-profit-making and their primary task is the carriage, treatment, and recovery of WEEE, performed in adherence with the provisions of Legislative Decree no. 151 of 2005 and the rules laid down by the WEEE Co-ordination Centre. Collective Systems may be specialised, in which case they focus on just a few product categories, or they may be multi-category Collective Systems dealing with all product categories.</p> <p>Coordination Centre</p> <p>A WEEE Co-ordination Centre (www.cdcrree.it) exists to optimise the activities carried out by collective systems to ensure common, homogeneous, and uniform operating systems”and to</p> <ul style="list-style-type: none"> * guarantee, throughout Italy, the presence of a uniform service of WEEE collection and treatment; * to assign collection sites in a fair manner to the collective systems so that they can treat their WEEE quotas in similar operating conditions; * be the sole co-ordinating body for Collection Sites that have an internet portal for registration and a call center for the reception of service requests <p>The National Register of entities with a duty to treat WEEE was set up by the Environment Ministry and is kept by the Supervisory and Control Committee using a computer network connection with local Chambers of Commerce, which serve as data-input points.</p>
Level of payment to scheme	Varies from consortium to consortium (either the contribution is included in the price calculation) or the contribution is especially highlighted in the bill for a good.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	No information
Producer-led/funded or government-led/funded?	Producer-led
Reference/source	http://www.consorzioremedia.it/en/2/weee-takeback-system/collective-compliance-system.html
End-of-life vehicles (ELV)	
[Name of existing scheme]	
Year introduced	2003
Key Legislation	Decreto Legislativo 24 giugno 2003, n.209
Scope of the scheme	Like in the ELV Directive
Targets set for the scheme (including planned future targets)	Like in the ELV Directive

Principle	<p>Shared responsibility of producers, car sellers and demolition and recycling services; Treatment firm needs to report the correct treatment including recycling to the authorities via a modello unico di dichiarazione (MUD),</p> <p>The producers of cars need to create a network of authorised take-back sites or designate sites where ELVs can be given back on a guaranteed cost-free basis.</p> <p>The car owner has to hand over the ELV to a take-back site or if he buys a new car hand over the ELV to the car seller, who has then to hand over the ELV to the take-back site. The handing over of cars is for free for the car owner except for de-registration costs.</p> <p>The operator of the authorized take-back site has to hand over a scrapping certificate in compliance with the ELV Directive and treat the car according to the Italian Decreto Legislativo 24 giugno 2003, n.209.</p>
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Producer-led network
Reference/source	http://www.ealspa.it/News%20letter/veicoli_fuori_uso.htm
Batteries	
[Name of existing scheme]	
Year introduced	2008
Key Legislation	D.Lgs., 20 Novembre 2008, n. 188
Scope of the scheme	Batteries and accumulators
Targets set for the scheme (including planned future targets)	Same as in Batteries Directive
Principle	<p>Different consorzia exist for the treatment of waste batteries. The D.Lgs. 188/08 introduced the principle that the costs of collection and re cycling are imposed on the producers of batteries and accumulators, who shall organize themselves in consorzia or collective systems. The decree has led to the abolition of the obligatory national scheme Cobat. As a result, producers organize in different collective system for the coordination of which the Centro di coordinamento Pile ed Accumulatori (CdcPA) has been created. This Coordination Center shall survey the work of the system with a view to improve the efficiency of the service and optimize the work of the single system with a view to increasing the recycling rates.</p>
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	

Producer-led/funded or government-led/funded?	Producer-led and –funded on the basis of law.
Reference/source	http://gestione-rifiuti.it/smaltimento-pile-accumulatori
Paper/cardboard	
[Name of existing scheme]	
Year introduced	2010
Key Legislation	art. 7 del Decreto Legislativo 3 dicembre 2010, n. 205
Scope of the scheme	Paper/cardboard (as apart of municipal waste)
Targets set for the scheme (including planned future targets)	Until 2015 the authorities take up segregated collection for at least paper, metals, plastics and glass and where possible wood. .
Principle	Recycling targets as in Waste Framework Directive 2008/98/EC
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Other (if any)	
Enf of life tyre	
Year introduced	2011
Key Legislation	Art. 228
Scope of the scheme	Waste tyres, excluding tyres from bicycle and airplanes; solid tyres, caterpillars and tubes
Targets set for the scheme (including planned future targets)	100% of sold tyres should be collected and recycled per year.
Principle	The tyres are collected and recycled, advantaging the re-use of tyres, directly and through retreading. Ecopneu a non-profit company is organising the collecting and further step. Ecopneu is incorporated by the six major tyre manufacturers operating in Italy. Many other important cooperate voluntary with Ecopneu.
Level of payment to scheme	The Associations of vehicle manufacturers and importers, having the full responsibility of the ELV management, have obtained the imposition of a fee related to the tyres, to be paid at the vehicle's registration. The fee covers only the costs of the system.

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	The objective is to cover 100 percent of the costs.
Producer-led/funded or government-led/funded?	Producer led/funded, but fee has to be paid by the consumers at the moment of buying the vehicle.
Reference/source	http://www.icwmpisa.com/images/14pdf/Giovanni%20Corbetta%20-%20ECOPNEUS.pdf http://www.etrma.org/pdf/20101220%20Brochure%20ELT_2010_final%20version.pdf
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	

14.4 Other interesting instruments

e.g. Landfill Allowance Schemes	
Principle (one/two lines describing the instrument)	e.g. (Tradable) allowance scheme to reduce amount of biodegradable municipal waste sent to landfill, Sanctions applied for non-compliance.
Structure of incentive (how is it applied and at what levels?)	e.g. Market for allowances exists – prices move with the balance of supply and demand.
Scope (waste streams)	e.g. Biodegradable municipal waste
Voluntary or mandatory/legislative?	e.g. Applies in England and Northern Ireland – system of permits is non-tradable in Wales
Geographical coverage	e.g. Applies in England, Wales and Northern Ireland – scheme suspended in Scotland

Target group (e.g. consumer, households, business, manufacturer)	e.g. Local authorities
Reference/source	

ECONOMIC INSTRUMENTS IN LATVIA

15.1 Fees for Waste Disposal and Treatment

15.1.1 landfill fees (and Bans)

Natural Resources Tax on waste disposal			
Date of introduction	January 1991		
Principle (one/two lines describing the instrument)	The aim of the tax mentioned in the Law is to restrict pollution of the environment.		
Current levels of tax, and tax structure	Tax rates on disposed amount of waste		
	No.	Type of waste	Unit of measurement
			Rate during time period from 1 January 2011 to 31 December 2011 (LVL)
	1.	Municipal waste	ton
	2.	Waste from construction and demolition (including untreated excavated soil from contaminated sites)	ton
	3.	Asbestos in the form of fibres and dust	ton
	4.	Disposal of hazardous waste	ton
	5.	Industrial waste	ton
Details of any exemptions			
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)			

How has the tax changed over time?	No.	Type of waste	Unit of measurement	Rate during time period from 1 July 2009 to 31 December 2009 (LVL)	Rate during time period from 1 January 2010 to 31 December 2010 (LVL)
	1.	Municipal waste	ton	1,25	3,00
	2.	Waste from construction and deconstruction (including untreated excavated soil from contaminated sites)	ton	1,25	5,00
	3.	Asbestos in the form of fibres and dust	ton	10,00	25,00
	4.	Disposal of hazardous waste	ton	25,00	25,00
	5.	Industrial waste	ton	1,25	3,00
	Initially the tax was applied for municipal and hazardous waste and was based on m ³ disposed.				
Extent of geographical coverage	Country wide				
Plans for future levels of the tax	No.	Type of waste	Unit of measurement	Rate during time period from 1 January 2012 (LVL)	
	1.	Municipal waste	ton	7,00	
	2.	Waste from construction and deconstruction (including untreated excavated soil from contaminated sites)	ton	15,00	
	3.	Asbestos in the form of fibres and dust	ton	25,00	
	4.	Disposal of hazardous waste	ton	25,00	
	5.	Industrial waste	ton	15,00	
Reference/source	Natural Resources Tax Law http://www.likumi.lv/doc.php?id=124707#saist_11				
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)					
Range of fees for landfilling (excluding landfill tax)	<p>The fee is compiled of fee for municipal waste collection, shipment, reload, storage, maintaining of waste managing infrastructure, tariff for municipal waste landfilling which is approved by Public Utilities Commission and natural resources tax for landfilling. This fee is determined by municipalities and it varies in different regions of Latvia.</p> <p>The fee for landfilling of hazardous waste is determined according to Regulations of the Cabinet of Ministers No 371 (http://www.likumi.lv/doc.php?id=77217&from=off).</p> <p>The fee of industrial and hazardous waste landfilling, collection, storage and shipment is determined by an agreement between industrial or hazardous waste producer and waste managing company.</p>				
Source of information	Waste Management Law http://www.likumi.lv/doc.php?id=221378&from=off				
Do sources give any explanation for key factors explaining variation?	The variation of fees is based also on the distance of waste shipment till the landfill site.				

Information on Bans	
Wastes to which the ban is applied	<p>In landfill sites it is not permitted to accept for disposal:</p> <ul style="list-style-type: none"> • liquid waste; • sludge of wastewater treatment plants if the water content therein is more than 80%; • organic food industrial waste and wood treatment waste if it is not being composted or used for the acquisition of landfill gas; • waste which in landfill site conditions is explosive, corrosive, combustible or flammable in accordance with the regulatory enactments regarding waste classification and characteristics making waste hazardous; • waste which forms after human or animal health care and which is infectious in accordance with the regulatory enactments regarding waste classification and characteristics making waste hazardous; • undamaged worn tyres and cut tyres (except undamaged worn tyres which are used for engineering technical work in a landfill site or waste dump, bicycle tyres and the tyres the external diameter of which is more than 1 400 mm); • waste containing unidentified chemical substances originating from the research, learning or technical activity, the influence of which on human and environment is not known (surplus of substances and products from the laboratories), in conformity with the regulatory enactments regarding waste classification and the characteristics that make waste hazardous.
Date of introduction	2002
(Means of implementation)	
Plans for future bans (if any)	

15.1.2 Incineration fees (and Bans)

[Name of existing tax]	
Date of introduction	Some years we had a tax on incineration but it is not applied any more.
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Reference/source	
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	

Range of fees for incineration (excluding incineration tax)	The fee is determined by the managing company that performs the management in a particular area.
Source of information	
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	Waste from industrial batteries and accumulators and waste from vehicle batteries and accumulators.
Date of introduction	2008
(Means of implementation)	
Plans for future bans (if any)	

15.2 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS (not applied in Latvia)	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	
Reference/source	
Location of scheme (municipality where it is used)	
Nature of scheme	
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Reference/source	

15.3 Producer responsibility systems

Packaging, Taxes		
Date of introduction	1997	
Principle (one/two lines describing the instrument)	The purpose of the Natural Resources Tax is to reduce manufacturing and sale of environment polluting substances	
Scope of the tax	Covers packaging from all kinds of materials	
Current levels of tax, and tax structure	No.	Type and material of goods used in packaging products and disposable tableware and accessories
	1.	Of glass source materials
	2.	Of plastic (polymer) source materials, except bioplastic and oxiplastic and polystyrol source materials
	3.	Of metal source materials
	4.	Of wood, paper and cardboard or other natural fibre and bioplastic source materials
	5.	Of oxiplastic source materials
	6.	Of polystyrol source materials
	<p>Rate in time period from 1 January 2009 (LVL per 1 kg of material)</p> <p>0,25</p> <p>0,65</p> <p>0,70</p> <p>0,15</p> <p>0,45</p> <p>0,90 (since 2011)</p> <p>In 2008 there were introduced special tax rates for plastic bags that are higher than those for other plastic packaging. To plastic bags attached by a merchant to an aggregate of goods or products (purchase) in packaging or without it because of customer's convenience or advertising design, regardless of whether a separate payment is collected for these bags, a tax rate 2.60 lats per one kilogram (to plastic bags the weight of one bag of which does not exceed 0.003 kilograms (the weight of 1000 bags does not exceed 3 kilograms)) or 0.80 lats per one kilogram (to plastic bags the weight of one bag of which exceeds 0.003 kilograms (the weight of 1000 bags exceeds 3 kilograms)) shall be applied</p> <p>A tax rate for plastic bags manufactured from bioplastics or oxy-degradable plastics is the same as for any packaging manufactured from bioplastics or oxy-degradable plastics.</p>	
Details of any exemptions	<p>Natural Resources Tax Law determines that a taxpayer shall not pay the tax for packaging or disposable tableware and accessories if he or she ensures the fulfilment of the norms for used packaging and disposable tableware and accessories recovery specified in regulatory enactments regarding environment protection, as well as complies with one of the following conditions:</p> <p>1) has established and applies the used packaging or disposable tableware and accessories management system and has entered into an agreement with the institution subordinated to the Ministry of Environmental Protection and Regional Development and specified in regulatory enactments regarding application of this system; or</p> <p>2) has entered into an agreement with the packaging or disposable tableware and accessories manager regarding participation in the used packaging or disposable tableware and accessories management system (if the manager is registered in the Environment State Bureau and has entered into agreement with the institution subordinated to the Ministry of Environmental Protection and Regional Development and specified in regulatory enactments regarding application of the used packaging or disposable tableware and accessories management system).</p>	

How has the tax changed over time?	No.	Type and material of goods used in packaging products and disposable tableware and accessories	Rate in time period from 1 January 2006 to 31 December 2006 (LVL per 1 kg of material)	Rate in time period from 1 January 2007 to 31 December 2007 (LVL per 1 kg of material)	Rate in time period from 1 January 2008 to 31 December 2008 (LVL per 1 kg of material)
	1.	Of glass source materials	0,04	0,16	0,20
	2.	Of plastic (polymer) source materials, except bioplastic source materials	0,10	0,40	0,60
	3.	Of metal source materials	0,06	0,24	0,45
	4.	Of wood, paper and cardboard or other natural fibre and bioplastic source materials	0,012	0,05	0,15
Till 2004 tax could be calculated in various ways (based on packaging weight or weight of goods etc.)					
Plans for future levels of the tax	-				
Reference /source	Natural Resources Tax Law http://www.likumi.lv/doc.php?id=124707&version_date=01.01.2006#saist_11				
Packaging, Deposit refunds					
Voluntary deposit system for reusable packaging					
Year introduced	2004				
Key Legislation	Packaging Law and Regulations of Cabinet of Ministers No. 414 adopted 22 July 2003 "Regulations regarding Application of Deposit System to Reusable Packaging"				
Targets set for the scheme (including planned future targets)	Producers have to comply with national targets for packaging recycling and recovery				
Scope of scheme	This is a voluntary system. It can be applied to reusable glass bottles with volume 0,33 and 0,5 litres, colourless and brown, plastic bottle crates, green (capacity – 20 bottles with volume 0,5 litres) and plastic bottle crates, blue (capacity -24 bottles with volume 0.33 litres)				
Principle	<p>The manager or importer willing to introduce a voluntary deposit system for reusable packaging needs to specify the amount of a deposit payment for the particular packaging and submit to state institutions the substantiation for determining it in accordance with the calculations performed in the undertaking.</p> <p>The retailer or merchant with whom a contract regarding the collection of deposit packaging has been entered into shall pay in full to the consumer the deposit payment for the deposit packaging returned.</p> <p>The manufacturer or importer shall pay in full to the retailer or merchant the deposit payment for the returned deposit packaging.</p> <p>The manufacturer or importer shall reimburse to the retailer or merchant for the collection of deposit packaging (including the acceptance from the consumer, inventory, storage, loading) in accordance with mutual agreement.</p>				

Level of payment to scheme	The manufacturer or importer and retailer or merchant shall include procedures for the circulation of mutual accounts and documented substantiation in relation to deposit packaging in the supply contract of the good or other specific contract.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	All costs shall be covered by the packaging manufacturer or importer.
Producer-led/funded or government-led/funded?	The system is led by manufacturers or importers.
Reference /source	www.likumi.lv
Packaging	
Producers responsibility scheme	
Year introduced	1997
Key Legislation	Natural Resources Tax Law and Packaging Law
Scope of the scheme	Packaging waste and disposable tableware and cutlery.

Targets set for the scheme (including planned future targets)	The required packaging recycling and recovery rates for producers are the same as the ones that are determined in the EU legislation for Latvia.											
	No.	Type of packaging material	Recovery (recycling and energy recovery) volumes of packaging materials up to 31 December of the respective year (%)									
			20 06	20 07	20 08	20 09	20 10	20 11	20 12	20 13	20 14	20 15
		P a p e r , c a r d b o a r d	62	67	74	76	77	78	79	81	82	83
		P l a s t i c	18	21	28	32	35	36	37	39	40	41
		M e t a l	27	30	38	42	44	45	46	48	49	50
		G l a s s	32	35	40	45	50	55	58	61	63	65
		V o o d	21	24	25	25	26	27	27	28	28	29
		I n t o t a l f			213							

Principle	<p>According to the Natural Resources Tax Law a taxpayer shall not pay the tax for packaging or disposable tableware and accessories (receive a 100% exemption) if he or she ensures the fulfilment of the norms for used packaging and disposable tableware and accessories recovery specified in regulatory enactments regarding environment protection, as well as complies with one of the following conditions:</p> <p>1) <u>has established</u> and applies the used packaging or disposable tableware and accessories management system and has entered into an agreement with the institution subordinated to the Ministry of Environmental Protection and Regional Development and specified in regulatory enactments regarding application of this system; or</p> <p>2) <u>has entered into an agreement with</u> the packaging or disposable tableware and accessories <u>manager</u> regarding participation in the used packaging or disposable tableware and accessories management system (if the manager is registered in the Environment State Bureau and has entered into agreement with the institution subordinated to the Ministry of Environmental Protection and Regional Development and specified in regulatory enactments regarding application of the used packaging or disposable tableware and accessories management system).</p>																																							
Level of payment to scheme	<p>The licence fees are currently set per kg according to different types of packaging and tableware. The fees differ among all companies but they are set based on the principle to cover collection and recycling costs. There are indicated fees of those companies that have inserted their fees in the internet:</p> <p>Latvijas Zāļais punkts</p> <p>The minimum licence fee is LVL 15 (EUR 21) per quarter.</p> <p>From 1 January 2010, the licence fee tariffs are:</p> <p>Entrance fee</p> <p>New licensees have to pay a single entrance fee LVL 25 (EUR 35).</p> <table><tr><th>Material fees</th><th>License fee LVL</th><th>License fee EUR</th></tr><tr><td>Glass</td><td>0.0344</td><td>0.049</td></tr><tr><td>Polymers (incl. PET)</td><td>0.0936</td><td>0.133</td></tr><tr><td>Metal</td><td>0.048</td><td>0.068</td></tr><tr><td>Paper, cardboard, beverage cartons other natural fibers, incl. bio-plastics</td><td>0.0116</td><td>0.016</td></tr><tr><td>Wood</td><td>0,011</td><td>0,016</td></tr></table> <p>Fees for composites (laminates) are based on the dominant packaging material.</p> <p>Zaļā josta</p> <table><tr><th>Material fees</th><th>License fee LVL</th><th>License fee EUR</th></tr><tr><td>Glass</td><td>0.031</td><td>0.044</td></tr><tr><td>Polymers (incl. PET)</td><td>0.076</td><td>0.108</td></tr><tr><td>Metal</td><td>0.046</td><td>0.065</td></tr><tr><td>Paper, cardboard, other natural fibers</td><td>0.009</td><td>0.013</td></tr><tr><td>Wood</td><td>0,009</td><td>0,013</td></tr><tr><td>Oxy-degradable plastics</td><td>0.076</td><td>0.108</td></tr></table>	Material fees	License fee LVL	License fee EUR	Glass	0.0344	0.049	Polymers (incl. PET)	0.0936	0.133	Metal	0.048	0.068	Paper, cardboard, beverage cartons other natural fibers, incl. bio-plastics	0.0116	0.016	Wood	0,011	0,016	Material fees	License fee LVL	License fee EUR	Glass	0.031	0.044	Polymers (incl. PET)	0.076	0.108	Metal	0.046	0.065	Paper, cardboard, other natural fibers	0.009	0.013	Wood	0,009	0,013	Oxy-degradable plastics	0.076	0.108
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Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	The fees are set in order to cover collection and recycling costs and will be revised if the costs change.
Producer-led/funded or government-led/funded?	All managers are privately owned companies.
Source/reference	www.lvaf.gov.lv (list of managing companies can be found there) www.zalais.lv www.zalajosta.lv
	There are three packaging companies that provide packaging management for producers: Latvijas Zālais punkts, Zālā Josta and Zālais centrs. These managers also manage WEEE and batteries and accumulators. There are also several individual packaging management schemes that deal only with their own created packaging.
Electrical and electronic equipment (EEE)	
Producers responsibility scheme	
Year introduced	July 2006
Key Legislation	Natural Resources Tax Law and Waste Management Law
Scope of the scheme	WEEE

Targets set for the scheme (including planned future targets)	EEE	Collection amount of WEEE released in the market, %	Treatment amount of WEEE delivered to the treatment facility, %
	large household equipment (except for large refrigeration equipment, cold storage depots and refrigerators)	25	80
	large refrigeration equipment, cold storage depots and refrigerators	25	80
	small household equipment	25	70
	information technology and electronic communication equipment (except for monitors and mobile phones)	25	75
	monitors	25	75
	mobile phones	25	75
	equipment provided for wide consumption (except for television sets)	25	75
	television sets	25	75
	electrical and electronic instruments (except for large fixed production machinery which is not portable or is permanently fixed)	25	70
	light bulbs containing mercury	50	70
	lighting installation (except for light bulbs containing mercury)	25	70
	monitoring and control tools	25	70
	toys, sport and recreation inventory	25	70
	medical devices (except for implanted and contaminated medical devices)	25	70
	automatic vending machines	25	80
Principle	<p>According to the Natural Resources Tax Law a taxpayer shall not pay the tax for goods harmful to the environment (including WEEE) if he or she ensures the fulfilment of norms for the recovery of the waste of goods harmful to the environment specified in regulatory enactments regarding environment protection, as well as complies with one of the following conditions:</p> <p>1) <u>has established and applies a waste management system</u> for goods harmful to the environment and has entered into an agreement with the institution subordinated to the Ministry of Environmental Protection and Regional Development and specified in regulatory enactments about application of this system; or</p> <p>2) <u>has entered into an agreement with a waste managing company</u> for the waste of goods harmful to the environment regarding participation in the waste management system for spent goods harmful to the environment (if the manager has entered into agreement with the institution subordinated to the Ministry of Environmental Protection and Regional Development and specified in regulatory enactments regarding application of management system of goods harmful to the environment).</p>		

Level of payment to scheme	<p>The licence fees are currently set per tonne according to different types of EEE. The fees differ among companies but they are set based on the principle to cover collection and recycling costs. There are indicated fees of those companies that have inserted their fees in the internet:</p> <p>Latvijas Zālais Punkts</p> <table> <tr> <th>EEE</th><th>LVL/t</th></tr> <tr> <td>large refrigeration equipment, cold storage depots and refrigerators</td><td>53,06</td></tr> <tr> <td>large household equipment (except for large refrigeration equipment, cold storage depots and refrigerators)</td><td>39,86</td></tr> <tr> <td>small household equipment</td><td>61,00</td></tr> <tr> <td>information technology and electronic communication equipment</td><td>61,13</td></tr> <tr> <td>equipment provided for wide consumption</td><td>45,71</td></tr> <tr> <td>television sets</td><td>92,84</td></tr> <tr> <td>light bulbs containing mercury</td><td>780, 00</td></tr> <tr> <td>lighting installation (except for light bulbs containing mercury)</td><td>122, 37</td></tr> <tr> <td>electrical and electronic instruments (except for large fixed production machinery which is not portable or is permanently fixed)</td><td>61,20</td></tr> <tr> <td>toys, sport and recreation inventory</td><td>89,32</td></tr> <tr> <td>medical devices (except for implanted and contaminated medical devices)</td><td>140,00</td></tr> <tr> <td>monitoring and control tools</td><td>140,00</td></tr> <tr> <td>automatic vending machines</td><td>140,00</td></tr> </table> <p>Zaļā josta</p> <table> <tr> <th>EEE</th><th>LVL/kg</th></tr> <tr> <td>large refrigeration equipment, cold storage depots and refrigerators</td><td>0.0555</td></tr> <tr> <td>large household equipment (except for large refrigeration equipment, cold storage depots and refrigerators)</td><td>0.027</td></tr> <tr> <td>small household equipment</td><td>0.032</td></tr> <tr> <td>information technology and electronic communication equipment</td><td>0.029</td></tr> <tr> <td>equipment provided for wide consumption</td><td>0.029</td></tr> <tr> <td>television sets</td><td>0.045</td></tr> <tr> <td>light bulbs containing mercury</td><td>0.43</td></tr> <tr> <td>lighting installation (except for light bulbs containing mercury)</td><td>0.032</td></tr> <tr> <td>electrical and electronic instruments (except for large fixed production machinery which is not portable or is permanently fixed)</td><td>0.035</td></tr> <tr> <td>toys, sport and recreation inventory</td><td>0.039</td></tr> <tr> <td>medical devices (except for implanted and contaminated medical devices)</td><td>0.093</td></tr> <tr> <td>monitoring and control tools</td><td>0.093</td></tr> <tr> <td>automatic vending machines</td><td>0.093</td></tr> </table>	EEE	LVL/t	large refrigeration equipment, cold storage depots and refrigerators	53,06	large household equipment (except for large refrigeration equipment, cold storage depots and refrigerators)	39,86	small household equipment	61,00	information technology and electronic communication equipment	61,13	equipment provided for wide consumption	45,71	television sets	92,84	light bulbs containing mercury	780, 00	lighting installation (except for light bulbs containing mercury)	122, 37	electrical and electronic instruments (except for large fixed production machinery which is not portable or is permanently fixed)	61,20	toys, sport and recreation inventory	89,32	medical devices (except for implanted and contaminated medical devices)	140,00	monitoring and control tools	140,00	automatic vending machines	140,00	EEE	LVL/kg	large refrigeration equipment, cold storage depots and refrigerators	0.0555	large household equipment (except for large refrigeration equipment, cold storage depots and refrigerators)	0.027	small household equipment	0.032	information technology and electronic communication equipment	0.029	equipment provided for wide consumption	0.029	television sets	0.045	light bulbs containing mercury	0.43	lighting installation (except for light bulbs containing mercury)	0.032	electrical and electronic instruments (except for large fixed production machinery which is not portable or is permanently fixed)	0.035	toys, sport and recreation inventory	0.039	medical devices (except for implanted and contaminated medical devices)	0.093	monitoring and control tools	0.093	automatic vending machines	0.093
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Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	The fees are set in order to cover collection and recycling costs and will be revised if the costs change.
Producer-led/funded or government-led/funded?	All managers are privately owned companies.
Reference /source	www.lvaf.gov.lv (list of managing companies can be found there) http://www.elektroregistrs.lv/ (EEE Registration: Latvian Electrical Engineering and Electronics Industry Association (LETERA) authorized by the government) www.zalais.lv www.zalajosta.lv
	There are six packaging companies that provide packaging management for producers: Latvijas Zaļais punkts (Green Dot Latvia), Zaļā Josta and Zaļais centrs, Ekogaisma, Latvijas Elektrotehnikas apsaimniekošana, Latvijas Zaļais elektrons. There are also several individual management schemes that deal only with their own created WEEE.
End-of-life vehicles (ELV)	
Producers responsibility scheme	
Year introduced	2004
Key Legislation	Natural Resources Tax Law and End-of-Life Vehicles Management Law
Scope of the scheme	End-of-Life Vehicles
Targets set for the scheme (including planned future targets)	Each vehicle has to be treated at the end of its life.
Principle	The tax for vehicles shall not be paid by the manufacturer of the vehicle or authorised representative thereof, who in accordance with the Management of End-of-Life Vehicles Law has established and applies an end-of-life vehicle management system and has entered into an agreement with an institution subordinated to the Ministry of Environmental Protection and Regional Development and specified in regulatory enactments regarding the application of this system or participates in the operation of such system. Starting from July 2011 this principle will refer also to used vehicles that are first time registered in Latvia.
Level of payment to scheme	The fees of producer's responsibility organizations are set in order to cover collection and recycling costs.

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	The fees will be revised if the costs change.			
Producer-led/funded or government-led/funded?	All managers are privately owned companies.			
Reference /source	http://www.likumi.lv/doc.php?id=124707#saist_11 www.lvaf.gov.lv (list of managing companies can be found there)			
	There are 29 producers now under this scheme.			
Batteries				
Producers responsibility scheme				
Year introduced	July 2006			
Key Legislation	Natural Resources Tax Law and Waste Management Law.			
Scope of the scheme	Batteries and accumulators			
Targets set for the scheme (including planned future targets)		Collection amount of battery and accumulator waste released in the market, %	Treatment amount of battery and accumulator waste delivered to the treatment facility, %	
	Electric batteries and chemical sources of electricity (lead):			
	lead-acid batteries and accumulators	25	65	
	nickel-cadmium batteries and accumulators	25	75	
	other type waste batteries and accumulators	25	50	

Principle	<p>According to the Natural Resources Tax Law a taxpayer shall not pay the tax for goods harmful to the environment (including batteries and accumulators) if he or she ensures the fulfilment of norms for the recovery of the waste of goods harmful to the environment specified in regulatory enactments regarding environment protection, as well as complies with one of the following conditions:</p> <p>1) <u>has established and applies</u> a waste management system for goods harmful to the environment and has entered into an agreement with the institution subordinated to the Ministry of Environmental Protection and Regional Development and specified in regulatory enactments about application of this system; or</p> <p>2) <u>has entered into an agreement with a waste managing company</u> for the waste of goods harmful to the environment regarding participation in the waste management system for spent goods harmful to the environment (if the manager has entered into agreement with the institution subordinated to the Ministry of Environmental Protection and Regional Development and specified in regulatory enactments regarding application of management system of goods harmful to the environment).</p> <p>Management of batteries and accumulators is under WEEE management system.</p>																						
Level of payment to scheme	<p>The licence fees are currently set per kg according to different types of accumulators and batteries. The fees differ among companies but they are set based on the principle to cover collection and recycling costs. There are indicated fees of those companies that have inserted their fees in the internet:</p> <p>Latvijas Zālais punkts</p> <table border="1"> <tr> <td>Electric batteries and chemical sources of electricity (ead):</td><td>LVL/kg</td></tr> <tr> <td>lead-acid batteries and accumulators</td><td>0,085</td></tr> <tr> <td>nickel-cadmium batteries and accumulators</td><td>0,26</td></tr> <tr> <td>other type chemical sources of electricity (lead)</td><td>0,671</td></tr> <tr> <td>other type accumulators</td><td>0,671</td></tr> </table> <p>Zaļā josta</p> <table border="1"> <tr> <td></td><td>LVL/kg</td></tr> <tr> <td>Electric batteries and chemical sources of electricity (lead):</td><td></td></tr> <tr> <td>lead-acid batteries and accumulators</td><td>0.083</td></tr> <tr> <td>nickel-cadmium batteries and accumulators</td><td>0.46</td></tr> <tr> <td>other type chemical sources of electricity (lead)</td><td>0.6</td></tr> <tr> <td>other type accumulators</td><td>0.66</td></tr> </table>	Electric batteries and chemical sources of electricity (ead):	LVL/kg	lead-acid batteries and accumulators	0,085	nickel-cadmium batteries and accumulators	0,26	other type chemical sources of electricity (lead)	0,671	other type accumulators	0,671		LVL/kg	Electric batteries and chemical sources of electricity (lead):		lead-acid batteries and accumulators	0.083	nickel-cadmium batteries and accumulators	0.46	other type chemical sources of electricity (lead)	0.6	other type accumulators	0.66
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Producer-led/funded or government-led/funded?	All managers are privately owned companies.
Reference /source	www.lvaf.gov.lv (list of managing companies can be found there) www.zalais.lv www.zalajosta.lv
	There are six packaging companies that provide packaging management for producers: Latvijas Zaļais punkts (Green Dot Latvia), Zaļā Josta, Latvijas Zaļais elektrons, Zaļais centrs, Zaļā iela and Latvijas Elektrotehnikas apsaimniekošana. There is also individual management scheme that deals only with their own created waste of batteries and accumulators.
Paper/cardboard	
Not applied in Latvia	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	

Producer-led/funded or government-led/funded?			
Reference /source			
Other (if any)			
Producer responsibility scheme on goods harmful to the environment			
Year introduced	2006		
Key Legislation	Natural Resources Tax Law and Waste Management Law		
Scope of the scheme	All types of tyres, lubricating oils, oil filters, substances depleting the ozone layer (freons, halons and others)		
Targets set for the scheme (including planned future targets)		Collection amount of waste of goods harmful to the environment released in the market, %	Treatment amount of waste of goods harmful to the environment delivered to the treatment facility, %
	tyres	60	80
	lubricating oils	40	80
	oil filters	25	80
	substances depleting the ozone layer (freons, halons and others)	100	80
Principle	<p>According to Natural Resources Tax Law a taxpayer shall not pay the tax for goods harmful to the environment (including all types of tyres, lubricating oils, oil filters, substances depleting the ozone layer) if he or she ensures the fulfilment of norms for the recovery of the waste of goods harmful to the environment specified in regulatory enactments regarding environment protection, as well as complies with one of the following conditions:</p> <p>1) <u>has established and applies a waste management system</u> for goods harmful to the environment and has entered into an agreement with the institution subordinated to the Ministry of Environmental Protection and Regional Development and specified in regulatory enactments about application of this system; or</p> <p>2) <u>has entered into an agreement with a waste managing company</u> for the waste of goods harmful to the environment regarding participation in the waste management system for spent goods harmful to the environment (if the manager has entered into agreement with the institution subordinated to the Ministry of Environmental Protection and Regional Development and specified in regulatory enactments regarding application of management system of goods harmful to the environment).</p>		

Level of payment to scheme	<p>The licence fees are currently set per tonne of waste. The fees differ among companies but they are set based on the principle to cover collection and recycling costs.</p> <p>There are indicated fees of those companies that have inserted their fees in the internet:</p> <p>Latvijas Zaļais Punkts</p> <table> <tr> <td></td><td>LVL/kg</td></tr> <tr> <td>tyres</td><td>0,06</td></tr> <tr> <td>lubricating oils</td><td>0,03</td></tr> <tr> <td>oil filters</td><td>0,08 (for an item)</td></tr> </table> <p>Zaļā josta</p> <table> <tr> <td></td><td>LVL/kg</td></tr> <tr> <td>tyres</td><td>0,06</td></tr> <tr> <td>lubricating oils</td><td>0,03</td></tr> <tr> <td>oil filters</td><td>0,08 (for an item)</td></tr> </table>		LVL/kg	tyres	0,06	lubricating oils	0,03	oil filters	0,08 (for an item)		LVL/kg	tyres	0,06	lubricating oils	0,03	oil filters	0,08 (for an item)
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Producer-led/funded or government-led/funded?	All managers are privately owned companies.																
Reference /source	<p>Natural Resources Tax Law http://www.likumi.lv/doc.php?id=124707#saist_11</p> <p>Waste Management Law http://www.likumi.lv/doc.php?id=221378&from=off</p> <p>www.lvaf.gov.lv (list of managing companies can be found there)</p> <p>www.zalais.lv</p> <p>www.zalajosta.lv</p>																
	<p>There are seven packaging companies that provide packaging management for producers: Latvijas Zaļais punkts (Green Dot Latvia), Zaļā Josta, Latvijas Zaļais elektrons, Zaļais centrs, Zaļā iela and Latvijas Elektrotehnikas apsaimniekošana and Kuusakoski.</p> <p>There are also three individual management schemes that deal only with their own created waste of goods harmful to environment.</p>																
Planned future schemes (if any)																	
[Name of planned future scheme]																	
Year introduced																	

Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference /source	

15.4 Other interesting instruments

e.g. Landfill Allowance Schemes	
Principle (one/two lines describing the instrument)	
Structure of incentive (how is it applied and at what levels?)	
Scope (waste streams)	
Voluntary or mandatory/legislative?	
Geographical coverage	

Target group (e.g. consumer, households, business, manufacturer)	
Reference/source	

ECONOMIC INSTRUMENTS IN LITHUANIA

16.1 Fees for Waste Disposal and Treatment

16.1.1 landfill fees (and Bans)

[Name of existing tax]	
Date of introduction	None
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	A landfill tax is planned to be instituted in 2012 (22 Euro/ton), all over Lithuania.
Reference/source	http://www.eea.europa.eu/soer/countries/lt/soertopic_view?topic=waste http://www.cewep.eu/media/www.cewep.eu/org/med_557/529_cewep_-_landfill_taxes_and_bans_7september2010_web.pdf
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for landfilling (excluding landfill tax)	<p>Using EU funds 11 new regional municipal waste landfills are established according to the requirements of Landfill Directive. The disposal of waste to the existing old landfills is banned and all existing old landfills are not in operation from the 16/07/2009. Final closure of old landfills is planned until 2011. At the end of 2010 the closure works were done in 457 dumpsites of nonhazardous waste and waste polluted areas. It is planned to close left 309 nonhazardous waste dumpsites and waste polluted areas. Old landfills are closed using mainly EU funds.</p> <p>Landfill construction and maintenance have traditionally been financed by the municipalities, usually from the municipal environmental funds with the consequence that waste collection charges do not cover landfill costs (see).</p> <p>Recently With the establishment of the Regional Waste Management Centers, specific waste management fee has been instituted: a fee for landfilling. According to different opinions, the landfill price will rise considerably in order to stimulate waste re-use, recycling and recovery.</p> <p>Average Net fee for landfilling: € 14.5.</p> <p>Total price for landfilling MSW:</p> <p>2010: € 17.5</p> <p>2012: € 39.5</p>

Source of information	http://www.wastesolutions.org/fileadmin/user_upload/wastesolutions/dogliani/italija.PDF , http://www.eea.europa.eu/soer/countries/lt/soertopic_view?topic=waste
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	<p>The disposal of biodegradable waste from gardens, parks and greeneries is banned according to the Order of the Minister of Environment No 444 on the Rules on Construction, Operation, Closure and After Care of Landfills of Waste, adopted 18/10/2000 with the last amendments in 2010 (Žin., 2000, No 96-3051; 2010, No 79-4111).</p> <p>The disposal of liquid waste, explosive, flammable waste, batteries and accumulators, dangerous waste to the non-hazardous waste landfills is banned according to the Order of the Minister of Environment No 444 on the Rules on Construction, Operation, Closure and After Care of Landfills of Waste, adopted 18/10/2000 with the last amendments in 2010 (Žin., 2000, No 96-3051; 2010, No 79-4111).</p>
Date of introduction	<p>The disposal of biodegradable waste from gardens, parks and greeneries to the non-hazardous waste landfills is banned from the 2003.</p> <p>The disposal of liquid waste, explosive, flammable waste, batteries and accumulators, dangerous waste to the non-hazardous waste landfills is banned from the 2000.</p>
(Means of implementation)	The ban of biodegradable waste from gardens, parks and greeneries disposal to landfills encourages the implementation of municipal waste disposal minimisation targets set in the Directive 1999/31/EC.
Plans for future bans (if any)	<p>In order to reduce waste amount going to landfill (including biodegradable waste) the ban for untreated waste was established in Lithuania. The ban is adopted by the Order of the Minister of Environment No 444 on the Rules on Construction, Operation, Closure and After Care of Landfills of Waste, adopted 18/10/2000 with the last amendments in 2010 (Žin., 2000, No 96-3051; 2010, No 79-4111).</p> <p>The transition period for this ban is no later than till the 2013.</p> <p>Such ban will encourage the establishment of sorting, composting, incineration and other waste treatment plants.</p>

16.1.2 Incineration fees (and Bans)

[Name of existing tax]	
Date of introduction	None
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	

Reference/source	
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	No municipal waste incineration plant operating to date.
Source of information	http://www.baltictimes.com/news/articles/25085/
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	None
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	
Green Energy	
Date of introduction	
Principle (one/two lines describing the instrument)	Lithuanian Environmental Investment Fund (LEIF): Subsidy Law on Renewable Energy: Feed-in tariff
Structure of incentive (how is it applied and at what levels?)	The tariffs under the support scheme are applicable for 12 years from the issue date of the generation licence.
Scope (waste streams)	LEIF: renewable electricity generation inclusive biogas and biomass are promoted under this scheme Feed-in tariff: renewable electricity generation inclusive biogas and biomass are promoted under this scheme: Biogas: 0,30 LTL/kWh, Biomass: 0,30 LTL/kWh (In the existing 10 biogas plants in Lithuania city sewer sludge, pig manure, and a variety of organic waste is used).
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	LEIF: paid by Lithuania state and supported by other countries and EU Commission. Feed-in tariff: The costs arising from the feed-in tariff are paid by the consumers through the electricity prices.
Reference/source	Renewable energy policy country profiles: http://www.reshaping-res-policy.eu/downloads/RE-SHAPING%20Renewable%20Energy%20Policy%20Country%20profiles%202009.pdf http://ec.europa.eu/environment/waste/compost/pdf/Biowaste_recycling_targets_final_final.pdf

16.2 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS

What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	<p>Traditionally waste management was financed through taxes. Only with the establishment of Regional Waste Management Centers did the concept of waste management fees become known.</p> <p>As the role of the waste management centres should expand in the future (so far they have been involved in only waste collection and storage), it is likely that waste fees will go further up. A general waste management fee was (in a few counties) or is being imposed.</p> <p>The State Strategic Waste Management Plan projected that 95 % of the population should have waste fee agreements signed by 2010, but the percentage lies somewhat above 80, as many people - particularly in the country side is reported to be unwilling to sign them.</p> <p>There was a countrywide discussion about whether the fee should be calculated according to the total area of the apartment or house or to the number of tenants living in the space. Since the declaration of one's home address in the Lithuanian passport is not mandatory there are many unaccounted residents. Therefore most municipalities set the fee to the actual area of the residence, upsetting the residents, as the principle "the larger the living space, the more garbage is produced" seems to be unfair to the majority.</p> <p>It is planned to make analyses on the amount of waste generated in various spheres. The price of local tax will depend according to the results of such analysis.</p> <p>Remark: From this follows that PAYT systems do not yet play a considerable role in Lithuania.</p>
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	Local tax is implemented in 1/3 municipalities.
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	The Law on Local Tax (Žin., 2000, No 52-1484; 2011, No 24-1156) sets the requirements for local tax calculation and administration. Other solutions are accepted in the level of municipalities.
Reference/source	http://www.wtert.eu/Default.asp?Menu=18&NewsPPV=7436
Location of scheme (municipality where it is used)	
Nature of scheme	
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Reference/source	

16.3 Producer responsibility systems

Packaging, Taxes	
Date of introduction	01-01-2006
Principle (one/two lines describing the instrument)	Pollution tax is an element of economic mechanism designed to reduce pollution and its negative impact on the environment.
Scope of the tax	Filled with the product packaging: glass, plastic, PET, combined, metal, paper or cardboard, other (including wood) packaging.

Current levels of tax, and tax structure	Fee depends on type of packaging and varies (LTL/kg): 0,1 LTL (0,03 EUR) for paper or cardboard 0,2 LTL (0,06 EUR) for glass and other 1,8 LTL (0,46 EUR) for plastic 2,0 LTL for PET and combined 2,6 LTL (0,75 EUR) for metal
Details of any exemptions	Producer or importer can benefit from tax relief if he fulfils the target of packaging waste recovery or recycling.
How has the tax changed over time?	The tax rates were changed once: for glass packaging the tax rate was raised up from 0,09 LTL (0,03 EUR) to 0,2 (0,06 EUR) LTL per kg; for plastic packaging - from 1,8 LTL (0,46 EUR) to 0,2 LTL (0,58 EUR) per kg. Also the new type of packaging (PET) was included and the tax rate 2,0 LTL per kg was set.
Plans for future levels of the tax	
Reference/source	http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=398670
Packaging, Deposit refunds	
[Name of existing scheme]	
Year introduced	2003 (but real implementation in 2006)
Key Legislation	Law on Packaging and Packaging Waste Management, The Decisions of the Government of the Republic of Lithuania on the List of Packaging Covered with Deposit Deposit Rate and Packaging Deposit System Implementation Order Description Approval
Targets set for the scheme (including planned future targets)	To ensure appropriate packaging return rate (80% in 2007-2009 and 85% in 2010-2012)
Scope of scheme	Refillable glass beverage packaging: capacity –up to 0,5 litres and more; types of drinks – beer, alcohol, soft drinks, mineral water and juice (but up now producers and importers use refillable glass bottles only for beer and soft drinks)
Principle	Producers declare to the Ministry of Environment about marketing of refillable glass packaging. They are obliged to accept the packaging of products they provide to the seller and return the deposit when the empty packaging is returned and also to compensate seller's service costs. Sellers are obliged to accept the packaging of products they sell and to return the deposit to the consumers when they return empty packaging, also itemize the deposit rate in the price of product and provide the information about the way how consumer can return empty packaging covered with deposit system.
Level of payment to scheme	Compensation for bottle collection – 0,03 LTL; deposit administration fee (administrator – Desa) – 0.0018 LTL per sold bottle
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	No
Producer-led/funded or government-led/funded?	Producer led/funded
Reference/source	http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=322897&p_query=&p_tr2= http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=280447
Packaging, Green Dot scheme	
[Name of existing scheme]	
Year introduced	2006
Key Legislation	Law on waste management

Scope of the scheme	Public Agency "Žaliasis Taškas" is the first Lithuanian not-for-profit company incorporated by producers and importers which undertakes management of packaging waste. [http://www.zaliasistaskas.lt/]																
Targets set for the scheme (including planned future targets)	Public Agency "Žaliasis Taškas" is developing a system for collection, sorting and re-use of packaging waste, informs the society and promotes the experience of European countries by offering advanced solutions to normative acts regulating this type of activities. The accumulated funds are used for packaging management purposes exclusively, foremost to finance loss-making stages of management activities. "Žaliasis tasšas" must organise packaging waste management and to ensure fulfilment of packaging recovery and recycling targets, also wage public awareness campaigns																
Principle	Basic principles of activities: not-for-profit; equal conditions to all clients. Thus all resources are used to develop the packaging management system, and opportunities of participation are provided to any company. Stakeholders: 34 well-known companies which use large amounts of packaging in their activities. Each stakeholder has only up to 7% of votes. Therefore, shared interests of all companies are defended without discrimination of any company and of any type of packaging. Methodical and long-term activities: the aim of "Žaliasis Taškas" is to fulfil targets which grow annually thus creating the deficit of opportunities for packaging management. Principles of activities of "Žaliasis Taškas" are the well-known European practice, which proved its viability.																
Level of payment to scheme	<p>The tariffs shall be applicable to taxable packaging placed on the internal market in 2011:</p> <table border="1"> <thead> <tr> <th>Type of packaging</th><th>Tariff, LTL for 1 t of packaging placed on the market (exclusive of VAT)</th></tr> </thead> <tbody> <tr> <td>Glass</td><td>185</td></tr> <tr> <td>Plastic (except for PET)</td><td>80</td></tr> <tr> <td>PET</td><td>220</td></tr> <tr> <td>Metal</td><td>80</td></tr> <tr> <td>Paper/cardboard</td><td>42</td></tr> <tr> <td>Combined</td><td>250</td></tr> <tr> <td>Other</td><td>42</td></tr> </tbody> </table>	Type of packaging	Tariff, LTL for 1 t of packaging placed on the market (exclusive of VAT)	Glass	185	Plastic (except for PET)	80	PET	220	Metal	80	Paper/cardboard	42	Combined	250	Other	42
Type of packaging	Tariff, LTL for 1 t of packaging placed on the market (exclusive of VAT)																
Glass	185																
Plastic (except for PET)	80																
PET	220																
Metal	80																
Paper/cardboard	42																
Combined	250																
Other	42																
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	No																
Producer-led/funded or government-led/funded?	Not-for-profit company incorporated by producers and importers.																
Electrical and electronic equipment (EEE)																	
[Name of existing scheme]																	
Year introduced	01-01-2006																
Key Legislation	Law on waste management																
Scope of the scheme	No tax. Guarantee shows that the management of all WEE will be financed.																
Targets set for the scheme (including planned future targets)	To collect 44-56% of WEEE (expressed as a percentage of the weight of EEE placed on the market).																
Principle	Producers and importers can fulfil their obligation within licensed organisation (collective scheme) or individually (by signing a contract with waste manager)																
Level of payment to scheme	Depends on type of EEE																

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	No
Producer-led/funded or government-led/funded?	Not-for-profit company incorporated by producers and importers.
Reference/source	http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=398114
End-of-life vehicles (ELV)	
[Name of existing scheme]	
Year introduced	13-08-2005
Key Legislation	Law on waste management
Scope of the scheme	No tax. Large fines for non-participation in the system (for non organisation treatment of ELV).
Targets set for the scheme (including planned future targets)	1 collection point for a region (total 10 collection points country wide).
Principle	Producers and importers can fulfil their obligation within licensed organisation (collective scheme) or individually (by signing a contract with waste manager).
Level of payment to scheme	It depends on agreement between producer (importer) and waste treatment company.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	No
Producer-led/funded or government-led/funded?	Led/funded by producers and importers.
Reference/source	http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=398114
Batteries	
[Name of existing scheme]	
Year introduced	26-09-2008
Key Legislation	Law on waste management; Law on environmental pollution taxes
Scope of the scheme	All kind of batteries and accumulators
Targets set for the scheme (including planned future targets)	80% recovery or recycling target (expressed as a percentage of the weight of batteries and accumulators which were placed into the market)
Principle	Pollution tax is an element of economic mechanism designed to reduce pollution and its negative impact on the environment.
Level of payment to scheme	It depends on agreement between producer (importer) and waste treatment company
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	No
Producer-led/funded or government-led/funded?	Led/funded by producers and importers

Reference/source	http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=398114 http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=398670
Paper/cardboard	
[Name of existing scheme]	
Year introduced	No taxes
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Other (if any)	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	

Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	

16.4 Other interesting instruments

e.g. Landfill Allowance Schemes	
Principle (one/two lines describing the instrument)	e.g. (Tradable) allowance scheme to reduce amount of biodegradable municipal waste sent to landfill, Sanctions applied for non-compliance.
Structure of incentive (how is it applied and at what levels?)	e.g. Market for allowances exists – prices move with the balance of supply and demand.
Scope (waste streams)	e.g. Biodegradable municipal waste
Voluntary or mandatory/legislative?	e.g. Applies in England and Northern Ireland – system of permits is non-tradable in Wales
Geographical coverage	e.g. Applies in England, Wales and Northern Ireland – scheme suspended in Scotland
Target group (e.g. consumer, households, business, manufacturer)	e.g. Local authorities
Reference/source	

ECONOMIC INSTRUMENTS IN LUXEMBOURG

17.1 Fees for Waste Disposal and Treatment

17.1.1 landfill fees (and Bans)

Landfill taxes																								
Date of introduction	1994 (Loi Déchets), General Plan on Waste management 2000 revised in 2010																							
Principle (one/two lines describing the instrument)	<p>Tax system is based on volume and weight of waste actually produced. Municipalities have autonomy to determine level of measures, including taxes.</p> <p>Three “syndicats” are in charge of landfilling (SIDEDEC and SIGRE) and incineration (SIDOR) of waste from all municipalities. Municipality or syndicate determine terms of waste collection: type of container, frequency of service and tax level. The aim is to apply polluter pays principle: tax based on actual waste production combined with structures of selective collection of waste.</p>																							
Current levels of tax, and tax structure	<p>Depends on tax base: weight and frequency of collection/size of container/size of container and frequency of collection/household size/ household size and size of container/ frequency of collection with minimum number of collection</p> <table border="1"> <thead> <tr> <th colspan="2">Disposal facility</th><th colspan="3">Tax</th></tr> <tr> <th>Location</th><th>Syndicat</th><th>Household waste [€/t]</th><th>Bulky waste [€/t]</th><th>Commercial waste [€/t]</th></tr> </thead> <tbody> <tr> <td>Deponie Fridhaff</td><td>SIDEDEC</td><td>123.95</td><td>123.95</td><td>123.95</td></tr> <tr> <td>Deponie Muertendall</td><td>SIGRE</td><td>175.00</td><td>175.00</td><td>175.00</td></tr> </tbody> </table>				Disposal facility		Tax			Location	Syndicat	Household waste [€/t]	Bulky waste [€/t]	Commercial waste [€/t]	Deponie Fridhaff	SIDEDEC	123.95	123.95	123.95	Deponie Muertendall	SIGRE	175.00	175.00	175.00
Disposal facility		Tax																						
Location	Syndicat	Household waste [€/t]	Bulky waste [€/t]	Commercial waste [€/t]																				
Deponie Fridhaff	SIDEDEC	123.95	123.95	123.95																				
Deponie Muertendall	SIGRE	175.00	175.00	175.00																				
Details of any exemptions																								
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	Taxes variable in each municipality, depends on waste weight or, size of containers, transport cost, frequency of service, house hold size, etc. Tax covers the costs of building and operating the waste treatment facilities (i.e. landfills and incinerators).																							
How has the tax changed over time?																								
Extent of geographical coverage	Tax applied to all municipalities.																							
Plans for future levels of the tax	Standardise tax level in order to avoid imbalance of competition between treatment facilities. Introduce basic tax + tax depending on waste weight + tax for each collection of residual waste + tax on organic waste + tax on bulky waste + tax on disposal of specific waste + collection fee + cost of waste treatment facility infrastructure																							
Reference/source	<p>DATEN zur Abfallwirtschaft im Großherzogtum Luxemburg 2008, http://www.environnement.public.lu/dechets/statistiques_indicateurs/LUXUS_Daten_2008.pdf</p> <p>Plan general de gestion des déchets, http://www.environnement.public.lu/dechets/dossiers/pggd/pggd_plan_general.pdf</p> <p>SIDEDEC, http://www.sidec.lu/</p> <p>SIGRE, http://www.sigre.lu/accueil</p> <p>http://www.environnement.public.lu/dechets/dossiers/pggd/index.html</p>																							

Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for landfilling (excluding landfill tax)	
Source of information	
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	Untreated waste (e.g. by MBT) Uncompostable waste ??? of recyclable waste
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	
Source of information	Serge Less, Administration de l'Environnement, Division des Déchets (Luxembourg)

17.1.2 Incineration fees (and Bans)

Incineration taxes					
Date of introduction	Same as above				
Principle (one/two lines describing the instrument)					
Current levels of tax, and tax structure					
Details of any exemptions					
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	Disposal facility		Tax		
	Location	Syndicat	Household waste [€/t]	Bulky waste [€/t]	Commercial waste [€/t]
	MVA Leudelange	SIDOR	96.68	128.90	178.48
How has the tax changed over time?					
Extent of geographical coverage					
Plans for future levels of the tax					
Reference/source	SIDOR, http://sidor.lu/				
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)					
Range of fees for incineration (excluding incineration tax)	€96.68				
Source of information					

Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	<p>Only waste from the following EWC waste codes MAY be incinerated:</p> <p>130801 (desalter sludges or emulsions)</p> <p>191210 (combustible waste (refuse derived fuel))</p> <p>200203 (other non-biodegradable wastes)</p> <p>200301 (mixed municipal waste)</p> <p>200302 (waste from markets)</p> <p>200303 (street-cleaning residues)</p> <p>200307 (bulky waste)</p> <p>200399 (municipal wastes not otherwise specified)</p> <p>These waste codes may only be incinerated in so far as they are not recyclable.</p>
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	
Source of information	Serge Less, Administration de l'Environnement, Division des Déchets (Luxembourg)

17.2 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	21 municipalities out of 116 use PAYT schemes. This accounts for around 40% of the population.
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	The schemes used are: weight + frequency; container size + frequency; and frequency with a set minimum number of collections.
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	
Reference/source	
SICA Region and SYCOSAL Region	
Nature of scheme	<p>Combined weight and volume based scheme</p> <p>Fees: Depends on tax base: weight and frequency of collection/size of container/size of container and frequency of collection/household size/ household size and size of container/ frequency of collection with minimum number of collection</p>

Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	SICA Region (PAYT for residual waste) Annual fee: €120 /year plus Emptying fee: €1.30 (120l), €2 (240l) plus Weight fee: €0.15 /kg plus Separately collected biowaste, weight: €0.10 /kg SYCOSAL Region A) Annual fee: €91.20 - €144 plus Container size fee: €46.80 - €66 (120l); €82.80 - €128 (240l) plus Emptying fee: €2.25 - €3.50 (120l), €4.50 - €6.50 (240l) B) Annual fee: €174 - €264 plus Emptying fee: €3.75 - €4 (120l), €7.50 - €8 (240l) Minimum number of emptyings: 19-28 (120l), 10-28 (240l)
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Reference/source	Serge Less, Administration de l'Environnement, Division des Déchets (Luxembourg)

17.3 Producer responsibility systems

Packaging, Taxes	
Date of introduction	
Principle (one/two lines describing the instrument)	
Scope of the tax	
Current levels of tax, and tax structure	
Details of any exemptions	
How has the tax changed over time?	
Plans for future levels of the tax	
Reference/source	
Packaging, Deposit refunds	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Targets set for the scheme (including planned future targets)	
Scope of scheme	
Principle	
Level of payment to scheme	

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?																													
Producer-led/funded or government-led/funded?																													
Reference/source																													
Packaging, Green Dot scheme																													
Green Dot fees																													
Year introduced	1998																												
Key Legislation	The Grand-Ducal Regulation																												
Scope of the scheme	Household packaging, products similar to household packaging (all packages identical or similar to household packages, but with another purpose), sales, secondary and tertiary packaging (except for transport pallets) and non-household packaging (used by industry and/or professionals).																												
Targets set for the scheme (including planned future targets)	Targets are set only for 2008.																												
Principle	Reduce the production of waste through prevention and avoidance of unnecessary packaging and reduce the quantity of waste disposed in landfills or processed through incineration by recycling and recovering packaging (principle of the second life of packaging).																												
Level of payment to scheme	<p>The Green Dot fees are as follows:</p> <table> <tr> <td>€/kg (VAT excl.)</td><td>2011</td></tr> <tr> <td>Glass (bottles & jars)</td><td>0.0256</td></tr> <tr> <td>Paper / cardboard</td><td>0.0377</td></tr> <tr> <td>Steel</td><td>0.0225</td></tr> <tr> <td>Aluminium</td><td>0.1485</td></tr> <tr> <td>PET Bottles</td><td>0.3432</td></tr> <tr> <td>PVC Bottles</td><td>-----</td></tr> <tr> <td>HDPE bottles and containers</td><td>0.3432</td></tr> <tr> <td>Beverage Cartons</td><td>0.3336</td></tr> <tr> <td>Other recoverable products</td><td>0.3981</td></tr> <tr> <td>Other non-rec. products</td><td>0.4379</td></tr> </table> <p>Commercial packaging</p> <table> <tr> <td>Paper/cardboard</td><td>0.0138</td></tr> <tr> <td>Wood</td><td>0.0138</td></tr> <tr> <td>Other materials</td><td>0.0375</td></tr> </table> <p>The Green Dot operator supports financially municipalities, unions and associations, by paying a fixed price for each tonne of packaging collected. The financial contributions (€/ton) per type of packaging are as follows:</p> <p>Glass - 38,95 Euros/ tn Paper - 5,62 Euros/tn Cardboard - 15,62 Euros/tn other (plastic & metal) - 136,40 Euros/tn</p>	€/kg (VAT excl.)	2011	Glass (bottles & jars)	0.0256	Paper / cardboard	0.0377	Steel	0.0225	Aluminium	0.1485	PET Bottles	0.3432	PVC Bottles	-----	HDPE bottles and containers	0.3432	Beverage Cartons	0.3336	Other recoverable products	0.3981	Other non-rec. products	0.4379	Paper/cardboard	0.0138	Wood	0.0138	Other materials	0.0375
€/kg (VAT excl.)	2011																												
Glass (bottles & jars)	0.0256																												
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Other recoverable products	0.3981																												
Other non-rec. products	0.4379																												
Paper/cardboard	0.0138																												
Wood	0.0138																												
Other materials	0.0375																												

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The scheme is led by the accredited body VAROLUX and implemented by the packaging users and producers.
Electrical and electronic equipment (EEE)	
WEEE recycling fees	
Year introduced	2006
Key Legislation	Grand Ducal Regulation of 18 January 2005 on waste electrical and electronic equipment (WEEE)
Scope of the scheme	Large household appliances, small household appliances, computing and telecommunication equipment, audio-visual appliances, lighting equipment, electric tools and gardening equipment, toys, leisure and sports equipment, medical devices, monitoring and control instruments, automatic dispenser.
Targets set for the scheme (including planned future targets)	The scheme transposes the Directives 2002/96/CE and 2002/95/EC
Principle	Transposition of EU legislation.

Level of payment to scheme	<p>Large household appliances:</p> <p>Refrigeration appliances 8,05 Euros/ item Large appliances 0,92 Euros/ item Medium-sized appliances 0,02 Euros/ item Heaters and fans 0,02 Euros/ item</p> <p>Small household appliances:</p> <p>Cleaning and sewing appliances 0,45 Euros/ item Vacuum cleaners 0,02 Euros/ item Domestic appliances 0,02 Euros/ item Personal care and hair-removal appliances for men 0,02 Euros/ item Personal care and hair-removal appliances for women 0,02 Euros/ item Healthcare, massage, etc. 0,02 Euros/ item Cooking appliances 0,02 Euros/ item Small appliances 0,02 Euros/ item</p> <p>Computing and telecommunication equipment:</p> <p>Personal computers 0,49 Euros/ item Personal computers and typewriter 0,45 Euros/ item LCD/TFT/CRT/Plasma/Led Monitors 2,75 Euros/ item Laptops and Digital Photo Display 0,45 Euros/ item Hard-copy printers / Fax 0,45 Euros/ item Photocopiers / All-in-one devices 0,45 Euros/ item Small IT equipment 0,02 Euros/ item Telecommunication devices 0,02 Euros/ item</p> <p>Audio – visual appliances:</p> <p>Image reproduction appliances less or equal then 20 inches 0,45 Euros/ item Image reproduction appliances greater then 20 inches and less or equal to 32 inches 1,60 Euros/ item Image reproduction appliances greater then 32 inches 2,75 Euros/ item Sound receiving, recording and reproduction devices 0,02 Euros/ item Sound recording and reproduction devices 0,02 Euros/ item Portable appliances and car audio 0,02 Euros/ item Printer and projectors (image) 0,02 Euros/ item Other 0,02 Euros/ item Active loudspeakers 0,02 Euros/ item</p> <p>Lighting equipment:</p> <p>Lighting device 0,02 Euros/ item Light sources 0,07 Euros/ item Lighting device with 1 light source 0,09 Euros/ item Lighting device with 2 light sources 0,16 Euros/ item Lighting device with 3 light sources 0,23 Euros/ item Lighting device with 4 light sources 0,30 Euros/ item</p> <p>Electric tools and gardening equipment:</p> <p>Electric gardening tools 0,02 Euros/ item Electric tools 0,02 Euros/ item</p> <p>The transportation of EEE for disposal is subject to transportation fees. These fees vary across districts and depend on the type of owner (household or business). The range of these fees is between 10 Euros/ item to 35 Euros/ item.</p>
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Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The scheme is led by the WEEE operator Ecotrel. Fees are collected by the entities that are obliged to participate.
Reference/source	Ecotrel, http://www.ecotrel.lu/en/professionals-downloads.html DATEN zur Abfallwirtschaft im Großherzogtum Luxemburg 2008, http://www.environnement.public.lu/dechets/statistiques_indicateurs/LUXUS_Daten_2008.pdf
End-of-life vehicles (ELV)	
Scheme for the management of the ELV – NB For some BE LUX producers the monitoring is done by Febelauto from Belgium	
Year introduced	2003
Key Legislation	Grand Ducal Regulation of 17 March 2003 on ELV
Scope of the scheme	All vehicles in category M1, N1 and three-wheeled vehicles, excluding motor tricycles.
Targets set for the scheme (including planned future targets)	No later than 1 st January 2015, for all ELV, is increased to a minimum of 95% (from 85%) of the average weight per vehicle per year. At the same time, the rate of reuse and recycling shall be increased to at least 85% (from 80%) of the average weight per vehicle per year.
Principle	Aims primarily to prevent waste from vehicles and to reuse, recycle and promote other forms of recovery for ELVs.
Level of payment to scheme	No fees are specified.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The scheme is established by the government to transpose the EU legislation. It is now led and funded by the vehicle importers.
Reference/source	Grand Ducal Regulation of 17 March 2003 on ELV, http://www.environnement.public.lu/dechets
Batteries	
Scheme for the management of waste batteries and accumulators	
Year introduced	2008
Key Legislation	Law of 19 December 2008 on batteries and accumulators and waste batteries and accumulators
Scope of the scheme	The law applies to all types of batteries and accumulators and specifically portable batteries or accumulators, automotive batteries or accumulators, industrial batteries or accumulators. Equipment that is related to security interests of Member States and equipment which intended to be launched into space are excluded from the scope.

Targets set for the scheme (including planned future targets)	<p>Minimum collection rate:</p> <ul style="list-style-type: none"> • 25% no later than September 26, 2012; • 45% no later than September 26, 2016 <p>From 2011 a recycling rate of at least:</p> <ul style="list-style-type: none"> • 65% of the average weight of lead-acid batteries and accumulators • 75% of the average weight of nickel-cadmium batteries and accumulators • 50% of the average weight of other waste batteries and accumulators
Principle	Transposition of the EU legislation
Level of payment to scheme	<p>Recycling fees:</p> <ul style="list-style-type: none"> • Batteries sold separately – 0,09 Euros/unit • Batteries incorporated into appliances – 0,09 Euros/unit • Automotive batteries – 0,040 Euros/unit
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The scheme is established by the government to transpose the EU legislation. It is now led and funded by the producers and importers, distributors and end dealers.
Reference/source	<p>Ecobatterien - www.ecobatterien.lu</p> <p>Law of 19 December 2008 on batteries and accumulators and waste batteries and accumulators - http://www.ecobatterien.lu/pdf/loi.pdf</p>
Paper/cardboard	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Other (if any)	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	

Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	

17.4 Other interesting instruments

e.g. Landfill Allowance Schemes	
Principle (one/two lines describing the instrument)	
Structure of incentive (how is it applied and at what levels?)	
Scope (waste streams)	
Voluntary or mandatory/legislative?	
Geographical coverage	

Target group (e.g. consumer, households, business, manufacturer)	
Reference/source	

ECONOMIC INSTRUMENTS IN MALTA

18.1 Fees for Waste Disposal and Treatment

18.1.1 landfill fees (and Bans)

No landfill tax in place	
Date of introduction	
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Reference/source	
Landfill charge	
Range of fees for landfilling (excluding landfill tax)	Subsidy is provided for the actual disposal of waste at the landfills. Charges for the disposal of waste at the landfills are significantly lower than the actual cost incurred by WasteServ for the management and recovery of this waste. Consequently the Government is also subsidising the disposal costs through a subvention to WasteServ. (WasteServ Malta Ltd. was established in November 2002. The company is responsible for organising, managing and operating integrated systems for waste management including integrated systems for minimisation, collection, transport, sorting, reuse, utilisation, recycling, treatment and disposal of solid and hazardous waste. WasteServ Malta Ltd. operates integrated systems for export of waste to destinations outside the Maltese islands. The company operates integrated systems for waste management in accordance to the Law of Malta. It is responsible for the waste management policy and plan of the Government of Malta.
Source of information	OECD/EEA database on environmental and resource instruments
Do sources give any explanation for key factors explaining variation?	No
No details of bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	

Plans for future bans (if any)	
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18.1.2 Incineration fees (and Bans)

18.2 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	
Reference/source	
Location of scheme (municipality where it is used)	
Nature of scheme	
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	1.
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Reference/source	

18.3 Producer responsibility systems

Packaging, Taxes - none	
Date of introduction	
Principle (one/two lines describing the instrument)	
Scope of the tax	
Current levels of tax, and tax structure	

Details of any exemptions	
How has the tax changed over time?	
Plans for future levels of the tax	
Reference/source	
Packaging, Deposit refunds	
See 'other interesting schemes' for details on 'Eco-Contribution Act' relevant to packaging	
Year introduced	
Key Legislation	
Targets set for the scheme (including planned future targets)	
Scope of scheme	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Packaging, Green Dot scheme (see 'other interesting schemes' for details on 'Eco-Contribution Act' relevant to packaging)	
Greenpak	
Year introduced	2004
Key Legislation	The Waste Packaging Directive was transposed in Maltese law in April 2004 as Legal Notice 98 of 2004. This L.N. states that the Competent Authority shall in consultation with industry and producers shall take measures to ensure that targets are met.
Scope of the scheme	
Targets set for the scheme (including planned future targets)	<p>The following targets were set in the abovementioned legislation:</p> <p>By the 31st December 2004:</p> <ul style="list-style-type: none"> • 27% as a minimum and 65% as a maximum by weight of all packaging waste resulting from packaging and packaging material put on the market is recovered. • 21% as a minimum and 45% of a maximum of packaging material put on the market by recycled with a minimum weight for glass of 30%, 31% by weight for metals, 5% by weight for plastic and 30% for paper and board contained in packaging waste. <p>By 31st December 2009:</p> <ul style="list-style-type: none"> • 51% as a minimum and 65% as a maximum of packaging material put on the market are recovered. • 45% as a minimum and maximum of packaging material put on the market by recycled with a minimum weight for glass of 60%, 50% by weight for metals, 15% by weight for plastic and 65% for paper and board contained in packaging waste.

Principle	Its principal aim is to provide a service to producers, importers and traders in Malta and help them meet their various environmental and legal obligations. The law introduces the concept of producer responsibility, where the manufacturer, importer, filler etc are responsible to recover, sort and recycle the packaging of their products that end up in the waste stream. They are also allowed the opportunity to transfer their obligations to an authorized waste recovery scheme, such as the one being operated by GreenPak
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	Adopting the Green Dot concept, the company strives to be also instrumental in Malta's ability to meet the national targets arising from the several EU Directives. As members, operators transfer their legal obligations to GreenPak who undertakes collectively and on behalf of its members their responsibility to recover, sort and recycle all packaging material they put on the market. By way of audited procedures, members will also be able to show their waste trail and conform to their environmental and legal obligations.
Producer-led/funded or government-led/funded?	Government-led (via the establishing legislation) and producer-funded
Reference/source	PRO-Europe website (http://www.pro-e.org/General_Information_3.html) accessed 24 February 2011.
Electrical and electronic equipment (EEE) (see 'other interesting schemes' for details on 'Eco-Contribution Act' relevant to WEEE)	
[Name of existing scheme]	
Year introduced	
Key Legislation	G.N. 1102 of 2004 Environment Protection Act, 2001 (Act No. XX of 2001) Waste Management (Waste Electrical and Electronic Equipment) Regulations, 2004
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
End-of-life vehicles (ELV) (see 'other interesting schemes' for details on 'Eco-Contribution Act' relevant to ELVs)	
[Name of existing scheme]	
Year introduced	
Key Legislation	Environment Protection Act (CAP. 435) Waste Management (End of Life Vehicles) Regulations, 2004
Scope of the scheme	
Targets set for the scheme (including planned future targets)	EU legislation targets

Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Batteries	
Year introduced	
Key Legislation	L.N. 313 of 2010 Environment Protection Act (Cap. 435) - Commencement Notice of the Waste Management (Waste Batteries and Accumulators) Regulations, 2010.
Scope of the scheme	WasteServ collects the separated, used batteries from outlets and stores them safely until a market for recycling and/or safe disposal is identified. Batteries may also be disposed of at any Local Council Office.
Targets set for the scheme (including planned future targets)	EU legislation targets
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Paper/cardboard	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	

Producer-led/funded or government-led/funded?	
Reference/source	
Other (if any)	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	

18.4 Other interesting instruments

Reduced import duty on environmentally friendly goods (introduced in 2002)	
Principle (one/two lines describing the instrument)	
Structure of incentive (how is it applied and at what levels?)	
Scope (waste streams)	Consumption-reducing electricity bulbs Degradable refuse bags Recycled paper and bleach free paper Shopping bags manufactured from recycled paper and carton
Voluntary or mandatory/legislative?	
Geographical coverage	
Target group (e.g. consumer, households, business, manufacturer)	
Reference/source	OECD/EEA database on environmental and resource instruments

Eco-Contribution Act - 2004	
Principle (one/two lines describing the instrument)	Based on a draft policy document dealing with "Authorisation/Registration of Schemes - Eco-Contribution Exemption/Refund Mechanism", an Eco-Contribution Act was enacted in September 2004. The document makes proposals to Government on a framework within which an Eco-Contribution refund mechanism could operate. Producers participating in waste recovery schemes are eligible for a refund of the Eco-Contribution paid on recovered items, upon providing documentary proof that this recovery has taken place. In the context of the Eco-Contribution Act, a scheme is taken to mean as an organized and regulated framework that demonstrates that a particular waste producer is recovering the end-of-life products originating from products which s/he normally places on the market.
Structure of incentive (how is it applied and at what levels?)	An Eco-Contribution Commission, established to advise the Government on the matter, concluded that a framework based on refunds as opposed to exemptions would be more appropriate and these should result in a better audit trail for the whole chain of products life-cycle. The Eco-Contribution Commission also considered that such a system would reward those companies with a higher percentage of recovered waste. Under the framework proposed by MEPA, producers who provide documented evidence that they are recovering waste will be enlisted in the Eco-Contribution Scheme Register. Registration involves the submission of documented evidence of the quantity of goods put on the market and the quantity of waste recovered. Producers listed in the Eco-Contribution Scheme Register will be eligible for refunds on the amount of Eco-Contribution paid during the previous year, subject to a minimum recovery rate of 25%. For the first years, it is being proposed that a 100% refund will be given if 80% of the product put on the market is recovered.
Scope (waste streams)	The main objective of the Act is to provide for the levying of an eco-contribution on products which generate end-of-life products or waste, with the ultimate aim of ensuring better disposal/re-use/recycling management. Therefore, under the provisions of this Act, products falling within its scope would attract eco-contribution. This regulatory framework is an economic incentive that, given the necessary legal basis, could also be instrumental in maximizing the amount of waste that is recovered. Moreover, the framework is self-enforcing since producers are given the incentive to recover and will be rewarded when successful.
Voluntary or mandatory/legislative?	Voluntary (as it is a refund system)

Geographical coverage	National
Target group (e.g. consumer, households, business, manufacturer)	Producers
Reference/source	Malta Environment and Planning Authority website (http://www.mepa.org.mt/waste-ecocont) accessed 24 February 2011.

Construction waste disposal charge (2005)	
Principle (one/two lines describing the instrument)	Due to the significance of inert waste arisings on the Maltese Islands, the Planning Authority will seek to encourage greater reuse and recycling of demolition, construction, mineral and other inert wastes. This approach is in accordance with the Public Consultation of the Draft Minerals Subject Plan which recommends the use of secondary aggregates. The projection of inert waste arisings indicates that there is scope for greater use of recycled inert materials such as aggregates.
Structure of incentive (how is it applied and at what levels?)	
Scope (waste streams)	Disposal of inert waste Disposal of inert waste contaminated or mixed with other materials
Voluntary or mandatory/legislative?	
Geographical coverage	
Target group (e.g. consumer, households, business, manufacturer)	
Reference/source	OECD/EEA database on environmental and resource instruments Maltese Planning Authority; "Space for Waste: The Waste Management Subject Plan"; 2001

ECONOMIC INSTRUMENTS IN THE NETHERLANDS

19.1 Waste Policy in the MS

The “basic” law in the Netherlands for waste is the Environmental Management Act. In 1997 there was a decision to centralise responsibility for waste management, implying a shift in powers from the provincial authorities to the central government authorities. The amendment to the Environmental Management Act reflecting the change came into force on 8 May 2002. In the wake of the power shifts, the Act stipulates that the Ministry for Housing, Spatial Planning and the Environment must draw up a Waste Management Plan once in every six years.

The legal duties of provinces concern mostly the licensing and the enforcement of licenses regarding waste treatment facilities (including incineration and landfilling), including the regulation of waste prevention in individual licenses. The provinces are also responsible (financially, administrative and organizationally) for the aftercare for the individual landfills. To make this task possible they have the possibility to charge a levy for the amounts of waste land filled. With this levy a aftercare fund is built up for the aftercare after the landfill is closed.

Municipalities are responsible for the (separate) collection of household waste in their own city. In the Netherlands, the definition of household waste covers all wastes arising from private households with the exception of wastewater and car wrecks. Bulky household waste items are usually analysed separately however. The basic pattern is once a week collection near each premise. Authorities are obliged to collect organic household waste separately, door-to-door, though there may be deviations in specific circumstances. Local authority bylaws mainly include rules on disposal of household waste, for example, which components have to be kept separate, frequency of waste collection and the agencies carrying out collection.

Other important pieces of waste legislation include Decree on Waste Disposal at Landfills (Soil Protection Act), the Waste Substances decree for landfilling (Prohibition of landfilling) and the waste incineration decree for Waste Incineration.

Biodegradable waste legislation and strategies consist of the National waste management plan and the Environmental Management Act. Packaging is covered by the Decree on Packaging and paper/cardboard (2005). Construction and demolition waste: Decree on the mobile crushing of construction and demolition waste (2004)

Source: EIONET: Factsheet Netherlands:

http://scp.eionet.europa.eu/facts/factsheets_waste/2009_edition/factsheet?country=NL

10. Does the MS have any **mandatory targets for recycling** of waste streams (and mechanisms to enforce them)? (please list any mandatory targets additional to, or higher than, those specified in EU Directives, associated deadlines, and outline information on any enforcement mechanisms).

Yes, there are a series of recycling targets. In addition to the minimum targets of the different EU Recycling Directives, for example, there are targets for paper (see below) and recycling/recovery targets exceeding the targets of the Packaging Directive.

11. titles/references and links, and a very brief summary of the main objectives and elements of the plan)

The current national plan's horizon is from 2009 to 2015, with a view to 2021.

19.2 Waste management performance in the MS

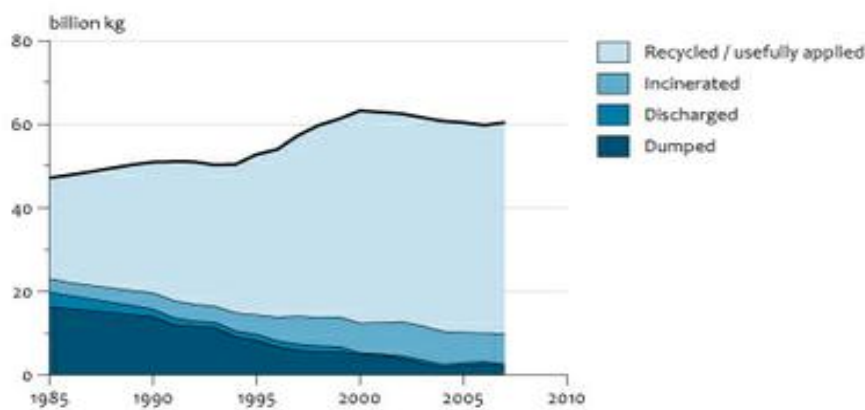
Waste generation

Around 10 million tonnes of municipal waste are produced in the Netherlands 10.161 (2004), 10.178 (2005), 10.164 (2006), 10.311 (2007), 10.25 (2008), 10.159 (2009). The total waste production in the Netherlands grew from 47 Mt in 1985 to over 63 Mt in 2000. After 2000, the amounts of waste decreased, and are currently down to approximately 60 Mt.

Waste Recycling

Over the past 25 years, the treatment of waste has also changed; in 1985, nearly 50 % of waste was disposed of, mostly in landfills. The Dutch waste policy made recycling of waste a top priority. As a result, in 2007, only 3 % of the waste was landfilled, about 12 % was incinerated, and almost 85 % was recycled.

Waste production and management



www.pbl.nl

Source: EEA, http://www.eea.europa.eu/soer/countries/nl/waste-state-and-impacts-netherlands/062g_soer10_01_en.jpg

Number of incinerations

At the beginning of 2010 in Netherlands 12 municipal waste incineration plants were in service. Approximately 6.3 million tonnes of waste were thermally treated in 2009.

Source: CEWEP, http://www.cewep.eu/information/data/studies/138.Map_European_Waste-to-Energy_Plants_in_.html

19.3 Fees for Waste Disposal and Treatment

19.3.1 landfill fees (and Bans)

[Name of existing tax]

Date of introduction	1995
Principle (one/two lines describing the instrument)	waste is subject to the landfill tax, i.e. their disposal is charged with the tax.
Current levels of tax, and tax structure	Amount of landfill tax in 2010: € 107,49 per tonne
Details of any exemptions	
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	€ 107,49
How has the tax changed over time?	The level of the landfill tax has been raised every year from 13 Euros in 1995 to 87 Euro in 2006 and to 107,49 Euro in 2010.
Extent of geographical coverage	All of the Netherlands
Plans for future levels of the tax	It is still going up
Problems encountered/ solutions found/ lessons learned from implementation	The measure has worked fine and has decisively contributed to bringing down landfill rates from over 20% in 1996 to 2 % in 2009. The ban is implemented essentially through a density measurement, so although it applies, in theory, to loads of different waste streams, the implementation is based on pragmatic parameters (information from Dominic Hogg, Eunomia)
Perceived costs (financial and administrative) of the instrument	The artificial high costs of landfilling have been so decisive that waste has been diverted to other waste treatment methods and the waste going to landfills has declined considerably..
Reference/source	CEWEP: http://www.cewep.eu/storage/med/media/data/taxes/293_CEWEP_-_LandfillTaxesbans_February2010_final-website.pdf?fCMS=60a9a1372cc004a7d6ec2808c0797dd0 http://www.green-alliance.org.uk/uploadedFiles/Publications/CPPWNetherlands.pdf
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for landfilling (excluding landfill tax)	The net price for landfilling is 20-30 Euro, on top of this comes the tax.
Source of information	CEWEP
Do sources give any explanation for key factors explaining variation?	e.g. Generally the local availability of landfill void space (the level of competition in the market) is considered the strongest influence.
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Information on Bans	
Wastes to which the ban is applied	For 35 categories of waste (combustible waste) regulated in Landfill ban and landfills decree (1994)
Date of introduction	1996
(Means of implementation)	

Plans for future bans (if any)	No
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	

19.3.2 Incineration fees (and Bans)

[Name of existing tax]	
Date of introduction	None, rather there has been a feed-in tariff for energy produced from waste incineration under certain circumstances
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	70-120 Euro, however given there are overcapacities in a few installations, prices tend to decrease recently.

Source of information	Dr. K. D. van der Linde Amsterdam Waste & Energy Enterprise, Presentation 4th-generation Waste Incineration (may 2003)
Do sources give any explanation for key factors explaining variation?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Information on Bans	
Wastes to which the ban is applied	None
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Stimuleren Duurzame Energieproductie - stimulation renewable energy production (SDE)	
Date of introduction	2007
Principle (one/two lines describing the instrument)	In the Netherlands, electricity from renewable sources is promoted through a price regulation in terms of bonus payments.
Structure of incentive (how is it applied and at what levels?)	The premium aims to compensate for the difference between the market prices of electricity from fossil sources and electricity from renewable sources and is paid for a period of up to 15 years. This provision applies to newly constructed installations only.
Scope (waste streams)	<p>Waste relevante streams:</p> <ul style="list-style-type: none"> Electricity production in waste incineration plants, if (efficiency of the installation is above 22% - Feed in premium between 25 to 48 €/MWh Electricity production from landfills and sewage treatment (for power stations) – 15 €/MWh Biomass electricity from <ul style="list-style-type: none"> Combustion (10-50 MW) 71-112 €/MWh Fermentation of bio-degradable waste - 85-105 €/MWh Co-fermentation and small-scale combustion (up to 10 MW) - 108-133 €/MWh Other fermentation (liquid biomass) – 114 €/MWh

Problems encountered/ solutions found/ lessons learned from implementation	For new projects, the total available budget and the premium level are established relatively late every year. Project developers have to deal with this uncertainty. There will be a guaranteed budget for new projects up to 2014. Discussions about financing in the period afterwards are ongoing.
Perceived costs (financial and administrative) of the instrument	At the moment the premiums are paid from the government budget. In 2008, 1.459 m Euros were provided for the SDE Programme, in 2009 2.585 m Euros. But plans are discussed if a change towards socializing the costs through electricity consumer tariffs is possible.
Reference/source	Renewable energy policy country profiles: http://www.reshaping-res-policy.eu/downloads/RE-SHAPING%20Renewable%20Energy%20Policy%20Country%20profiles%202009.pdf http://www.res-legal.de/en/search-for-countries/netherlands/more-about/land/niederlande/ueberblick/foerderung.html http://ec.europa.eu/environment/waste/compost/pdf/Biowaste_recycling_targets_final_final.pdf

19.4 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	Old data: By 2000: more than 20% of all Dutch municipalities had instituted a unit-based user fees to finance waste collection. These user fees require households to pay for each kilogram, presented at the curb for collection.
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	Year 2000 Municipalities with Weight-based system: 13 Bag based system for both residual and compostable waste: 6 Bag-based system for unsorted waste: 14 Frequency-based system: 54 Volume-based system: 29 Unspecified type of system: 10 Total: 126 Municipalities without unit-based pricing system: 412
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	Dijkgraaf/Gradus, Cost savings in unit-based pricing of household waste. The case of the Netherlands.

Location of scheme (municipality where it is used)	
Nature of scheme	Weight-based
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	Residual household waste is weighted when collected, the waste bins have a chip with a unique code that allow to attribute the waste collected to the specific waste producer. Based on the weight collected, the variable fee is calculated which is added to the fixed fees.
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	Ostzaan
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	Weight-based pricing in the collection of household waste: the Oostzaan case (1997)

19.5 Producer responsibility systems

Packaging, Taxes	
Date of introduction	2008
Principle (one/two lines describing the instrument)	The overall objective of the carbon-based packaging tax is to meet national targets to recycle 32% of plastic packaging by 2009, 38% by 2010 and increasing to 42% by 2012. This is in line with the targets set for the Netherlands in order to fulfil the EU Packaging Directive.
Scope of the tax	The tax is levied for packaging material (excluding logistics tools such as pellets, trolleys or large crates). It was introduced in January 2008, but was subsequently simplified in August 2008 to facilitate wider compliance and make planning payments easier. Focus has also been shifted from companies that specialize in packaging or that undertake packaging activities to those that supply packaging materials. The tax finances a Waste Fund, which is to be used to assist in the provision, at municipality level, of a separate collection of plastic packaging material from households. This means that the packaging tax both provides a financial incentive to reduce packaging waste generation, but also funds increased plastic packaging waste recycling by improving collection.
Current levels of tax, and tax structure	The tax was expected to generate 365 million Euros in 2009.
Details of any exemptions	
How has the tax changed over time?	e.g. The tax is relatively new so the current levels are as they were when the tax came into force
Plans for future levels of the tax	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	

Reference/source	http://ec.europa.eu/environment/waste/prevention/pdf/Netherlands_Factsheet.pdf
Packaging, Deposit refunds	
Mandatory systems do not exist. Voluntary system for glass beer bottles and large PET bottles.	
Year introduced	1 January 2004
Key Legislation	The Environmental Protection Act contains the option to impose mandatory deposit-refund schemes. But until now the instrument has not been part of the Dutch waste policy. Also Article 8 of the Decree on the management of packaging, paper and cardboard (waste) addresses a deposit-refund scheme for drinks packaging, which will only be established if certain targets for collection, reuse or litter reduction will not be realised.
Targets set for the scheme (including planned future targets)	
Scope of scheme	The Netherlands has a voluntary deposit refund scheme on large single use Polyethylene terephthalate (PET) bottles, glass beer bottles and for the corresponding plastic crates. (Statiegeld)
Principle	
Level of payment to scheme	Large single use PET bottle - 0.25 Euro deposit Glass beer bottle – 0.10 Euro deposit, plastic crate – 1.50 Euro deposit
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	For PET deposit bottles, a return rate of 95% (26,6 kton) is reported, compared to 66% (11,3 kton) of non-deposit PET bottles for 2010. The return rate for deposit glass bottles is around 90% (=2160 million) by 2009.
Perceived costs (financial and administrative) of the instrument	
Reference/source	Oosterhuis, F. H. (2009): Economic instruments and waste policies in the Netherlands. Inventory and options for extended use. http://www.recyclingnetwerk.org/andere_themas/2009/09/statiegeld.php http://www.verpakkingsmanagement.nl/thema's/duurzaamheid/42-statiegeld+voor+pet+niet+eco-effici%C3%ABnt.html
Packaging, Green Dot scheme	
[Name of existing scheme]	
Year introduced	1991 (Dutch Packaging Covenant), 1997 (Order on Packagings and Packaging Waste), 2005 (Packaging, Paper and Card (Management) Decree)
Key Legislation	See above
Scope of the scheme	The packaging regulation includes packaging from plastics, paper and cardboard, metals, type of woods, types of textile, glass.

Targets set for the scheme (including planned future targets)	<p>The producer or importer shall ensure that, 70 per cent of the total quantity of packagings by weight is put to good use, 65 per cent by weight is re-used as a material. (From 2010: the targets are 75 per cent of the total quantity of packagings by weight be put to good use, 70 per cent by weight is re-used as a material.) As "good use" in relation to packagings is understood the re-use as a material, primary use as a fuel or primary use for another means of generating power.</p> <p>The producer or importer shall ensure that,</p> <ul style="list-style-type: none"> - plastic drinks packagings (larger than 500 ml) - at least 95% is collected separately and re-used as a material; - plastic drinks packagings (smaller than 500 ml) - at least 55% is collected separately and re-used as a material; - the remaining plastic packagings, at least 45% will be put to good use and at least 27 percent by weight will be re-used as a material; - other material types, at least the following percentages by weight will be put to good use through their re-use as materials: <ul style="list-style-type: none"> o 90 percent by weight of glass packagings, o 75 percent by weight of paper and card packagings, o 85 percent by weight of metal packagings, o 25 percent by weight of wooden packagings.
Principle	<p>Since 1991: The focus of the regulation is to reach the target jointly. So disposers of waste, being consumers (private households) and businesses are expected to cooperate in the separate collection of recyclable packaging materials. Local authorities are responsible for setting up collection systems at least for glass and paper/cardboard originating from private households. Every producer or importer who places packed products on the market is responsible for prevention and for achieving specific percentages of recovery and material recycling.</p> <p>Since 2005: the importer or producer who introduces a product is responsible for the waste management and also the separate collection. This means the cost of waste management is part of the product price and the 'polluter pays' principle is complied with. Also the responsibility for achieving targets is clearly assigned. The municipality and the producer or importer determine whether actual collection of glass, waste paper and card is performed by a municipal service or a private enterprise.</p>
Level of payment to scheme	The producer/importer have to pay for the waste management and collection system.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	All
Producer-led/funded or government-led/funded?	Producer-led and funded
Problems encountered/ solutions found/ lessons learned from implementation	<p>The level of good use has increased over the past five years by an annual average of one percentage point.</p> <p>In 2003 67 percent of packagings which were put on the market was put to good use in the same year, resulting in 33 percent packaging waste to be removed.</p>
Perceived costs (financial and administrative) of the instrument	
Reference/source	<p>Packagings, Paper and Card (Management) Decree (http://www.svm-pact.nl/upload/121765_8820_1132664899710-2005-03-24_Netherlands_Packaging_Decree_EN.pdf); VROM Packaging and Packaging waste regulation ((http://international.vrom.nl/docs/internationaal/regulation.pdf)</p>
Electrical and electronic equipment (EEE)	
[Name of existing scheme]	
Year introduced	2004
Key Legislation	Regulation management electrical and electronic equipment

Scope of the scheme	Similar to the EU Directive no. 2002/96 (equipment which is dependent on electric currents or electromagnetic fields in order to work properly and equipment for the generation, transfer and measurement of such currents and fields, which: falls under one of the categories set out in Annex IA to Directive no. 2002/96; and is intended for use with a rated alternating voltage not exceeding 1000 volts or a rated direct voltage of 1500 volts)
Targets set for the scheme (including planned future targets)	Similar to EU Directive no. 2002/96: By end of 2006 producers have to meet following targets: for different equipment by categories of EU Directive no. 2002/96, Annex IA: <ul style="list-style-type: none"> - the rate of recovery shall be increased to a minimum of 70-80 % by an average weight per appliance, and - component, material and substance reuse and recycling shall be increased to a minimum of 50-75 % by an average weight per appliance; for gas discharge lamps, the rate of component, material and substance reuse and recycling shall reach a minimum of 80 % by weight of the lamps.
Principle	Producers are required to submit a notification before putting electronic products on the Netherlands market. This notification should detail how the producer will meet its obligation to take back and recycle EEE. EEE must be marked with the crossed-out wheeled waste bin, and show the producer's identity and that the product was put on the market after 13 August 2005. Producers and distributors are subject to take back and recovery obligations, but may delegate these obligations to a collective system.
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Producer-led
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.weeeregistratie.com/weee-registratie/Netherlands_WEEE-management-decree_200409_engelsevertaling_besluit_elektrapp.pdf
End-of-life vehicles (ELV)	
[Name of existing scheme]	
Year introduced	2002
Key Legislation	Besluit beheer autowrakken (Decree on car wreck management)
Scope of the scheme	Like the EU Directive requires, all passenger cars and commercial vehicles up to 3,500 kg are included and also three wheel motor vehicles fall under the decree.
Targets set for the scheme (including planned future targets)	The Netherlands already attained the 85% EU-target for reuse and recovery by 1997. The EU-target was to reach this percentage in 2005. Consequently, the national target was set to reach a 95 % recovery target by 2007 instead of by 2015. Nevertheless, the 95 % target by 2007 couldn't be attained and the target was changed to 2015, as in the ELV Directive.

Principle	A voluntary system of free take back of ELVs was already introduced in the 1990s. The organisation 'Auto Recycling Nederland' (ARN) cooperates with certified car scrapping and recycling firms and pays them for the unprofitable parts of their operations. After the Decree on car wreck management was established, the voluntary system became legally binding. The Decree requires that licensed dismantlers, car dealers, garages or repair shops have to take back the car wrecks for free. Furthermore a country wide collecting system was installed by the producers and importers. In 2006 about 91 % of the total number of ELVs in the Netherlands were collected by ARN.
Level of payment to scheme	ARN pays the recycling and car scrapping firms for not profitable parts of their operations. The calculation of the payment is based on the average costs for recycling of 20 different materials/components. The system includes provisions for monitoring and enforcement. The ARN system is financed by a fee that has to be paid for all new car registrations (except for cars older than 25 years). From 2000 until 2007 this fee was €45. After 2007 it was reduced to €15.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	The system finances itself, so the car producers and importers and ultimately the buyers pay the full cost of ELV management.
Producer-led/funded or government-led/funded?	Producer-led
Problems encountered/ solutions found/ lessons learned from implementation	No problems mentioned. In 2006 about 91 % of the total number of ELVs in the Netherlands were collected by ARN.
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.europarl.europa.eu/comparl/envi/pdf/externalexpertise/end_of_life_vehicles.pdf
Batteries	
[Name of existing scheme]	
Year introduced	2008
Key Legislation	Regulation on batteries and accumulators management 2008
Scope of the scheme	The Regulation focuses on the scope of the EU Directive 2006/66/EC with portable batteries and accumulators, industrial batteries and accumulators and automotive batteries and accumulators. Depending on the type of battery or accumulator, their producer or manufacturer is subject to different rules governing the collection, treatment and reuse as material of waste batteries and accumulators when they are discarded. This distinction has been adopted in the Regulations.
Targets set for the scheme (including planned future targets)	
Principle	It was decided to introduce a system of producer responsibility under which producers of batteries and accumulators are both materially and financially responsible for the management of batteries and accumulators as waste.
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Producer-funded

Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	www.stibat.nl/files/besluit-beheer-batterijen-en-accus-2008-eng.pdf
Paper/cardboard	
[Name of existing scheme]	
Year introduced	2005 (voluntary 2001)
Key Legislation	Packagings, Paper and Card (Management) Decree (2005), Paper Fibres Covenant, part of Packagings Covenant III (2001, voluntary agreement)
Scope of the scheme	Paper and cardboard
Targets set for the scheme (including planned future targets)	The producer or importer shall ensure that, each calendar year, at least 75 percent by weight of the quantity of paper and card he has made available to another party in the Netherlands during the previous calendar year is re-used as a material.
Principle	Since 2005: the importer or producer who introduces a product is responsible for the waste management and also the separate collection. This means the cost of waste management is part of the product price and the 'polluter pays' principle is upheld. The municipality and the producer or importer determine whether actual collection of paper and card is performed by a municipal service or a private enterprise.
Level of payment to scheme	The cost of the separate collection or collection and subsequent separation of paper and card is at the expense of the producer or importer.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Producer-led/funded
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	Packagings, Paper and Card (Management) Decree (http://www.svm-pact.nl/upload/121765_8820_1132664899710-2005-03-24_Netherlands_Packaging_Decree_EN.pdf)
Other (if any)	
Car tyre disposal	
Year introduced	1995
Key Legislation	The car tyre disposal decree (1995)
Scope of the scheme	Car tyres and of vehicles and trailers
Targets set for the scheme (including planned future targets)	

Principle	Decree requires that car tyres are taken back by producers or importers, and process them in an environmentally manner.
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Producer-led/funded
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	Costs stay with the importer/producer or given brought to the consumer.
Reference/source	http://www-user.uni-bremen.de/~avosetta/netherlands.pdf http://eea.eionet.europa.eu/Public/irc/eionet-circle/etc_waste/library?l=/country_fact_sheets/netherlandspdf/_EN_1.0_&a=d
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	

19.6 Other interesting instruments

e.g. Landfill Allowance Schemes	
Principle (one/two lines describing the instrument)	e.g. (Tradable) allowance scheme to reduce amount of biodegradable municipal waste sent to landfill, Sanctions applied for non-compliance.
Structure of incentive (how is it applied and at what levels?)	e.g. Market for allowances exists – prices move with the balance of supply and demand.
Scope (waste streams)	e.g. Biodegradable municipal waste
Voluntary or mandatory/legislative?	e.g. Applies in England and Northern Ireland – system of permits is non-tradable in Wales
Geographical coverage	e.g. Applies in England, Wales and Northern Ireland – scheme suspended in Scotland
Target group (e.g. consumer, households, business, manufacturer)	e.g. Local authorities
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	

ECONOMIC INSTRUMENTS IN POLAND

20.1 Fees for Waste Disposal and Treatment

20.1.1 landfill fees (and Bans)

Charge on municipal waste landfilling	
Date of introduction	2001, revision Oct 2008
Principle (one/two lines describing the instrument)	Recent and planned significant increase of charge aims to create an incentive to reduce waste generation, encourage recycling by making it more profitable. Charge increase will also allow modernisation of waste transformation facilities and new investments.
Current levels of tax, and tax structure	<p>25 € per tonne of waste</p> <p>Tax sub-schemes: (excluding packages waste)</p> <p>Landfilling of other selectively collected waste 25 € per tonne</p> <p>Landfilling of selectively collected glass waste 25 € per tonne</p> <p>Landfilling of selectively collected paper waste 25 € per tonne</p> <p>Landfilling of selectively collected plastic waste 25 € per tonne</p> <p>Landfilling of selectively collected waste from discharge lamps, medicine, pesticides 34 € per tonne</p> <p>Landfilling of solid waste from sanitation services 25 € per tonne</p> <p>Landfilling of waste not collected selectively 25 € per tonne</p> <p>Can be negotiable in some municipalities.</p>
Details of any exemptions	
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	25 € per tonne
How has the tax changed over time?	<p>2006-2010: 4 € per tonne</p> <p>2011: 25 € per tonne</p>
Extent of geographical coverage	Country wide
Plans for future levels of the tax	<p>from 2012: 35 € per tonne</p> <p>from 2013: 40 € per tonne</p> <p>from 2014: 45 € per tonne</p> <p>from 2015: 50 € per tonne</p> <p>(Projekt ROZPORZĄDZENIA RADY MINISTRÓW z dnia 4.02.2011)</p>
Reference/source	<p>Ustawa z dnia 27 kwietnia 2001 o odpadach, Rozdział 7; ROZPORZĄDZENIE RADY MINISTRÓW z dnia 14 października 2008 r. w sprawie opłat za korzystanie ze środowiska</p> <p>Last revision : 1.01.2011</p>
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for landfilling (excluding landfill tax)	
Source of information	

Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	

20.1.2 Incineration fees (and Bans)

Charge on municipal waste incineration	
Date of introduction	
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	No information identified on specific charge level
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Reference/source	
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	130 € per tonne for municipal waste not suitable for recycling
Source of information	The Solid Communal Waste Utilisation Plant in Warsaw (only incineration plant in Poland)
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	

Plans for future bans (if any)	
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20.2 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	No PAYT scheme has been identified in Poland.
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	
Reference/source	
Location of scheme (municipality where it is used)	
Nature of scheme	
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Reference/source	

20.3 Producer responsibility systems

Packaging, Taxes – product fees for packaging	
Date of introduction	2001
Principle (one/two lines describing the instrument)	Prevent generation of waste from packaging, mainly by reducing the weight, volume and hazards of the packages and chemical substances.
Scope of the tax	Packaging Any type of products for the purpose of holding, protecting, handling, delivering or possibly presenting all types of products (from materials to end goods).

Current levels of tax, and tax structure	Depending on packaging material, for example: Plastic packaging: 0.6 € per kg Aluminium packaging: 0.3 € per kg Paper: 0.15 € per kg Glass: 0.04 € per kg Wood or natural textiles: 0.08 € per kg Mixed material: 0.68 € per kg
Details of any exemptions	
How has the tax changed over time?	
Plans for future levels of the tax	
Reference/source	Ustawa z dnia 11 maja 2001 r. o opakowaniach i odpadach opakowaniowych. Level of fees: http://www.eko.org.pl/kropla/26/stawki.html
Packaging, Deposit refunds	
Deposit-refund system for glass and plastic bottles	
Year introduced	1990
Key Legislation	
Targets set for the scheme (including planned future targets)	No specific targets
Scope of scheme	Glass bottles Plastic bottles
Principle	To encourage the application of multiple use packaging
Level of payment to scheme	No information found
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Deposit-refund system for lead-acid accumulators	
Year introduced	
Key Legislation	
Targets set for the scheme (including planned future targets)	
Scope of scheme	
Principle	
Level of payment to scheme	

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Packaging, Green Dot scheme	
Packaging waste recycling obligation	
Year introduced	2002
Key Legislation	Entrepreneur obligations is based on three Acts dated 27 April 2001 O odpadach - The Waste Act and 11 May 2001 O opakowaniach i odpadach opakowaniowych - The Act on Packaging and Packaging Waste - and O obowiązkach przedsiębiorców w zakresie gospodarowania niektórymi odpadami oraz o opłacie produktowej i opłacie depozytowej - The Act on Producer Responsibility with regard to the Management of Certain Waste, Product Fee and Deposit Fee - of the same date. These acts have been adopted in January 2002, transposing EC Directive 94/62/EC into national law.
Scope of the scheme	The scheme has a national coverage and it targets all packaging operators (packaging manufacturers as well as packers and fillers).
Targets set for the scheme (including planned future targets)	Same as EU Directive
Principle	Rekopol Recovery Organisation S.A. is an organisation founded by packaging manufacturers as well as packers and fillers to operate the recycling scheme. The scheme involves local authorities in order to support the development of a selective collection system in municipalities.
Level of payment to scheme	No information found
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The scheme is led by the accredited operator Rekopol Recovery Organisation S.A. and implemented by the packaging users and producers.
Electrical and electronic equipment (EEE)	
[Name of existing scheme]	
Year introduced	2005, revision 2008
Key Legislation	Ustawa z 29 lipca 2005 r. o Zużytych Sprzęcie Elektrycznym i Elektronicznym

Scope of the scheme	Producers of Electric and Electronic Equipment have to pay the legally required financial contribution to the organisation of their choice or to ensure collection and recovery. The following EEE is covered: Large household appliances Small household appliances IT and telecommunication equipment Consumer equipment Lighting Electrical and electronic tools Toys leisure and sports equipment Medical devices Monitoring and control instruments Automatic dispensers
Targets set for the scheme (including planned future targets)	The rate of recovery shall be minimum 24% (40% for lighting equipment)
Principle	The WEEE system is entirely financed by producers. Producers pay monthly financial contribution which is calculated on the basis of products placed on the market by each producer.
Level of payment to scheme	contribution calculated on the basis of products placed on the market
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Government led, producer funded.
Reference/source	Ustawa o zużytych sprzęcie elektrycznym i elektronicznym z 29 lipca 2005r Rozporządzenie Ministra Środowiska 22.12.2008 w sprawie minimalnych rocznych poziomów zbierania zużytego sprzętu elektronicznego http://www.elektroeko.pl/
End-of-life vehicles (ELV)	
[Name of existing scheme]	
Year introduced	2005
Key Legislation	Ustawa z dnia 20 stycznia 2005 r. o recyklingu pojazdów wycofanych z eksploatacji, Transposes the EU legislation 2000/53/WE
Scope of the scheme	End-of-life vehicles produced in Poland or imported from EU or third countries
Targets set for the scheme (including planned future targets)	Same as EU Directive
Principle	Introduces a negative incentive to the importation of used vehicles
Level of payment to scheme	Obligatory recycling fee 125 € per vehicle imported from EU countries after 01.1.2006
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	

Batteries	
[Name of existing scheme]	
Year introduced	2009
Key Legislation	Act 24.4.2009 Batteries and accumulators (Ustawa z dnia 24 kwietnia 2009 r. o bateriach i akumulatorach), transposes the EU legislation
Scope of the scheme	Same as EU Directive
Targets set for the scheme (including planned future targets)	Same as EU Directive
Principle	To limit the overall negative environmental impacts of batteries and accumulators by reducing dangerous substances and better collecting and recycling used batteries.
Level of payment to scheme	No information found
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	Ustawa z dnia 24 kwietnia 2009 r. o bateriach i akumulatorach
Paper/cardboard	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Other (if any)	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	

Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	

20.4 Other interesting instruments

Grants and soft loans from debt for environment swap scheme - ECOFUND foundation

Principle (one/two lines describing the instrument)	<p>EcoFund is a foundation created in 1992 by the State Treasury and the Ministry of Finance to administer the funds derived from the conversion of the share of the foreign debt of Poland that is intended to support environmental protection projects (within a mechanism usually referred to as “debt-for-environment swap”).</p> <p>The EcoFund’s task is to subsidise environmental protection projects that are not only important for the region or the whole country but also help attain ecological goals recognized by the international community as European or even global priorities.e.g. (tradable) allowance schemes to reduce amount of biodegradable municipal waste sent to landfill, sanctions applied for non-compliance.</p> <p>Priorities of Waste Management:</p> <ul style="list-style-type: none"> · Organization of comprehensive systems of the collection, recycling, and management of municipal wastes to serve areas with a population from 50 000 to 250 000 people; · Methods of the processing of biodegradable wastes generated by public utility facilities; · Safe disposal of dangerous wastes; · Construction of systems for the recycling of municipal and dangerous wastes; · Modernization of industrial technologies to eliminate the generation of dangerous wastes (promotion of “clean technologies”). <p>6 countries: United States, France, Switzerland, Italy, Sweden and Norway agreed to convert 573 M USD of the debt into contribution to EcoFund. During 18 years the fund spent almost 500 M€ to finance 1400 investment projects (93 project in waste management of total value 200 M€ including 62 M€ fund contribution).</p>
Structure of incentive (how is it applied and at what levels?)	e.g. Rotary composters min 50 k€ max 1 M€ per year per unit
Scope (waste streams)	<p>Investment projects</p> <p>Non-investment projects</p>
Voluntary or mandatory/legislative?	
Geographical coverage	Municipal level
Target group (e.g. consumer, households, business, manufacturer)	Municipalities, public utility facilities
Reference/source	http://www.ekofundusz.org.pl/us/index.htm

ECONOMIC INSTRUMENTS IN PORTUGAL

21.1 Fees for Waste Disposal and Treatment

21.1.1 landfill fees (and Bans)

Landfill taxes and fees	
Date of introduction	2007
Principle (one/two lines describing the instrument)	Establishing a set of national legal principles for the waste management by following the prevention principle and promoting the reuse and recycling of materials.
Current levels of tax, and tax structure	3,5 Euros /tn There are 29 systems in Portugal and others in the regions of Madeira and Acores. The average landfill fee is calculated on case by case approach. For the waste which could be recycled the fee is 1,5 times higher than indicated above. For the calculation it is assumed that in Portugal 50% of waste landfilled is recyclable.
Details of any exemptions	
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	
How has the tax changed over time?	
Extent of geographical coverage	National coverage
Plans for future levels of the tax	Taxes are updated every year.
Reference/source	Decree-Law No 178/2006 of 5 September, http://www.apambiente.pt/Paginas/default.aspx Confederation of European Waste to Energy Plants (CEWEP), 2010, 'Landfill taxes & bans' http://www.cewep.eu/storage/med/media/data/taxes/293_CEWEP_-_LandfillTaxesbans_February2010_final-website.pdf?fCMS=60a9a1372cc004a7d6ec2808c0797dd0
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for landfilling (excluding landfill tax)	
Source of information	
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	There are no bans implemented or planned in Portugal.
Date of introduction	
(Means of implementation)	

Plans for future bans (if any)	
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21.1.2 Incineration fees (and Bans)

[Name of existing tax]	
Date of introduction	
Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Reference/source	
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	
Source of information	
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	

21.2 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS

What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	
Reference/source	
Location of scheme (municipality where it is used)	
Nature of scheme	
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Reference/source	

21.3 Producer responsibility systems

Packaging, Taxes	
Date of introduction	
Principle (one/two lines describing the instrument)	
Scope of the tax	
Current levels of tax, and tax structure	
Details of any exemptions	
How has the tax changed over time?	

Plans for future levels of the tax	
Reference/source	
Packaging, Deposit refunds	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Targets set for the scheme (including planned future targets)	
Scope of scheme	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Packaging, Green Dot scheme	
Charges on packaging	
Year introduced	Since 1997
Key Legislation	Decree-Law 366-A/97, 20 th December (amended by Decree-Law 162/2000 and Decree-Law 92/2006) and Ordinance 29-B/98, 15 th January
Scope of the scheme	Packaging and packaging waste (glass, paper/cardboard, plastic, metal and wood)
Targets set for the scheme (including planned future targets)	<p>By the end of 2011 Portugal has set the following targets:</p> <ul style="list-style-type: none"> • Recover 60% of the total weight of packaging waste placed on the market • Recycle at least 55% of this waste • Recycle at least: <ul style="list-style-type: none"> - 60% of glass - 60% of paper and cardboard - 50% of metal - 22.5% of plastic - 15% of wood

Principle	Prevent and reduce the environmental impact of packaging waste (design of lighter, less bulky packaging and use of more easily recyclable materials)
Level of payment to scheme	The packers/importers can transfer the responsibility for the packaged products which are placed on the market to a management entity at national level, called Sociedade Ponto Verde (SPV). In 2011, the Green Dot fees paid by the packers/importers to SPV are available online in the following site: http://www.apambiente.pt/politicasambiente/Residuos/fluxresiduos/ecovalor/Documents/SPV_maio2011.pdf The value of Green Dot fees is calculated accordingly to the type of material and the weight of the packaging placed in the market.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The legislation establish the extended producer responsibility, which is achieved through management entities, that are licensing by the government bodies .
Reference/source	http://www.pontoverde.pt
Electrical and electronic equipment (EEE)	
Management of WEEE	
Year introduced	Since 2006
Key Legislation	Decree Law no. 230/2004, 10 th December
Scope of the scheme	Large household appliances, small household appliances, IT and telecommunication equipment, consumer equipment, lighting equipment, electrical and electronic tools, toys leisure and sport equipment, medical devices, monitoring and control instruments, automatic dispensers.
Targets set for the scheme (including planned future targets)	Portugal has set a a collection target of 4 kg/inhabitant.year of WEEE from domestic users.by 31 of December 2006.
Principle	Prevent the production and promote the reutilization and recycling in order to reduce the quantity and harmful nature of the waste to be eliminated.

Level of payment to scheme	<p>The producers of electric and electronic equipment can transfer their responsibility to a management entity. There are two entities for WEEE management at national level, called AMB3E e ERP Portugal. In 2011, the EcoWEEE paid by the producers to Amb3E or ERP Portugal are available online in the following site: http://www.apambiente.pt/politicambient/Residuos/fluxresiduos/ecovalor/Paginas/default.aspx</p> <p>The value of EcoWEEE is calculated accordingly to the characteristics and the number of EEE placed in the market.</p> <p>A register fee (2011) is charged in an annual basis and it is calculated according to the producer's previous year activity:</p> <ul style="list-style-type: none"> • Annual Register Fee - Up to 1.111 Equipments: 100 Euros (Single fee) • From 1.112 to 10.050 Equipment: 0,09 Euros / Equipment • From 10.051 to 60.105 Equipment: 0,009 Euros / Equipment • More than 60.105 Equipments: 1.400 Euros (Single fee)
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The legislation establish the extended producer responsibility, which is achieved through management entities, that are licensing by the government bodies.
Reference/source	http://www.amb3e.pt/ http://www.erp-portugal.pt/ http://www.anreee.pt/
End-of-life vehicles (ELV)	
[Name of existing scheme]	
Year introduced	Since 2004
Key Legislation	Decree-Law no. 196/2003
Scope of the scheme	Motor vehicles intended for transport of passengers with eight seats, at most, besides the driver's seat; motor vehicles for the transport of goods with maximum weight in technically permissible load not exceeding 3.5 t, as well as three-wheel motor vehicles, except motor tricycles.
Targets set for the scheme (including planned future targets)	<p>The following objectives shall be accomplished no later than the 1st January 2015:</p> <ul style="list-style-type: none"> - reuse and recovery of all ELV increased to a minimum of 95% by an average weight per vehicle and year; - reuse and recycling of all ELV increased to a minimum of 85% by an average weight per vehicle and year.
Principle	Reducing the amount of waste from ELV sent to disposal and improving the environmental performance of ELV operators in Portugal.
Level of payment to scheme	<p>The producers and importers of vehicles can transfer their responsibility to a management entity, called Valorcar.</p> <p>In 2011, the financial provision paid by the producers/importers to Valorcar is available online in the following site: http://www.apambiente.pt/politicambient/Residuos/fluxresiduos/ecovalor/Paginas/default.aspx</p>

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The legislation establish the extended producer responsibility, which is achieved through management entities, that are licensing by the government bodies.
Reference/source	http://www.valorcar.pt
Batteries	
Charge on batteries	
Year introduced	Since 2002
Key Legislation	Decree Law 62/2001 Decree Law 6/2009 of 6 th January (amended by Decree Law 266/2009)
Scope of the scheme	Batteries and accumulators, regardless of their shape, volume, weight, material composition or use.
Targets set for the scheme (including planned future targets)	Producers must take the steps necessary to reach at least the following rates of collection of waste batteries and accumulators: a) 25% by December 31, 2011; b) 45% by December 31, 2015.
Principle	This ordinance gives particular emphasis to the need to reduce the amount of hazardous substances already incorporated in batteries, especially mercury, cadmium and lead.
Level of payment to scheme	The producers of batteries and accumulators can transfer their responsibility to a management entity. There are 5 management entities for this waste stream: Valorcar, Amb3E, ERP Portugal, Ecopilhas and GVB. In 2011, the financial provision paid by the producers are available online in the following site: http://www.apambiente.pt/politicasambiente/Residuos/fluxresiduos/ecovalor/Paginas/default.aspx
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The legislation establish the extended producer responsibility, which is achieved through management entities, that are licensing by the government bodies.
Reference/source	http://www.ecopilhas.pt/ http://www.valorcar.pt/ http://www.amb3e.pt/ http://www.erp-portugal.pt/home http://www.gvb.pt/

Paper/cardboard	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Other (if any)	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	Probably 2012
Key Legislation	Decree-Law 366-A/97, 20 th December (amended by Decree-Law 162/2000 and Decree-Law 92/2006) and Ordinance 29-B/98, 15 th January
Scope of the scheme	Packaging and waste packaging
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	

21.4 Other interesting instruments

e.g. Landfill Allowance Schemes	
Principle (one/two lines describing the instrument)	

Structure of incentive (how is it applied and at what levels?)	
Scope (waste streams)	
Voluntary or mandatory/legislative?	
Geographical coverage	
Target group (e.g. consumer, households, business, manufacturer)	
Reference/source	

ECONOMIC INSTRUMENTS IN ROMANIA

22.1 Fees for Waste Disposal and Treatment

22.1.1 landfill fees (and Bans)

No existing landfill tax or levy (but a 'waste user charge')	
Date of introduction	1996, updated in 2001
Principle (one/two lines describing the instrument)	Charged to households and industries
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Reference/source	OECD/EEA database on environmental and resource instruments (http://www2.oecd.org/ecoinst/queries/index.htm)
Information on Fees (no data found)	
Range of fees for landfilling (excluding landfill tax)	
Source of information	
Do sources give any explanation for key factors explaining variation?	
Information on Bans – none identified	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	

22.1.2 Incineration fees (and Bans)

No incineration tax or levy	
Date of introduction	

Principle (one/two lines describing the instrument)	
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Reference/source	
Information on Fees (none found)	
Range of fees for incineration (excluding incineration tax)	
Source of information	
Do sources give any explanation for key factors explaining variation?	
Information on Bans – none identified	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	

22.2 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	

Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	
Reference/source	
Nature of scheme	
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	2.
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Reference/source	

22.3 Producer responsibility systems

Packaging, Taxes – none identified	
Date of introduction	
Principle (one/two lines describing the instrument)	
Scope of the tax	
Current levels of tax, and tax structure	
Details of any exemptions	
How has the tax changed over time?	
Plans for future levels of the tax	
Reference/source	
Packaging, Deposit refunds	
(glass and glass bottles)	
Year introduced	1998 (for glass bottles, no data on glass)
Key Legislation	

Targets set for the scheme (including planned future targets)	
Scope of scheme	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	OECD/EEA database on environmental and resource instruments (http://www2.oecd.org/ecoinst/queries/index.htm)
Packaging, Green Dot scheme	
Eco-Rom Ambalaje	
Year introduced	2004
Key Legislation	Government Decision (GD) No. 621/2005, regarding management of packaging and packaging waste, which came into force on 20 July 2005 Other packaging-related legislation are the Government Decision no. 349/2002 on managing packaging and packaging waste, and the Order of the Ministry of Waters and Environment Protection no. 1190/2002 on the procedure for reporting information on packaging and packaging waste
Scope of the scheme	<p>ECO - ROM AMBALAJE (ERA) is the official representative in Romania of the "Green Dot" system. The national and European regulations stipulate economic operators' obligation to fulfil the annual recovery and recycling targets for the packaging quantity they put on the market.</p> <p>ERA takes over, on a contractual basis and in exchange for unitary prices used for each type of packaging materials, the responsibility to organise the recovery and recycling activities and to report to competent authorities on the achievement of those legal objectives.</p> <p>Its objectives are:</p> <ul style="list-style-type: none"> • To fulfil the legal objectives related to the 100% recovering and recycling for all customers; • To organise an integrated waste management system at the national level for all types of packages: <ul style="list-style-type: none"> ○ To develop the industrial scheme (packaging waste coming from companies); ○ To take a direct part in projects with the local authorities in order to develop the local scheme (packaging waste coming from households). <p>In order to accomplish its objectives, ERA established partnerships with local authorities, sanitation and transportation companies as well as companies specialised in packaging waste recycling. ERA provides financial and technical support to municipalities' Waste Management Companies (WMC) aiming at implementing Pilot Projects named ERACOLECT. ERA signs a Protocol with the municipalities and the authorised Waste Management Companies to start the selective collection for household packaging waste.</p>

Targets set for the scheme (including planned future targets)	EU legislation targets.														
Principle															
Level of payment to scheme	<p>ERA is financed by the contribution of licensees. All of them pay a fee based on the quantity and type of packaging material placed on the market.</p> <table> <tr> <th>Packaging Material</th><th>Price per ton excl. VAT in 2007 (€ per ton)</th></tr> <tr> <td>Glass</td><td>10.49</td></tr> <tr> <td>Plastics</td><td>9.60</td></tr> <tr> <td>PET</td><td>20.54</td></tr> <tr> <td>Metal</td><td>7.26</td></tr> <tr> <td>Wood</td><td>4.58</td></tr> <tr> <td>Paper/cardboard</td><td>8.37</td></tr> </table>	Packaging Material	Price per ton excl. VAT in 2007 (€ per ton)	Glass	10.49	Plastics	9.60	PET	20.54	Metal	7.26	Wood	4.58	Paper/cardboard	8.37
Packaging Material	Price per ton excl. VAT in 2007 (€ per ton)														
Glass	10.49														
Plastics	9.60														
PET	20.54														
Metal	7.26														
Wood	4.58														
Paper/cardboard	8.37														
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?															
Producer-led/funded or government-led/funded?	e.g. The law is a government one. The scheme, however, is operated by industry.														
Reference/source	<p>PRO-Europe website (http://www.pro-e.org/General_Information_3.html) accessed 24 February 2011.</p> <p>“National Waste Management Strategy” (covering the period 2003-2013) (English version: http://www.mmediu.ro/protectia_mediului/gestiune_deseuri/strategii_planuri/NationalWasteStrategy.pdf , accessed on 24 February 2011).</p>														
Electrical and electronic equipment (EEE)															
Ecotic /RoRec															
Year introduced	2007 (both Ecotic and RoRec began operation)														
Key Legislation	Government’s Decision No. 1037/2010 and Government’s Ordinance 26/2000 as further amended and supplemented.														

Scope of the scheme	<p>In conformity with Govt. Decision 448/2005, Annex 1A, the categories covered by ECOTIC are:</p> <ol style="list-style-type: none"> 1. Large household appliances 2. Small household appliances 3. Telecommunication and IT equipments 4. Consumer electronics 6. Electrical and electronic tools 7. Toys, sports and leisure equipments 9. Surveillance and control instruments 10. Automatic dispensers <p>RoRec was founded on non-profit basis by the CECED (European federation) members operating in Romania, i.e Amica, Arctic, BSH, Candy Hoover, Electrolux, Gorenje, Indesit, Philips, Groupe SEB and Whirlpool. In addition to the above listed WEEE categories, RoRec also covers lighting equipment (only luminaries for fluorescent lamps) and medical devices.</p>
Targets set for the scheme (including planned future targets)	EU legislation targets
Principle	<p>ECOTIC takes over the responsibilities of manufacturers or importers of EEE for the achievement of their annual targets of collection, reuse, and recycling of WEEEs, including reporting to the National Environment Protection Agency of the waste of electric and electronic equipments management strategy.</p> <p>RoRec's mission is to actively contribute in implementing the objectives of preserving and protecting the environment and human health by providing WEEE management full services. RoRec purpose is to take over the responsibility of its members for WEEE management by ensuring all the processes related to treatment, recovery, recycling and final disposal of WEEE in an environmentally sound manner.</p>
Level of payment to scheme	<p>The Ecotic system is financed through a visible fee ('green stamp') to the sales of the EEE. The members report their sales quarterly and are invoiced according to their declarations. According to Article 8 (10) (11) of GD 1037/2010, from 14 February 2011, these costs will be embedded in the sale price of the equipment without being registered separately on the invoice and/or shelf. An exception is made for large domestic appliances, for which producers can inform the buyers about the costs of collection, treatment and environmentally friendly disposal of WEEE up to 13 February 2013. The outlined costs should not exceed the actual costs generated by the collection, treatment and environmentally friendly disposal operations.</p> <p>RoRec is also funded through a visible fee system.</p> <p>ECOTIC relies on collection of WEEE from municipal collection points and from retailers collection infrastructure .</p>
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	<p>Ecotic website (http://www.ecotic.ro/en/) accessed 24 February 2011.</p> <p>WEEE Forum website (http://www.weee-forum.org/index.php?section=members&page=members_community) accessed 24 February 2011.</p>

End-of-life vehicles (ELV)	
No data found	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Batteries	
No other data found	
Year introduced	
Key Legislation	Government Decision no.1057/2001 on the regime of batteries and accumulators containing dangerous substances
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	"National Waste Management Strategy" (covering the period 2003-2013) (English version: http://www.mmediu.ro/protectia_mediului/gestiune_deseuri/strategii_planuri/NationalWasteStrategy.pdf , accessed on 24 February 2011).
Paper/cardboard	
None found	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Other (if any)	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	

Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	

Reference/source	
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22.4 Other interesting instruments

Principle (one/two lines describing the instrument)	
Structure of incentive (how is it applied and at what levels?)	
Scope (waste streams)	
Voluntary or mandatory/legislative?	
Geographical coverage	
Target group (e.g. consumer, households, business, manufacturer)	
Reference/source	

ECONOMIC INSTRUMENTS IN SLOVAKIA

23.1 Fees for Waste Disposal and Treatment

23.1.1 landfill fees (and Bans)

Landfilling fee																																																																								
Date of introduction	Act No. 17/2004 on fees for landfilling																																																																							
Principle (one/two lines describing the instrument)	<p>This Act sets progressively increasing levies on landfilling for future years. The levy to be applied will depend upon the number of waste fractions being separated at source by the municipality concerned. The levy is to be paid to the municipality in which the landfill is located. The levy rates proposed are set out in table below.</p> <p>The fee among others is to be used to provide a financial reserve for close down and after-care.</p>																																																																							
Current levels of tax, and tax structure																																																																								
Details of any exemptions	Construction waste seem to be excluded from the levy.																																																																							
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)																																																																								
How has the tax changed over time?	<p>Levies on Landfilling of Waste in €/tonne in Slovakia</p> <table><tr><td>Type of waste</td><td>2004</td><td>2005</td><td>2006</td><td>2007</td><td>2008</td></tr><tr><td>1. Inert waste</td><td>0.03</td><td>0.10</td><td>0.17</td><td>0.27</td><td>0.33</td></tr><tr><td>2. Other waste, except type of waste 1,3,4,5</td><td>0.66</td><td>1.00</td><td>1.66</td><td>3.32</td><td>6.64</td></tr><tr><td>3. No source separated MW</td><td>1.00</td><td>1.66</td><td>3.32</td><td>6.64</td><td>9.96</td></tr><tr><td> 1 waste type source separated MW</td><td>0.90</td><td>1.49</td><td>2.99</td><td>5.97</td><td>8.96</td></tr><tr><td> 2 waste type source separated MW</td><td>0.80</td><td>1.33</td><td>2.66</td><td>5.31</td><td>7.97</td></tr><tr><td> 3 waste type source separated MW</td><td>0.70</td><td>1.16</td><td>2.32</td><td>4.65</td><td>6.97</td></tr><tr><td> 4 waste type source separated MW</td><td>0.60</td><td>1.00</td><td>1.99</td><td>3.98</td><td>5.97</td></tr><tr><td> 5 waste type source separated MW</td><td>0.50</td><td>0.83</td><td>1.66</td><td>3.32</td><td>4.98</td></tr><tr><td>4. Biodegradable waste</td><td>1.00</td><td>1.66</td><td>3.32</td><td>6.64</td><td>13.28</td></tr><tr><td>5. Hazardous waste</td><td>8.30</td><td>9.96</td><td>16.60</td><td>23.24</td><td>33.19</td></tr></table>						Type of waste	2004	2005	2006	2007	2008	1. Inert waste	0.03	0.10	0.17	0.27	0.33	2. Other waste, except type of waste 1,3,4,5	0.66	1.00	1.66	3.32	6.64	3. No source separated MW	1.00	1.66	3.32	6.64	9.96	1 waste type source separated MW	0.90	1.49	2.99	5.97	8.96	2 waste type source separated MW	0.80	1.33	2.66	5.31	7.97	3 waste type source separated MW	0.70	1.16	2.32	4.65	6.97	4 waste type source separated MW	0.60	1.00	1.99	3.98	5.97	5 waste type source separated MW	0.50	0.83	1.66	3.32	4.98	4. Biodegradable waste	1.00	1.66	3.32	6.64	13.28	5. Hazardous waste	8.30	9.96	16.60	23.24	33.19
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Extent of geographical coverage	National																																																																							

Plans for future levels of the tax	
Reference/source	http://scp.eionet.europa.eu/facts/factsheets_waste/2009_edition/factsheet?country=SK Slovak Waste Act Law no. 223/2001 Z.z. of 15 May 2001 in the version of 10.12.2009: http://www.odpady-portal.sk/Dokument/100300/zakon-o-odpadoch.aspx The Act of the National Council of the Slovak Republic No 17/2004 on landfill fees. http://jaspi.justice.gov.sk/jaspiw1/htm_zak/jaspiw_mini_zak_zobraz_clanok1.asp?kotva=k1&skupina=1
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for landfilling (excluding landfill tax)	
Source of information	
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	Only inert or stabilised waste may be landfilled. Since January 2003 the landfilling of untreated hazardous waste has been banned.
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	
Reference/source	http://www.sazp.sk/slovak/periodika/sprava/rio10/sk_pdf/14_odpady.pdf

23.1.2 Incineration fees (and Bans)

Waste incineration in Slovakia	
Date of introduction	
Principle (one/two lines describing the instrument)	In Slovakia waste is incinerated in 2 plants with a total capacity of 220.000 tonnes per year.
Current levels of tax, and tax structure	
Details of any exemptions	

Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Reference/source	<p>CEWEP (2010): WtE development in Slovakia. Poster Session Summary. 5th CEWEP Congress on Waste to Energy 2010. 30 June to 2 July 2011, Antwerp. http://www.cewep.eu/events/pastcewepcongresses1/480.th CEWEP Congress in Antwerp - Poster Session Handouts.html</p> <p>CEWEP (2010): Waste-to-Energy in Europe in 2008. http://www.cewep.eu/media/www.cewep.eu/org/med_557/529_cewep_-_landfill_taxes_and_bans_7september2010_web.pdf</p>
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	
Source of information	
Do sources give any explanation for key factors explaining variation?	
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	

23.2 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	

What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	Act No. 582/2004 sets the frame for municipal waste fees. The fee shall be between 0.0033 and 0.0531 €/l of municipal waste, 0.0066 and 0.1659 per kg of municipal waste or 2.4 and 40 € per person and year. It in any case should not be more than required the costs for waste collection, treatment and landfilling. The method and amount actually charged depends on each municipality.
Reference/source	Act No. 582/2004 Coll. on local taxes and local charges for municipal and minor construction waste as amended http://scp.eionet.europa.eu/facts/factsheets_waste/2009_edition/factsheet?country=SK
Location of scheme (municipality where it is used)	
Nature of scheme	
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Reference/source	

23.3 Producer responsibility systems

Packaging, Contribution to recycling fund		
Date of introduction		
Principle (one/two lines describing the instrument)	Manufacturers and importers of glass (including glass packaging) have to pay a contribution to the recycling fund according to the mass of material they introduce and the costs for recycling glass waste.	
		Contribution to recycling fund in €/kg
	Polyethylene terephthalate, polyethylene, polypropylene, polystyrene and polyvinyl chloride	0.17
	Glass	0.02
	Metal packaging	
	iron and steel	0.04
	aluminium	0.14
Scope of the tax		
Current levels of tax, and tax structure		
Details of any exemptions		

How has the tax changed over time?	
Plans for future levels of the tax	
Reference/source	<p>Slovak Waste Act Law no. 223/2001 Z.z. of 15 May 2001 in the version of 10.12.2009: http://www.odpady-portal.sk/Dokument/100300/zakon-o-odpadoch.aspx</p> <p>Decree of the Ministry of Environment of the Slovak Republic No. 127/2004 Coll. on tariff rates for calculation of fees to Recycling Fund, on list of products, materials and equipments that a fee is required to pay to Recycling Fund and on details of application form concerning financial contribution granted by Recycling Fund as amended by Decree of the MoE SR No 359/2005 Coll.</p> <p>Act of the National Council of the Slovak Republic No 119/2010 Coll. on packaging and packaging waste, http://jaspi.justice.gov.sk/jaspiw1/htm_zak/jaspiw_mini_zak_zobraz_clanok1.asp?kotva=k4&skupina=1</p>
Packaging, Deposit refunds	
Year introduced	
Key Legislation	
Targets set for the scheme (including planned future targets)	
Scope of scheme	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Packaging, Green Dot scheme	
ENVI PAK	
Year introduced	2003
Key Legislation	§8, Section 2 of SR National Council Act No. 529/2002 of Code on Packaging

Scope of the scheme	Take over responsibility for: -fulfilling the taking back obligation for packaging waste -meeting recycling and recovery targets -all types of packaging waste -registration of obliged persons
Targets set for the scheme (including planned future targets)	
Principle	ENVI-PAK, a.s. is a non-for-profit joint stock company (owned by beverage and packaging companies) established to provide for the observation of packaging waste collection duty
Level of payment to scheme	Single entering fee: clients according to amount of packaging introduced on the market/year A - 500 € (more than 700 tons) B - 250 € (100 ton - 700 ton) C - 125 € (less than 100 ton) Regular fees for packaging introduced on the market (fee/kg): <ul style="list-style-type: none"> quarterly: big and medium size companies (introducing over 100 tons of packaging annually) once a year: small companies (introducing up to 100 tons of packaging annually) (plastic - 0,045 €, paper - 0,0125 €, glass - 0,0125 €, metals - 0,0275 €) Example: 0.128 € per can
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Producer-led/funded
Reference/source	http://www.pro-e.org/slovakia1.htm
Electrical and electronic equipment (EEE)	
Take back obligation + SEWA and ENVIDOM systems+ contribution to recycling fund	
Year introduced	2005
Key Legislation	Slovak Waste Act Law no. 223/2001 Z
Scope of the scheme	

Targets set for the scheme (including planned future targets)																																							
Principle	<p>Producers/importers of EEE have the obligations to take care of a separate collection system for WEEE and to take back WEEE free of charge and to pay a contribution to the recycling fund based on the amount of household-EEE they put on the market.</p> <p>Consumers have the obligation to hand in an end-of-life appliance to the take-back or separate collection system. Neither retailers nor municipalities have an obligation.</p> <p>At least two systems which organise the take back, treatment and recycling of WEEE for the Producers/importers have been introduced in Slovakia:</p> <ul style="list-style-type: none"> - SEWA (Slovak Electronic Waste Agency) – which covers all 10 waste types defined in the WEEE directive 2002/96/EC. - ENVIDOM which covers large and small household appliances. <p>The WEEE collection is organised through collection points run directly by municipalities, by collection companies or by mobile (e.g. kerbside) collection.</p> <p>With SEWA producers and importers as members of the collective system pay an administration entry membership fee and a shared fee (in EUR/kg) as contribution for cost of collection, transport and treatment based on the quantities of EEE placed on the Slovak market the year before. The contribution is paid quarterly.</p> <p>With ENVIDOM producers and importers pay a visible recycling fee (in € per unit) when they put products onto the Slovak market. This money is paid on a monthly base and is used to finance the 'historical waste'. Waste of 'new EEE' is paid according to the pay-as-you-go principle – it was set down by an agreement of founders that defined percentages of the annual amount of appliances placed to the market will become waste in the same year. Therefore members pay an additional fee which will be increased step by step. In 2007 it was 2% of the appliances' price for large household appliances and 5,5% for small household appliances. For 2008 the percentage is stated as 2,5 % for category 1 and 9,5% for category 2. Financing of the 'new waste' of the next years is revaluated year by year.</p> <p>Contributions to recycling fund from WEEE</p> <table border="1"> <thead> <tr> <th></th><th>€/kg</th></tr> </thead> <tbody> <tr> <td>Large household appliances</td><td></td></tr> <tr> <td>Refrigerators</td><td>0.93</td></tr> <tr> <td>Others</td><td>0.53</td></tr> <tr> <td>Small household appliances</td><td>0.67</td></tr> <tr> <td>Information technology and telecommunication</td><td></td></tr> <tr> <td>PC</td><td>1.67</td></tr> <tr> <td>Others</td><td>1.33</td></tr> <tr> <td>Consumer electronics</td><td></td></tr> <tr> <td>Televisions</td><td>1.67</td></tr> <tr> <td>Others</td><td>1.33</td></tr> <tr> <td>Lamps</td><td></td></tr> <tr> <td>without mercury</td><td>1.33</td></tr> <tr> <td>with mercury</td><td>1.67</td></tr> <tr> <td>Electrical and electronic tools except large stationary industrial tools</td><td>0.67</td></tr> <tr> <td>Toys, sports equipment and recreation</td><td>0.67</td></tr> <tr> <td>Medical equipment except all implanted and infected products</td><td>1.33</td></tr> <tr> <td>Apparatus for monitoring and control</td><td>1.33</td></tr> <tr> <td>Vending machines</td><td>0.67</td></tr> </tbody> </table>		€/kg	Large household appliances		Refrigerators	0.93	Others	0.53	Small household appliances	0.67	Information technology and telecommunication		PC	1.67	Others	1.33	Consumer electronics		Televisions	1.67	Others	1.33	Lamps		without mercury	1.33	with mercury	1.67	Electrical and electronic tools except large stationary industrial tools	0.67	Toys, sports equipment and recreation	0.67	Medical equipment except all implanted and infected products	1.33	Apparatus for monitoring and control	1.33	Vending machines	0.67
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Level of payment to scheme																																							

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?					
Producer-led/funded or government-led/funded?					
Reference/source	<p>Slovak Waste Act Law no. 223/2001 Z.z. of 15 May 2001 in the version of 10.12.2009: http://www.odpady-portal.sk/Dokument/100300/zakon-o-odpadoch.aspx</p> <p>Decree of Ministry of Environment on handing of EEE and WEEE No. 208/2005 of April 29, 2005, Decree of Ministry of Environment on contribution rates to the Recycling Fund on the list of products, materials and equipments for which the contribution is paid No. 359/2005 of August 3, 2005, Governmental Decree on rates for collection, recovery, reuse and recycling of components materials and substances No. 388/2005 of August 17, 2005.</p> <p>http://www.weee-forum.org/index.php?section=members&page=members_community&id=51</p>				
End-of-life vehicles (ELV)					
Contribution to recycling fund					
Year introduced					
Key Legislation	Slovak Waste Act Law no. 223/2001				
Scope of the scheme					
Targets set for the scheme (including planned future targets)					
Principle	<p>Manufacturers and importers of vehicles must pay a contribution to the recycling fund.</p> <table border="1"> <thead> <tr> <th></th><th>Contribution to recycling fund in €/kg</th></tr> </thead> <tbody> <tr> <td>Vehicles</td><td>66.67</td></tr> </tbody> </table>		Contribution to recycling fund in €/kg	Vehicles	66.67
	Contribution to recycling fund in €/kg				
Vehicles	66.67				
Level of payment to scheme					
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?					
Producer-led/funded or government-led/funded?					

Reference/source	Slovak Waste Act Law no. 223/2001 Z.z. of 15 May 2001 in the version of 10.12.2009: http://www.odpady-portal.sk/Dokument/100300/zakon-o-odpadoch.aspx Decree of the Ministry of Environment of the Slovak Republic No. 127/2004 Coll. on tariff rates for calculation of fees to Recycling Fund, on list of products, materials and equipments that a fee is required to pay to Recycling Fund and on details of application form concerning financial contribution granted by Recycling Fund as amended by Decree of the MoE SR No 359/2005 Coll.						
Batteries							
Take back obligation + contribution to recycling fund							
Year introduced							
Key Legislation	Slovak Waste Act Law no. 223/2001						
Scope of the scheme							
Targets set for the scheme (including planned future targets)							
Principle	<p>Battery manufacturers must pay a contribution to the recycling fund based on the amount of batteries they introduce to the Slovak market.</p> <p>Distributors of batteries and accumulators are obliged to take back any portable batteries at the points of sale.</p> <p>Contribution to recycling fund from batteries</p> <table border="1"> <thead> <tr> <th></th><th>€/kg</th></tr> </thead> <tbody> <tr> <td>Batteries < 1 kg/piece</td><td>6.33</td></tr> <tr> <td>Batteries > 1 kg/piece</td><td>0.27</td></tr> </tbody> </table>		€/kg	Batteries < 1 kg/piece	6.33	Batteries > 1 kg/piece	0.27
	€/kg						
Batteries < 1 kg/piece	6.33						
Batteries > 1 kg/piece	0.27						
Level of payment to scheme							
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?							
Producer-led/funded or government-led/funded?							
Reference/source	Slovak Waste Act Law no. 223/2001 Z.z. of 15 May 2001 in the version of 10.12.2009: http://www.odpady-portal.sk/Dokument/100300/zakon-o-odpadoch.aspx Decree of the Ministry of Environment of the Slovak Republic No. 127/2004 Coll. on tariff rates for calculation of fees to Recycling Fund, on list of products, materials and equipments that a fee is required to pay to Recycling Fund and on details of application form concerning financial contribution granted by Recycling Fund as amended by Decree of the MoE SR No 359/2005 Coll.						
Paper/cardboard							
Contribution to recycling fund							
Year introduced							
Key Legislation	Slovak Waste Act Law no. 223/2001						

Scope of the scheme						
Targets set for the scheme (including planned future targets)						
Principle	Manufacturers and importers of paper, cardboard have to pay a contribution to the recycling fund according to the mass of material they introduce and the costs for recycling paper waste.					
		<table border="1"> <tr> <th></th> <th>Contribution to recycling fund in €/kg</th> </tr> <tr> <td>Paper and cardboard</td> <td>0.02</td> </tr> </table>		Contribution to recycling fund in €/kg	Paper and cardboard	0.02
	Contribution to recycling fund in €/kg					
Paper and cardboard	0.02					
Level of payment to scheme						
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?						
Producer-led/funded or government-led/funded?						
Reference/source	<p>Slovak Waste Act Law no. 223/2001 Z.z. of 15 May 2001 in the version of 10.12.2009: http://www.odpady-portal.sk/Dokument/100300/zakon-o-odpadoch.aspx</p> <p>Decree of the Ministry of Environment of the Slovak Republic No. 127/2004 Coll. on tariff rates for calculation of fees to Recycling Fund, on list of products, materials and equipments that a fee is required to pay to Recycling Fund and on details of application form concerning financial contribution granted by Recycling Fund as amended by Decree of the MoE SR No 359/2005 Coll</p>					
Other (if any)						
[Name of existing scheme]						
Year introduced						
Key Legislation						
Scope of the scheme						
Targets set for the scheme (including planned future targets)						
Principle						
Level of payment to scheme						

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	

23.4 Other interesting instruments

Recycling fund

Principle (one/two lines describing the instrument)	<p>The Recycling Fund was set up as a non-state special purpose fund to pool financial means to support the collection, appreciation and processing of spent batteries and accumulators, waste oils, used pneumatic tyres, multi-layer combined materials, electronic devices, plastics, paper, glass, vehicles and metal packing.</p> <p>The following table shows the planned budget of the recycling fund according to Slovak Waste Management Programme 2005</p> <table><tr><td>Year</td><td>2006</td><td>2007</td><td>2008</td><td>2009</td><td>2010</td></tr><tr><td>Budget in million €</td><td>23.8</td><td>22.0</td><td>21.9</td><td>20.9</td><td>19.9</td></tr></table>	Year	2006	2007	2008	2009	2010	Budget in million €	23.8	22.0	21.9	20.9	19.9
Year	2006	2007	2008	2009	2010								
Budget in million €	23.8	22.0	21.9	20.9	19.9								
Structure of incentive (how is it applied and at what levels?)													
Scope (waste streams)	The recycling fund is financed by the importer of for the recycling of batteries and accumulators, waste oils, used pneumatic tyres, multi-layer combined materials, electronic devices, plastics, paper, glass, vehicles and metal packing.												
Voluntary or mandatory/legislative?	Recycling fund was constituted by Waste Act 223/2001												
Geographical coverage	National												
Target group (e.g. consumer, households, business, manufacturer)													
Reference/source	<p>Decree of the Ministry of Environment of the Slovak Republic No. 127/2004 Coll. on tariff rates for calculation of fees to Recycling Fund, on list of products, materials and equipments that a fee is required to pay to Recycling Fund and on details of application form concerning financial contribution granted by Recycling Fund as amended by Decree of the MoE SR No 359/2005 Coll. http://jaspi.justice.gov.sk/jaspiw1/htm_zak/jaspiw_mini_zak_zobraz_clanok1.asp?kotva=k1&skupina=1</p> <p>MINISTERSTVO ŽIVOTNÉHO PROSTREDIA SLOVENSKEJ REPUBLIKY (2005): Waste Management Programme of the Slovak Republic (PROGRAM ODPADOVÉHO OSPODÁRSTVA SLOVENSKEJ REPUBLIKY). Bratislava.</p> <p>http://scp.eionet.europa.eu/facts/factsheets_waste/2009_edition/factsheet?country=SK</p>												

ECONOMIC INSTRUMENTS IN SLOVENIA

24.1 Waste Policy in the MS

24.2 Waste management performance in the MS

24.3 Fees for Waste Disposal and Treatment

24.3.1 landfill fees (and Bans)

Tax on landfill	
Date of introduction	2001
Principle (one/two lines describing the instrument)	All landfill operators of hazardous, non hazardous and inert landfill are obliged to pay tax for disposal of waste. If the operator invests the collected tax for the sanitation, technical adjustment of the landfill, construction or purchasing of equipment, Ministry for Environmental and Spatial Planning- Environmental Agency confirms the investments and the operator is not obliged to transfer the collected tax to the state budget.
Current levels of tax, and tax structure	<p>Since 2001 the investments in public infrastructure (landfilling of municipal waste) raised annually to EUR 13 million. The largest share was spent on landfills of municipal and hazardous waste, with also significant investment into collection and recycling schemes.</p> <p>Since 2006, in case of industrial landfills, the whole collected tax goes to the state budget. A tax payer who submits investment or participates in a sanitation programme (construction/ improvement of waste management facilities) resulting in lower quantity of waste landfilled is exempted from paying the tax in accordance with State Aid Rules.</p> <p>The tax rate is a function of the pollution of the land and the greenhouse gas emissions.</p> <p>The tax for MSW is 19 €/tonne.</p>
Details of any exemptions	
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	

Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	Regulation on the taxation of waste disposal in landfills (Official Gazette of RS, no. 70/10) http://www.stat.si/eng/novica_prikazi.aspx?id=3469 http://scp.eionet.europa.eu/facts/factsheets_waste/2006_edition/Slovenia CEWEP (2010): WtE development in Slovenia. Poster Session Summary. 5 th CEWEP Congress on Waste to Energy 2010. 30 June to 2 July 201, Antwerp. http://www.cewep.eu/events/pastcewepcongresses1/480.th_CEWEP_Congress__in_Antwerp_-_Poster_Session_Handouts.html
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste) Waste user charge for landfills	
Range of fees for landfilling (excluding landfill tax)	EUR 9.49 per m3 (weighted average) for household waste EUR 11.83 per m3 (weighted average) for industrial waste
Source of information	http://scp.eionet.europa.eu/facts/factsheets_waste/2006_edition/Slovenia
Do sources give any explanation for key factors explaining variation?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	

24.3.2 Incineration fees (and Bans)

Incineration in Slovenia	
Date of introduction	
Principle (one/two lines describing the instrument)	According to CEWEP (2010) some 20.000 tonnes of waste had been incinerated in Slovenia in 2008. With respect to waste treatment of MSW the market share of incineration is only 1 %.
Current levels of tax, and tax structure	
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	CEWEP (2010): Waste-to-Energy in Europe in 2008. http://www.cewep.eu/media/www.cewep.eu/org/med_557/529_cewep_-_landfill_taxes_and_bans_7september2010_web.pdf
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	
Source of information	
Do sources give any explanation for key factors explaining variation?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Information on Bans	
Wastes to which the ban is applied	

Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	

24.4 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Location of scheme (municipality where it is used)	
Nature of scheme	
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	<p>The maximum frequency of collection is once every 2 weeks</p> <p>The municipality also provides:</p> <ul style="list-style-type: none"> A food waste collection twice a week in small buckets A weekly collection of plastic and cans in 60 l sacks A fortnightly collection of paper and card in a 140 l bin There is a dense network of 'bring sites' for the collection of glass containers <p>The level of charge depends upon municipality, other charges set for SMEs.</p> <p>In Ljubljana, specific charges are set for street waste, green waste and non-hazardous waste from SMEs.</p>

Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://scp.eionet.europa.eu/facts/factsheets_waste/2008_edition/Slovenia

24.5 Producer responsibility systems

Packaging, Taxes	
Date of introduction	
Principle (one/two lines describing the instrument)	
Scope of the tax	
Current levels of tax, and tax structure	
Details of any exemptions	
How has the tax changed over time?	
Plans for future levels of the tax	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Packaging, Deposit refunds	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Targets set for the scheme (including planned future targets)	
Scope of scheme	
Principle	

Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Packaging, Green Dot scheme	
SLOPAK	
Year introduced	2004
Key Legislation	Rules of the Management of Packaging and Packaging Waste
Scope of the scheme	
Targets set for the scheme (including planned future targets)	<p>Recovery targets for packaging waste: The following targets must be attained no later than 31 December 2012:</p> <ul style="list-style-type: none"> minimum 60 % by weight must be recovered or incinerated at waste incineration plants with energy recovery, between 55% as a minimum and 80% as a maximum by weight of packaging waste must be recycled, <p>The following minimum recycling targets for materials contained in packaging:</p> <ul style="list-style-type: none"> 60% by weight for paper and board, 15% by weight for wood, (60% by weight for glass, 50% by weight for metals, 22.5 % by weight for plastics, counting exclusively material that is recycled back into plastics).
Principle	<p>Producers of packaging or packaging raw materials, importers, packaged goods manufacturers and retailers are obliged to cover the cost and ensure that packaging they have placed on the market in Slovenia is collected for reuse, reprocessing or disposal. The same is applied to end-users that import or purchase packaging or packaging material themselves.</p> <p>Slopak d.o.o. is financed by the fillers, packers and importers taking part in the system in a clear adoption of the shared responsibility principle. In return for the fee collected, Slopak, d.o.o. fulfils the obligation of the Rules of the Management of Packaging and Packaging Waste for the packaging waste in question and grants the fillers, packers and importers permission to mark their packaging with the »Green Dot«. The use of »Green Dot« is voluntary on the territory of Slovenia.</p>

Level of payment to scheme	<p>Licence fees for the year 2010</p> <table> <tr> <td>Packging</td><td>(€/tonne)</td></tr> <tr> <td>Glass</td><td>38,00</td></tr> <tr> <td>Paper Primary</td><td>87,00</td></tr> <tr> <td>Paper Secondary and Transport</td><td>57,00</td></tr> <tr> <td>Plastics Sales</td><td>112,00</td></tr> <tr> <td>Plastics PET</td><td>71,00</td></tr> <tr> <td>Plastics Secondary and Transport</td><td>53,00</td></tr> <tr> <td>Metal</td><td>79,00</td></tr> <tr> <td>Wood</td><td>57,00</td></tr> <tr> <td>Other materials e.g. textile</td><td>53,00</td></tr> <tr> <td>Composts (I)</td><td>43,00</td></tr> <tr> <td>Composts (II)</td><td>99,00</td></tr> <tr> <td>Packaging of dangerous materials</td><td>600,00</td></tr> <tr> <td></td><td>VAT not included</td></tr> </table>	Packging	(€/tonne)	Glass	38,00	Paper Primary	87,00	Paper Secondary and Transport	57,00	Plastics Sales	112,00	Plastics PET	71,00	Plastics Secondary and Transport	53,00	Metal	79,00	Wood	57,00	Other materials e.g. textile	53,00	Composts (I)	43,00	Composts (II)	99,00	Packaging of dangerous materials	600,00		VAT not included
Packging	(€/tonne)																												
Glass	38,00																												
Paper Primary	87,00																												
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Packaging of dangerous materials	600,00																												
	VAT not included																												
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?																													
Producer-led/funded or government-led/funded?	Slopak d.o.o. is financed by the fillers, packers and importers taking part in the system in a clear adoption of the shared responsibility principle. In return for the fee collected, Slopak, d.o.o. will fulfil the obligation of the Rules of the Management of Packaging and Packaging Waste for the packaging waste in question and will grant the fillers, packers and importers permission to mark their packaging with the »Green Dot«. The use of »Green Dot« is voluntary on the territory of Slovenia.																												
Problems encountered/ solutions found/ lessons learned from implementation																													
Perceived costs (financial and administrative) of the instrument																													
Reference/source	http://www.pro-e.org/Select_your_country1.html																												
Electrical and electronic equipment (EEE)																													
ZEOS (www.zeos.si), Slopak (www.slopak.si) and Interseroh (www.interseroh-gruppe.de)																													
Year introduced	2006																												
Key Legislation	<ul style="list-style-type: none"> - Decree for handling of waste electrical and electronic equipment from 04.11.2004. - Rules on limitations on and prohibition of placing on the market or use of certain hazardous substances and preparations of 11 January 2005 																												
Scope of the scheme	Take back, treat and recycle of all WEEE as defined in the EU-directive 2002/96/EC.																												
Targets set for the scheme (including planned future targets)																													
Principle	Introducers of EEE have the obligation to take back, treat and recycle waste EEE. The main requirements include producer registration, reporting, treatment and financing duties. In Slovenia this is mostly organised by the 3 systems ZEOS, Slopak and Interseroh. Producers who are not complying through a collective scheme must also provide a guarantee. Retailers and distributors have take-back and information obligations.																												

Level of payment to scheme	The systems are financed by contributions levied on producers. This contribution in terms of €/piece is calculated on the basis of products put on the Slovenian market.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Producer-led/funded
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.weee-forum.org/index.php?section=members&page=members_community&id=51 www.slopak.si www.zeos.si www.interseroh-gruppe.de
End-of-life vehicles (ELV)	
Tax on End-of-life vehicles	
Year introduced	2003
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	2008 Reuse and recycling rate 87.64 % Reuse and recovery rate 89.67 %
Principle	Revenues are partly used for financing public services for dismantling End-of-Life Vehicles.
Level of payment to scheme	40 € per tonne of a new vehicle
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://scp.eionet.europa.eu/facts/factsheets_waste/2006_edition/Slovenia

Batteries	
ZEOS (www.zeos.si), Slopak (www.slopak.si) and Interseroh (www.interseroh-gruppe.de)	
Year introduced	
Key Legislation	Ordinance on handling batteries and storage batteries as well as the ordinance on environmental pollution charges through the production of old electrical equipment
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	The law transfers the responsibility and recycling obligation for old batteries and storage batteries to all players on the market like the manufacturers and importers, sellers as well as final consumers.
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.weee-forum.org/index.php?section=members&page=members_community&id=51 www.slopak.si www.zeos.si www.interseroh-gruppe.de
Paper/cardboard	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	

Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Other (if any)	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	

Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	

24.6 Other interesting instruments

Environmental protection taxes	
Principle (one/two lines describing the instrument)	<p>Environmental pollution taxes were introduced for greenhouse gas emissions, water management and for</p> <ul style="list-style-type: none"> the use of lubricating oils, the generation of ELVs, WEEE, batteries, packaging waste, graveside candle waste and end-of-life tyres and for waste disposal. <p>The tax rate is based on the environmental pressure caused, expressed in so-called environmental load units (ELU) per individual polluter.</p> <p>The main share of taxes and contributions is used directly for the purpose of environmental protection investments.</p>
Structure of incentive (how is it applied and at what levels?)	
Scope (waste streams)	
Voluntary or mandatory/legislative?	Mandatory
Geographical coverage	National
Target group (e.g. consumer, households, business, manufacturer)	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	

Reference/source	http://kazalci.arso.gov.si/
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ECONOMIC INSTRUMENTS IN SPAIN

25.1 Fees for Waste Disposal and Treatment

25.1.1 landfill fees (and Bans)

Waste disposal tax (<i>Impuesto sobre el Depósito de Residuos</i>)	
Date of introduction	Variable according to the region <u>Catalunya:</u> The first landfill tax was implemented at 2004
Principle (one/two lines describing the instrument)	Reduce municipal waste generation and promote alternatives to disposal (landfilling and incineration), such as recycling and valorisation, in particular the selective collection and recovery of biodegradable waste (biowaste, paper & cardboard).
Current levels of tax, and tax structure	<p>Catalunya:</p> <p>The landfill tax is charged for the municipal waste and the Construction and Demolition waste:</p> <ul style="list-style-type: none"> - Municipal waste: ordinary 10 €/ ton. Excepcional 20 €/ ton, if biowaste is not collected at source. - Construction and Demolition waste: 3 €/ ton (depending if a waste collection project is implemented) <p>The tax is applied on municipal waste landfilled.</p> <p>If Biowaste separate collection was not applied in accordance an implementation plan, the municipal landfill tax is increased in 10 € per ton .</p> <p>Municipal and construction waste disposal taxes are environmental in nature, designed to give incentive to a more respectful attitude toward the environment and to promote measures to minimise and recover materials from waste. These taxes are economic instruments that contribute to financing the cost of implementing sustainable waste management.</p> <p>The collected landfilling municipal waste tax is refunded in part to the local authorities depending of their selective collection results. The criteria for returns are set by a Municipal Waste Management Fund Governing Board. Every year the refund criteria are established to the local authorities according to the planned objectives.</p> <p>Tax refund criteria to the local authorities includes:</p> <ul style="list-style-type: none"> - refund on Biowaste Treatment : 33,5 €/ ton - refund on Biowaste Collection : 12,0 €/ ton x qualitative factor x population factor <p>These amounts are affected by some correction factors (criteria such as biowaste quality, the population of the municipality, the presence or not of bulky green waste in the biowaste, application of biological treatment variable fees depending on biowaste quality).</p>
Details of any exemptions	Non-hazardous waste generated by farming and livestock production, C&D waste from restauration activities

Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	<u>Comunidad de Madrid:</u> The tax rate is dependant on the type of waste and is applicable to the volume of waste landfilled: - Hazardous waste: 10-15 euros per ton. - Non hazardous waste (excluding C&D waste): 7 euros per ton. - C&D waste: 3 euros per cubic meter.
How has the tax changed over time?	<u>Catalunya:</u> 1 st stage (2004): Law 16/2003 on waste disposal tax. Diposal tax: 10 euros per ton on municipal waste. 2on stage (2009): Law 8/2008 tax on landfill and incineration waste. Disposal tax varies between 10 or 20 € / ton on landfill and 5 or 15 €/ton on incineration depending on biowaste collection for municipal waste. The law also Implements a C&D waste tax.
Extent of geographical coverage	<u>Comunidad de Madrid:</u> Region-wide <u>Catalunya:</u> Region-wide
Plans for future levels of the tax	-Currently, there exists the initiative to update the tax (by applying the inflation increases between 2004 and 2011) - Under review higher disposal (landfill & incineration) tax expected
Reference/source	- Portal del contribuyente, Comunidad de Madrid (http://www.madrid.org) - Agencia tributaria, Gobierno de España (http://www.aeat.es) <u>Catalunya :</u> - Laws 16/2003 and 8/2008 on landfill and incineration tax - Municipal waste management programme (PROGEMIC) - Management Programme of construction waste (PROGOC) - Agència de Residus de Catalunya (www.arc.cat)
Information on Bans	
Wastes to which the ban is applied	No landfill ban implemented in Spain
Date of introduction	
(Means of implementation)	

25.1.2 Incineration fees (and Bans)

Incineration tax (Cataluna)	
Date of introduction	2009
Principle (one/two lines describing the instrument)	Reduce municipal waste generation and promote alternatives to incineration such as recycling and valorisation

Current levels of tax, and tax structure	<p><u>Catalunya:</u></p> <p>- ordinary Tax: 5 € / ton. Excepcional tax: 15€ / ton , if biowaste is not collected at source.</p> <p>The tax is applied on municipal waste incinerated.</p> <p>If Biowaste separate collection is not implemented in accordance an implementation plan, the tax is increased in 10 € per ton (total 15 €/ton)</p> <p>As the landfill tax, the amount of money collected by the incineration tax is refunded to the local authorities depending of their selective collection results. The criteria for returns are also set by the Municipal Waste Management Fund Governing Board. Every year the refund criteria are established to the local authorities according to the planned objectives.</p>
Details of any exemptions	-
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	Applied only on municipal waste
How has the tax changed over time?	-
Extent of geographical coverage	Region-wide
Plans for future levels of the tax	<p>-Currently, there exists the initiative to update the tax (by applying the inflation increases between 2004 and 2011)</p> <p>- Under review higher disposal (landfill & incineration) tax expected</p>
Reference/source	<p>- Law 8/2008 on waste disposal tax and incineration</p> <p>- Municipal waste management programme (PROGEMIC)</p>

25.2 Pay-as-you-throw schemes

Overview of PAYT schemes in Spain	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	<p>Only a few municipalities have PAYT schemes. The proportion of households in Spain concerned by PAYT schemes is negligible. However, around 13% of households participate in selective waste collection.</p> <p>Catalonia:</p> <p>Although only very few municipalities have introduced PAYT schemes, all Catalan municipalities have implemented separate collection for glass, paper and packaging; in addition to this, 710 municipalities (from overall 946) have already implemented the separate collection of biowaste.</p> <p>The few PAYT experiences have been implemented in municipalities with Door to Door collection schemes, achieving significant levels of separate collection (>75-85%)</p>
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	All the schemes currently implemented are sack-based schemes
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	There is no legislation specifically requiring the implementation of PAYT schemes in Spain

Reference/source	Regional waste management agencies
Municipality of Esporles (Mallorca region)	
Nature of scheme	A sack based system in which householders buy pre-paid sacks for general household waste. The sacks are all of the same size.
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	The scheme combines a fix charge (€ 90/year/household) and a variable one, through the obligation to purchase bags at € 1 per bag.
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	<ul style="list-style-type: none"> - Exemption of up to 100% of the fix component depending on the level of income - Discounts of up to 20% for large households - Discounts of 30% conditioned to the use of other environmentally-friendly services (<i>Parque verde</i>)
Reference/source	<i>Esporles Recicla</i> , Forum citutada and Ajuntament d'Esporles, June 2009 (http://www.ajesporles.net/wms/ofo/imgdb//archivo_doc40792.pdf)
Municipalities of Miravet and Rasquera (Tarragona region)	
Nature of scheme	A sack based system in which householders buy different sized pre-paid sacks for general household waste. The sacks are differentiated per type of waste: sacks with capacity of 35 liters are available for packaging waste. Sacks for residual waste have a capacity of 17 liters.
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	The scheme combines a fix and a variable charge. The fix charge is set at € 40 per year for urban households and € 30 for rural ones. The variable charge is based on the purchase of sacks, at € 0,30 for packaging bags and € 0,70 for bags containing residual waste.
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	Reduced rate for the fix charge for rural households (€ 30 against € 40 for urban households).
Reference/source	<i>Gestores de residuos.org</i>
Municipality of Argentona (Barcelona region)	
Nature of scheme	A sack based system in which householders buy different sized pre-paid sacks for general household waste. The sacks are differentiated per type of waste: sacks with capacity of 35 liters are available for packaging waste. Sacks for residual waste have a capacity of 17 liters.
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	The scheme combines a fix and a variable charge. The fix charge is set at € 95 per year and per household. The variable component is based on the purchase of bags., at € 0,35 for packaging bags and € 0,65 for bags containing residual waste.
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	There exists some reductions on the fix part of the charge (low incomes situation and households with homecomposting)
Reference/source	http://www.progremit.cat/index.php/ca/prevencio/260 (in catalan language) Greenpeace Spain

25.3 Producer responsibility systems

Packaging, Deposit refunds	
Packaging waste management and reduction	
Year introduced	2003
Key Legislation	Law 11/1997 on Packaging and Packaging Waste.
Targets set for the scheme (including planned future targets)	<ul style="list-style-type: none"> • Recover between 50%-65% of which • 25%-45% is to be recycled. • Minimum 15% of each material.
Scope of scheme	
Principle	<p>If this latter figure is not reached, taxes will be applied. There are choices between deposit self-compliance and membership of a compliance scheme. Responsibility is on the last holders/ owners of commercial/ industrial waste. They can either have a take-back system or become a member of a compliance scheme. At regional and central level, financial or fiscal measures can be put in place to promote the packaging that responds to the Prevention Plan.</p> <p>The packaging companies that want to belong to Ecoembes's IMS in order to comply with the law, enter into a Membership Contract and fill in an annual return regarding the packing put on the Spanish market, from which their contribution to the IMS is deducted. Ecoembes uses these contributions to finance the extra-cost that the selective collection, transport, classification and subsequent recycling and recovery of the packaging waste means to the local authorities.</p>
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	The scheme is industry led
Reference/source	European topic centre on resource and waste management

25.4 Other interesting instruments

Licence fees for packaging	
Principle (one/two lines describing the instrument)	At regional and central level, financial or fiscal measures can be put in place to promote that packaging responds to the Prevention Plan.

Structure of incentive (how is it applied and at what levels?)	<p>Packaging material Tariffs in EUR/kg in 2005 (excl. VAT)</p> <p>Plastics 0.191</p> <p>Paper/cardboard 0.051</p> <p>Beverage cartons 0.156</p> <p>Steel 0.051</p> <p>Aluminium 0.081</p> <p>Wood 0.019</p> <p>Ceramics 0.014</p> <p>Glass: EUR/unit</p> <p>> 500ml 0.0078</p> <p>> 125 ml - < = 500 ml 0.0039</p> <p>< = 125 ml 0.00293</p> <p>Other materials 0.191</p> <p>Composite materials: That is, packaging made of 2 or more materials, that are originally separate but when they form the packaging are difficult for the final consumer to separate. From 2003 onwards it will always contribute as if it were entirely composed of the majority material.</p>
Scope (waste streams)	
Voluntary or mandatory/legislative?	Mandatory/legislative (but regions have the choice to opt for this scheme or not)
Geographical coverage	Regional and central level
Target group (e.g. consumer, households, business, manufacturer)	
Reference/source	Decree Law April, 1997; Decree of Transposition of the Directive, 1998; www.pro-e.org

ECONOMIC INSTRUMENTS IN SWEDEN

26.1 Fees for Waste Disposal and Treatment

26.1.1 landfill fees (and Bans)

Landfill tax	
Date of introduction	2000
Principle (one/two lines describing the instrument)	The landfill tax was introduced to reduce the amount of material landfilled.
Current levels of tax, and tax structure	49 €/tonne
Details of any exemptions	The ban on landfilling combustible wastes in 2002 was introduced to reduce environmental burdens and promote resource efficiency. A few years later a landfill ban on compostable waste was introduced, but exemptions are in place for waste with a Total Organic Content (TOC) of less than 10%.
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	See above
How has the tax changed over time?	2000: The tax was 250 SEK (28 €/tonne using current exchange rate) when introduced 2002: Tax Increased to 288 SEK (32 €/tonne) 2003: Tax increased to 370 SEK (42 €/tonne) 2006: Tax increased to 435 SEK (49€/tonne), which still stands.
Extent of geographical coverage	Whole of Sweden
Plans for future levels of the tax	
Reference/source	Avfall Sverige: http://www.avfallsverige.se/avfallshantering/svensk-avfallshantering/avfallsagenda/
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for landfilling (excluding landfill tax)	Landfill fees are estimated to be between 700 – 1200 SEK (78 € - 135 €).
Source of information	Avfall Svsrige: http://www.avfallsverige.se/avfallshantering/svensk-avfallshantering/avfallsekonomi/
Do sources give any explanation for key factors explaining variation?	
Information on Bans	

Wastes to which the ban is applied	Combustible waste and organic waste.
Date of introduction	2002 for combustible waste; 2006 for organic waste.
(Means of implementation)	
Plans for future bans (if any)	e.g. Under consideration in Scotland and Wales
Reference/source	http://www.wrap.org.uk/downloads/FINAL_Landfill_Bans_Feasibility_Research.fedf1ba.8796.pdf

26.1.2 Incineration fees (and Bans)

[Name of existing tax]	
Date of introduction	2006
Principle (one/two lines describing the instrument)	The Swedish energy policy heavily incentivises the use of waste as a source of energy for district heating systems. Most plants were operating in a heat only mode, so in 2006 an incineration tax with differentiable rates was introduced to give plants generating electricity as well a competitive advantage, but also overall to further promote materials recycling and MBT treatments.
Current levels of tax, and tax structure	The amount of the tax was calculated based on a model of the content of fossil material in the waste. For facilities without electrical production, the tax is € 49 (SEK 487) per tonne, which would then decrease with increased electricity production. At 15 per cent electricity production, the tax is approx. € 8.3 (SEK 83) per tonne, at 20 per cent approx € 7.6 (SEK 76) per tonne. After the introduction of the tax material recycling, including biological treatment, has increased from 34.6 per cent to 48.7 per cent and waste -to-energy has increased from 38.1 to 46.4 per cent. The incineration tax was abolished in October 2010.
Details of any exemptions	
Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	The incineration tax was abolished in October 2010.
Reference/source	A. Bjorklund and G. Finnveden (2007) Lifecycle Assessment of a National Policy Proposal – the Case of a Swedish Incineration Tax, Waste Management, Vol.27, Issue 8, pp.1046-58. Hogg, D. et.al (2009), International Review of Waste Management Policy; Annexes to main report

Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	
Source of information	
Do sources give any explanation for key factors explaining variation?	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	

26.2 PAY-AS-YOU-THROW SCHEMES

Overview of PAYT schemes in the MS	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	Bagged, mixed household waste are regularly collected close to the properties all over Sweden. Drop-off points for dry recyclables are available free of charge to the public all year round throughout the country, in line with the Ordinance on Producer Responsibility. Compostable waste is collected at the property, in a separate bin or bag, in about one third of all the Swedish municipalities. Among the municipalities employing weight-based billing only one in six collected compostables separately.
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	<p>Weight-based billing in household waste collection has been implemented in 26 municipalities of the 264 municipalities analysed as part of a recent study (there are 290 municipalities in total). These 26 municipalities correspond to 9% of the Swedish population. Most of the pay-by-weight schemes (82%) were introduced between 1995 and 1999, and the remainder (18%) between 2000 and 2005. 215 municipalities use volume based billing.</p> <p>The way in which the weight-based fee was determined varies between the 26 municipalities, and the cost to a house owner differs more than 100%, depending on the municipality. In all cases, the fee consists of a fixed cost combined with a flexible cost depending on the weight of waste collected. The fixed cost normally consists of a basic fee and a bin fee. In some cases, a fee is also charged per emptying occasion. The cost per kilogram varies from 1.10 SEK (€ 0.12) to 3.26 SEK (€ 0.36 USD) and the average is 2.12 SEK (€ 0.23).</p>
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	
Reference/source	Dahlén, L and Lagerkvist, A (2010) <i>Pay as you throw Strengths and weaknesses of weight-based billing in household waste collection systems in Sweden</i> , Waste Management 30 (2010) 23–31
Location of scheme (municipality where it is used)	

Nature of scheme	
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	
Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Reference/source	

26.3 PRODUCER RESPONSIBILITY SYSTEMS

Packaging, Taxes	
Date of introduction	
Principle (one/two lines describing the instrument)	
Scope of the tax	
Current levels of tax, and tax structure	
Details of any exemptions	
How has the tax changed over time?	
Plans for future levels of the tax	
Reference/source	
Packaging, Deposit refunds	
[Name of existing scheme]	
Year introduced	Deposit on one-way containers in 1984 and for PET in 1994
Key Legislation	Act for Producer responsibility for glass and cardboard packaging SFS 1993 1154
Targets set for the scheme (including planned future targets)	SFS 1982 349 required that aluminium cans be recycled at a rate of 90% or face a ban. The response by industry was to implement a voluntary deposit system for aluminium cans. In 1994, the government required that the minimum recycling rate for aluminium cans be raised to 90% and PET be 90%.
Scope of scheme	Deposit refund schemes are in place in Sweden for glass, PET and aluminium drinks containers. Both refillable and one-way containers are managed under the system. The legislation regarding container deposit systems was updated so that from January 1 2006 containers from other plastics and metals, e.g. steel cans, can be included in the deposit systems. The law also makes it illegal to sell consumption-ready beverages in containers that are not part of an authorized container deposit system, with the exception of beverages that mainly consist of dairy products or vegetable, fruit, or berry juice.

Principle	Both refillable and one-way containers are managed under the system. A number of materials-specialist companies manage the scheme, for example, Ab Svenska Returpack-Pet, Svenska Returglas 50-Cl Ab and Ab Svenska Returpack.
Level of payment to scheme	The following deposit fees are in place: Cans: €0.04; 0.33 L glass bottle: €0.05; 0.50 L glass bottle: €0.08; ≤ 1 L non-refillable PET bottle: €0.09; and > 1 L non-refillable PET bottle: €0.18.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	Go
Reference/source	http://www.bottlebill.org/legislation/world/sweden.htm http://www.bookrags.com/wiki/Container_deposit_legislation#Sweden
Packaging, Green Dot scheme	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Electrical and electronic equipment (EEE)	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
End-of-life vehicles (ELV)	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Batteries	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Paper/cardboard	

[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Other (if any)	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	

Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Reference/source	

26.4 OTHER INTERESTING INSTRUMENTS

e.g. Landfill Allowance Schemes	
Principle (one/two lines describing the instrument)	
Structure of incentive (how is it applied and at what levels?)	
Scope (waste streams)	
Voluntary or mandatory/legislative?	
Geographical coverage	
Target group (e.g. consumer, households, business, manufacturer)	
Reference/source	

ECONOMIC INSTRUMENTS IN THE UK

27.1 Waste Policy in the MS

Environment Protection Act 1990 <http://www.legislation.gov.uk/ukpga/1990/43/contents>

The EPA replaced the Control of Pollution Act 1974 (CoPA) and covers many environmental issues other than waste. The parts dealing with waste are largely a copy out of the CoPA and therefore not always a good fit with more recent concepts of sustainable waste management.

The EPA defines, amongst other things:

- a) the three sorts of controlled waste:
 - Household
 - Commercial; and
 - Industrial
- b) the types of waste authority and which has responsibility for what waste management duty. These are:
 - Waste Collection Authority – district or borough
 - Waste Disposal authority - county
 - (Unitary authorities have both responsibilities)
- c) the charges they can make for providing the collection and or disposal service; and
- d) the penalties for those who breach the conditions of service.

The EPA does not specify how a Waste Collection Authority (WCA) should fulfil its waste collection duties. When to collect, how often collections are made and how much resource to devote to collection are matters for the authority to decide. The WCA does not have to collect the waste itself; it can engage any number of third parties to do the work in any combination. These third parties can be waste contractors or voluntary groups provided they are suitably permitted by the Environment Agency.

Section 46 of the EPA provides powers to the WCA to help them facilitate waste collection. To use these powers a WCA must inform recipients of the service, before they come into effect, and of the conditions of that service. This is by way of a 'section 46 notice' which usually takes the form of a leaflet dropped through the door of all premises covered by the service. These include:

- specifying the size, type and number of receptacles to be used and who pays for them;
- specifying which materials should be placed in which receptacles and prohibit materials from being placed in any of the receptacles;
- requiring the waste to be treated before placing it in a receptacle (e.g. requirement to wash cans & jars); and
- specifying when and where receptacles are placed for collection.

Those who breach the conditions of a s.46 notice can be prosecuted under the EPA with a maximum penalty on conviction of £1,000. The **Clean Neighbourhoods and Environment Act** amended the EPA to allow WCAs to issue a fixed penalty notice (max £150) as an alternative.

Waste and Emissions Trading Act 2003 <http://www.legislation.gov.uk/ukpga/2003/33/contents>

Provides the statutory basis for the setting up of the Landfill Allowance Trading Scheme – the means by which local authorities in England contribute to meeting the EU Landfill Directive Targets.

Waste policy in the UK is devolved.

In England a Review of Waste Policy is underway and expected to be published in May/June 2011.

Administrations in Scotland and Wales have set recycling targets for household waste which are higher than those in the EU Waste Framework Directive:

- **Wales (proposed in 2009 – agreed??):** By 2025, a high recycling society of a least 70% recycling across all sectors (municipal, C&I and C&D), and diverting waste from landfill sites; reusing/recycling at least 85% of construction and demolition waste by 2010, and recycling/recovery/reuse 90% of non-hazardous (and inert) C&D waste by 2019/20. Residual waste target of 150kg per person by 2025. From (<http://wales.gov.uk/docs/desh/consultation/090429wasteconsultationen.pdf>):

TARGET FOR:	TARGETS FOR EACH TARGET YEAR				
	09/10	12/13	15/16	19/20	24/25
Minimum levels of reuse and recycling / composting (or AD)	40%	52%	58%	64%	70%
Minimum proportion of reuse/recycling/ composting that must come from source separation (kerbside, bring and/or civic amenity (CA) site)	80%	80%	80%	80%	80%
Minimum levels of composting (or AD) of source separated food waste from kitchens as part of the combined recycling/ composting target above	-	12%	14%	16%	16%
Maximum level of residual household waste per inhabitant per annum	-	295kg	258kg	210kg	150kg
Maximum level of landfill	-	-	-	10%	5%
Maximum level of energy from waste.	-	-	42%	36%	30%

- **Scotland:** 70% recycling and composting and maximum 5% to landfill by 2025 for ALL waste (NB waste collected from households rather than municipal waste collected by local authorities). Interim targets of 40% recycling/composting and preparing for reuse of waste from households by 2010, 50% by 2013, 60% by 2020 (WFD requires 50% by 2020).

Waste Management Plans are in place in England, Wales, Scotland and Northern Ireland, and at local authority level. In England the national waste management plan will be revised after the Review of Waste Policy has been concluded in May/June 2011.

England <http://www.defra.gov.uk/environment/waste/strategy/strategy07/>

Scotland <http://www.scotland.gov.uk/Topics/Environment/waste-and-pollution/Waste-1/wastestrategy>

Wales <http://wales.gov.uk/consultations/environmentandcountryside/wastestrategy/?lang=en>

Northern Ireland <http://www.doeni.gov.uk/nica/waste-home/strategy/ni.htm>

27.2 Waste management performance in the MS

In 2009/10 26.6 million tonnes of local authority collected waste was generated in England, with 38.6% of this being recycled and 46.9% being sent to landfill. Local authority collected waste data can be found at <http://www.defra.gov.uk/evidence/statistics/environment/wastats/index.htm>. This is available at national, regional and local authority level. The data is collected by the WasteDataFlow system which is available to the public at <http://www.wastedataflow.org/>.

The results of the 2009 survey of commercial and industrial waste in England are available at <http://www.defra.gov.uk/evidence/statistics/environment/waste/wrindustry.htm>. The final results table linked from this page has data at regional level and split by material type.

WRAP's 2008 construction and demolition waste report is available at http://www.wrap.org.uk/construction/halving_waste_to_landfill/12w21_why.html. This analysis is at national level.

27.3 Fees for Waste Disposal and Treatment

27.3.1 landfill fees (and Bans)

<http://www.defra.gov.uk/corporate/consult/waste-review/100729-waste-review-background.pdf>

Waste and Emissions Trading Act 2003 <http://www.legislation.gov.uk/ukpga/2003/33/contents>

Landfill tax	
Date of introduction	1 October 1996
Principle (one/two lines describing the instrument)	Initially, to internalise externalities of landfill. More recently, to encourage alternative means of managing waste. The Landfill Tax applies to all waste disposed of by landfill at a licensed landfill site on or after 1 October 1996, unless the waste is specifically exempt.
Current levels of tax, and tax structure	Standard rate of tax £48/tonne (€58.46), rising to £56/tonne in April 2011. This applies to all materials except those under the Landfill Tax (Qualifying Material) Order 1996. The tax will rise by £8 per tonne per year until it reaches £80/tonne in April 2014 (see below). Lower rate of tax £2.50 per tonne applies to inactive materials under the Landfill Tax (Qualifying Material) Order, namely: Rocks and soils, Ceramic or concrete materials, minerals, Furnace slags, ash, Low activity inorganic compounds, Calcium sulphate, Calcium hydroxide and brine, and water.
Details of any exemptions	Dredgings; mining and quarrying waste; pet cemeteries; material from the reclamation of contaminated land; lower-rated waste used for filling quarries; and waste from visiting NATO forces.
Level currently applied to residual municipal waste (or if e.g. stabilised waste, the level applied to this waste stream)	Standard rate of £48/tonne (€58.46) for active waste, and £2.50/tonne for inert/inactive waste (2010/11).

How has the tax changed over time?	<p>Initially, the active rate of tax stood at £7 per tonne. It was increased to £10 per tonne in 2000/01 and has increased over time through:</p> <p>a £1 per tonne escalator between 2000/01 and 2004/5;</p> <p>a £3 per tonne annual escalator from in 2004/5-2007/8; and</p> <p>a £8 per tonne escalator from 2007/8 to present (and into future).</p> <p>There was a one off increase in the lower rate in 2009/10 from £2 to £2.50.</p> <p>Some small changes to qualifying materials and exemptions have been made over time.</p> <h3>3 LANDFILL TAX RATES</h3> <table><thead><tr><th>Date of Change</th><th>Standard Rate (£ per tonne)</th><th>Low er Rate (£ per tonne)</th></tr></thead><tbody><tr><td>01.10.96</td><td>7</td><td>2</td></tr><tr><td>01.04.99</td><td>10</td><td>2</td></tr><tr><td>01.04.00</td><td>11</td><td>2</td></tr><tr><td>01.04.01</td><td>12</td><td>2</td></tr><tr><td>01.04.02</td><td>13</td><td>2</td></tr><tr><td>01.04.03</td><td>14</td><td>2</td></tr><tr><td>01.04.04</td><td>15</td><td>2</td></tr><tr><td>01.04.05</td><td>18</td><td>2</td></tr><tr><td>01.04.06</td><td>21</td><td>2</td></tr><tr><td>01.04.07</td><td>24</td><td>2</td></tr><tr><td>01.04.08</td><td>32</td><td>2.5</td></tr><tr><td>01.04.09</td><td>40</td><td>2.5</td></tr><tr><td>01.04.10</td><td>48</td><td>2.5</td></tr><tr><td>01.04.11</td><td>56</td><td>2.5</td></tr><tr><td>01.04.12</td><td>64</td><td>2.5</td></tr></tbody></table>	Date of Change	Standard Rate (£ per tonne)	Low er Rate (£ per tonne)	01.10.96	7	2	01.04.99	10	2	01.04.00	11	2	01.04.01	12	2	01.04.02	13	2	01.04.03	14	2	01.04.04	15	2	01.04.05	18	2	01.04.06	21	2	01.04.07	24	2	01.04.08	32	2.5	01.04.09	40	2.5	01.04.10	48	2.5	01.04.11	56	2.5	01.04.12	64	2.5
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01.04.11	56	2.5																																															
01.04.12	64	2.5																																															
Extent of geographical coverage	UK wide																																																
Plans for future levels of the tax	<p>Plans are for the standard rate to increase by £8 (£9.76) per annum to 2013/14, as follows:</p> <ul style="list-style-type: none">from April 2011 £56 per tonne;from April 2012 £64per tonne;from April 2013 £72 per tonne;from April 2014 £80 per tonne. <p>The coalition government Emergency Budget 2010 states that the rate will not fall below £80 per tonne until at least 2020.</p> <p>The lower rate is frozen at £2.50 per tonne until 31 March 2011.</p>																																																
Problems encountered/ solutions found/ lessons learned from implementation																																																	
Perceived costs (financial and administrative) of the instrument	£1.1bn financial cost of tax payment by businesses and local authorities. For wastes diverted from landfill, the assumed (additional) cost therefore lies in the range of £0 to £40/t in 2010 (i.e. assumes anything more expensive to divert is not done so as a result of the landfill tax).																																																

Reference/source	<p>CEWEP landfill taxes and bans (September 2010), http://www.cewep.eu/media/www.cewep.eu/org/med_557/529_cewep_-_landfill_taxes_and_bans_7september2010_web.pdf</p> <p>HM Revenue and Customs, http://customs.hmrc.gov.uk/channelsPortalWebApp/channelsPortalWebApp.portal?_nfpb=true&_pageLabel=pageExcise_ShowContent&id=HMCE_CL_001206&propertyType=document</p> <p>HM Revenue and Customs, http://customs.hmrc.gov.uk/channelsPortalWebApp/channelsPortalWebApp.portal?_nfpb=true&_pageLabel=pageExcise_ShowContent&propertyType=document&id=HMCE_CL_000509#P34_2843</p>
Information on Fees (please focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for landfilling (excluding landfill tax)	Across the UK, fees vary from £11 per tonne to £44 per tonne. The median figure is therefore £22 (€26.80) per tonne of waste.
Source of information	WRAP, Gate Fees Report 2010: Comparing the cost of alternative waste treatment options, http://www.wrap.org.uk/downloads/2010_Gate_Fees_Report.5bba6d82.9523.pdf
Do sources give any explanation for key factors explaining variation?	Generally the local availability of landfill void space (the level of competition in the market) is considered the strongest influence. Some evidence indicates that the costs of some alternative treatments are suppressing gate fee increases as the landfill tax rises.
Problems encountered/ solutions found/ lessons learned from implementation	n/a
Perceived costs (financial and administrative) of the instrument	n/a
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	None at the present time

Plans for future bans (if any)	<p>Public consultations were held in England/Wales and in Scotland in 2010 on whether to introduce landfill bans on specific waste streams.</p> <p>England: Government has stated that there are no plans to introduce such a ban in England, but rather to focus on diverting from landfill. The Review of Waste Policy in England, due to be published in May or June, will set out future policy on landfill bans in England.</p> <p>Wales: The Welsh Assembly Government is still considering introducing bans.</p> <p>Scotland: The Scottish Government will introduce progressive bans (through to 2020) on sending certain materials to landfill. An existing 25% cap on local authority collected municipal waste treated in EfW plants will be replaced after 2010 with landfill bans on mixed unsorted waste; mandatory pre-sorting of recyclable materials; a limit on the biodegradable content of waste that can be landfilled; and restrictions on what can be incinerated. Supporting regulations will also be introduced to drive separate collection (notably for food waste from households and businesses, and paper/card, metals, plastics, textiles and glass from all sources) and treatment, maximise reuse and recycling value, and generate market supply. The initial focus is planned to be on separate collection of food waste. The possible timeline below for the development of sorting requirements and bans was included in the Zero Waste Plan for Scotland (2010):</p>
Problems encountered/ solutions found/ lessons learned from implementation	n/a
Perceived costs (financial and administrative) of the instrument	n/a
Sources	<p>Defra, Summary of responses to the consultation on the introduction of restrictions on the landfilling of certain wastes, September 2010, http://www.defra.gov.uk/corporate/consult/landfill-restrictions/20100318-landfill-restrictions-condoc-summary.pdf</p> <p>A Zero Waste Plan for Scotland, 2010 http://www.scotland.gov.uk/Resource/Doc/314168/0099749.pdf</p>

27.3.2 Incineration fees (and Bans)

[Name of existing tax]	None
Date of introduction	
Principle (one/two lines describing the instrument)	N/A
Current levels of tax, and tax structure	
Details of any exemptions	

Level currently applied to residual municipal waste (or to other waste streams where applicable, e.g. prepared solid recovered fuel (SRF))	
How has the tax changed over time?	
Extent of geographical coverage	
Plans for future levels of the tax	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Information on Fees (focus on fees applied to residual municipal waste; please clarify if the fee is applied to any other type of waste)	
Range of fees for incineration (excluding incineration tax)	<p>Across the UK, fees vary from £32 per tonne to around £120 per tonne.</p> <p>Existing facilities charge between £32 and £79 (median £49) per tonne.</p> <p>According to Defra information on planned facilities currently in procurement via PPP/PFI, planned facilities will charge between £76 and £151 per tonne (£128 to £151 for 50kt-100kt facilities; £78 to £109 for 200kt-300kt; and £76+ for 400kt-600kt).</p> <p>The report cited below gives a best current market estimate of £85 to £120 per tonne.</p>
Source of information	<p>WRAP, Gate Fees Report 2010: Comparing the cost of alternative waste treatment options, http://www.wrap.org.uk/downloads/2010_Gate_Fees_Report.5bba6d82.9523.pdf</p>
Do sources give any explanation for key factors explaining variation?	<p>Older incinerators have lower gate fees. Of the newer generation, larger facilities have slightly lower gate fees. Some evidence is now emerging of contracts being awarded for excess capacity at UK incinerators, and these appear to be around £40 per tonne. These contracts may be shorter-term than those agreed with procuring municipalities.</p>
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Information on Bans	
Wastes to which the ban is applied	
Date of introduction	
(Means of implementation)	
Plans for future bans (if any)	<p>The Scottish Government has just held a consultation (closed 28 Feb 2011) to help develop the proposed Zero Waste (Scotland) Regulations 2011. The consultation proposes restricting (through environmental permits) inputs to energy-from-waste (EfW) facilities (not AD facilities) to ensure they are pre-treated to remove waste materials that could be reused or recycled.</p>

Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	

27.4 Pay-as-you-throw schemes

Overview of PAYT schemes in the MS Para 72 of the Climate Change Act 2008 (http://www.legislation.gov.uk/ukpga/2008/27/part/5) allowed for up to 5 local authorities to set up pilot 'waste reduction schemes' (including PAYT), but none were set up. The Coalition Government does not back the idea of PAYT but does support the idea of 'recycling reward schemes'. http://www.rbwm.gov.uk/web/wm_recyclebank.htm Zero Waste Scotland, in cooperation with local authorities, will review the success of measures to influence waste behaviours, including incentives, and from the results of the review, encourage the development of schemes to drive reductions in waste and improvements in recycling performance. (A Zero Waste Plan for Scotland, 2010)	
What proportion of households in the MS pay for their waste services through PAYT schemes? (or what proportion of municipalities make use of such schemes)	No households in England are subject to A PAYT scheme.
What proportion of these households (or schemes) use sack/volume of bin/frequency/weight based systems?	
Is there legislation/are there regulations which require the use of PAYT schemes? If so, please describe briefly .	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Location of scheme (municipality where it is used)	
Nature of scheme	
Structure of charge (NB It is important to describe the parts of the kerbside service which are NOT charged for as well as those that are.)	

Are there any exemptions or discounts (e.g. are there lower prices for low-income families)?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	

27.5 Producer responsibility systems

Scotland: The Scottish Government was due to commission a study in 2010 into the implementation of producer responsibility in Scotland (including plastic bags, EEE, batteries, and packaging) to determine how revisions could be made to drive waste prevention and recycle markets. The study was due to explore options for extended producer responsibility and take-back schemes.

Packaging, Taxes		None
Date of introduction		
Principle (one/two lines describing the instrument)		N/A
Scope of the tax		
Current levels of tax, and tax structure		
Details of any exemptions		
How has the tax changed over time?		
Plans for future levels of the tax		
Problems encountered/ solutions found/ lessons learned from implementation		
Perceived costs (financial and administrative) of the instrument		
Reference/source		
Packaging, Deposit refunds		None
[Name of existing scheme]		
Year introduced		
Key Legislation		
Targets set for the scheme (including planned future targets)		

Scope of scheme	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Packaging, Packaging Recovery Note system (Green Dot scheme)	
Multiple schemes	
Year introduced	August 1997
Key Legislation	The Producer Responsibility Obligations (Packaging Waste) Regulations 2007
Scope of the scheme	<p>The UK system requires all business with a turnover of more than £2m p.a. and handle more than 50t of packaging to register with the relevant environment agency and recover a proportion of the packaging handled.</p> <p>The UK system makes no distinction between household, commercial, or industrial packaging. All schemes look after all types of packaging.</p>
Targets set for the scheme (including planned future targets)	All producers are subject to the prevailing UK business recovery and recycling targets, which are currently set to deliver the EU targets
Principle	<p>The UK does not operate a "Green Dot Scheme" along the lines of its European counterparts. The UK Government and packaging industry developed a market based system to achieve low cost compliance with the Packaging Directive targets. Obligated businesses are required to ensure that the relevant amounts of packaging waste are recovered or recycled and to purchase evidence of compliance in the form of Packaging Waste Recovery Notes (PRN) and Packaging Waste Export Recovery Notes (PERNs). These evidence notes are issued by accredited packaging waste reproducers and exporters, respectively. In the UK all participants in the chain, who meet the threshold tests described above, share the statutory responsibility.</p> <p>The system is open to competition and there are a number of "compliance schemes" operating in the UK. Obligated companies must either register with a "compliance scheme", or register directly with the Environment Agency or Scottish Environment Protection Agency or, in Northern Ireland, the Northern Ireland Environment Agency.. There are currently 42 schemes in operation in the UK.</p> <p>The use of the trademark is licensed in the UK for those organisations wishing to display the emblem but the use of the mark is not obligatory. Management of the trademark is carried out by the Green Dot Licensing Company, a subsidiary of a registered compliance scheme Valpak, and similar licensing arrangements are open to other compliance schemes for their own membership. Membership is open to all types of obligated companies (manufacturers, converters, packer/fillers, sellers, industry).</p>

Level of payment to scheme	<p>The Producer Responsibility Obligations (Packaging Waste) Regulations 2007 place an obligation on companies who handle more than 50 tonnes of packaging a year and have an annual turnover of more than £2million to ensure that a proportion of the packaging they handle is recovered and recycled.</p> <p>To show they have discharged this legal obligation, businesses obtain evidence in the form of Packaging Waste Recovery Notes (PRNs) and Packaging Waste Export Recovery Notes (PERNs). These evidence notes are issued by accredited packaging waste reproprocessors and exporters, respectively. An accredited reproprocessor/exporter can issue PRNs/PERNs to the amount of waste reprocessed (e.g. 100 tonnes of steel reprocessed allows the reproprocessor to 'sell' 100 PRNs in steel).</p> <p>The evidence notes have two functions. Firstly, they are a 'counting tool' for the amount of recovery/recycling undertaken on the behalf of producers. Secondly, they are a way to channel producer funding to recycling/recovery operations.</p> <p>As this is a market mechanism, the price of PRN/PERNs varies depending on the availability of evidence. Proceeds from the sale of PRNs/PERNs to producers are intended to finance improvements in the collection and reprocessing infrastructure across the UK. Historically, this has been between £40-80m per annum.</p>
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	No. The UK system was not intended to cover the full cost of collection, recovery and recycling. The additional funding derived from PRN/PERN revenue was intended to act as an incentive to ensure that recovery and recycling targets are met, but not to cover the full cost of the system.
Producer-led/funded or government-led/funded?	<p>The responsibility is shared.</p> <p><i>(A Packaging Recycling Advisory Group, a joint initiative between retailers, local and national government, reproprocessors, the packaging industry and others was set up to improve the level and consistency of packaging recycling in the UK.)</i></p>
Problems encountered/ solutions found/ lessons learned from implementation	The UK system was not established to cover the full cost of collection and recovery of packaging waste, so there has been criticism from Local Authorities who still bear some of the cost of collection of household packaging.
Perceived costs (financial and administrative) of the instrument	There is an annual cost to obligated producers associated with the acquisition of PRN/PERNs. As this is a market instrument, that cost will fluctuate.
Source	http://www.defra.gov.uk/environment/waste/producer/packaging/index.htm http://www.pro-e.org/united_kingdom1.htm
Electrical and electronic equipment (EEE)	
Distributor Takeback Scheme (DTS) – run by Valpak	
Year introduced	5 April 2007 (phase 1 ran from 2007-9; phase 2 runs from 2010-12)
Key Legislation	Waste Electrical and Electronic Equipment Regulations 2006, made on 11 December 2006, became law 2 January 2007, http://www.valpak.co.uk/docs/weee/weee_guidance.pdf
Scope of the scheme	All categories of WEEE as defined by the WEEE Directive. Membership of the scheme covers around 75% of all UK sales of EEE.
Targets set for the scheme (including planned future targets)	
Principle	This is the only WEEE distributor takeback scheme in the UK; it is operated by Valpak. It allows distributors (retailers) to meet their obligations under the UK WEEE Regulations. The DTS is also responsible for collating and maintaining a register of Designated Collection Facilities (DCFs). Joining the scheme exempts retailers from having to offer in-store take back. Distributors that choose not to join the DTS must offer a free collection or in store waste return system to all customers at the completion of each and every sale.

Level of payment to scheme	<p>Fees are based on total sales value of EEE from Oct 2008-Sept 2009: Band A retailers = sales greater than £1.5m; Band B = between £100k and £1.5m; Band C = between £0 and £100k.</p> <p>The initial setup costs of the DTS were met in Phase 1, so the cost to organisations of rejoining ('retention fees') the DTS in phase 2 was significantly lower than the cost of joining in phase 1. The 'retention fees' for Phase 2 were therefore:</p> <table><tr><th>membership status</th><th>Band A</th><th>Band B</th><th>Band C</th></tr><tr><td>Rejoining member</td><td>Phase 2 'per unit' fee + 14.75% operational costs</td><td>£150 retention fee + £37.50 op. costs</td><td>£50 retention fee + £25 op. costs</td></tr><tr><td>Late to rejoin</td><td>phase 2 unit fee plus 20%</td><td>£300</td><td>£150</td></tr></table> <p>Retention fees for members in band A in phase 2 detailed below:</p> <table><tr><th>Material type</th><th>Equipment category A</th><th>Band A retention fees (£) per unit sold (01/10/08 - 30/09/09)</th><th>Band A retention fees (£) including operating fees</th></tr><tr><td>Fridges and freezer</td><td>1b</td><td>0.148</td><td>0.170</td></tr><tr><td>Other white goods (non-refrigeration)</td><td>1a</td><td>0.0607</td><td>0.0696</td></tr><tr><td>Televisions and monitors</td><td>4b, 3b</td><td>0.0537</td><td>0.0616</td></tr><tr><td>Lighting</td><td>5</td><td>0.000864</td><td>0.000992</td></tr><tr><td>All other EEE</td><td>2, 3a, 4a, 6, 7, 8, 9,10</td><td>0.00198</td><td>0.00227</td></tr></table> <p>Fees for members joining for the first time in Phase 2 are comparable to those for Phase 1 (the fees will be passed to local authorities and other collectors to assist with special projects aimed at increasing the quantities of WEEE collected):</p> <table><tr><th>membership status</th><th>Band A</th><th>Band B</th><th>Band C</th></tr><tr><td>new to market</td><td>n/a</td><td>£750</td><td>£200</td></tr><tr><td>existing retailer (new to DTS)</td><td>Phase one 'per unit' fee plus 10% premium</td><td>£825</td><td>£225</td></tr></table>	membership status	Band A	Band B	Band C	Rejoining member	Phase 2 'per unit' fee + 14.75% operational costs	£150 retention fee + £37.50 op. costs	£50 retention fee + £25 op. costs	Late to rejoin	phase 2 unit fee plus 20%	£300	£150	Material type	Equipment category A	Band A retention fees (£) per unit sold (01/10/08 - 30/09/09)	Band A retention fees (£) including operating fees	Fridges and freezer	1b	0.148	0.170	Other white goods (non-refrigeration)	1a	0.0607	0.0696	Televisions and monitors	4b, 3b	0.0537	0.0616	Lighting	5	0.000864	0.000992	All other EEE	2, 3a, 4a, 6, 7, 8, 9,10	0.00198	0.00227	membership status	Band A	Band B	Band C	new to market	n/a	£750	£200	existing retailer (new to DTS)	Phase one 'per unit' fee plus 10% premium	£825	£225
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Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	<p>The phase 2 fee for 'operational costs' covers the costs incurred by Valpak in running the scheme. All other funds raised are made available for local authorities operating Designated Collection Facility (DCF) sites to assist with the provision of these facilities. Funds will be distributed on the following basis:</p> <ul style="list-style-type: none">£1,000 by 31 March 2010 to every eligible DCF site;funding of between £6,000 and £9,000 for new or replacement sites that register as DCFs;funding for existing civic amenity (CA) sites registered as DCFs if they wish to add hitherto uncollected streams of WEEE (to the value of £1,200 per added stream);possible additional funding during 2011 and 2012 depending on the level of uptake of the DTS by the retail sector. <p>Valpak must produce a report by September 2012 assessing overall success of DTS Phase 2 and identifying examples of good practice deployed by local authorities resulting in increased WEEE collection rates.</p>																																																
Producer-led/funded or government-led/funded?	Valpak was appointed by the Government to operate the DTS.																																																
Problems encountered/ solutions found/ lessons learned from implementation																																																	

Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.valpak.co.uk/dts/
REPIC (Recycling Electrical Producers' Industry Consortium) One of approx 30 WEEE Producer Compliance Schemes Operating in the UK	
Year introduced	January 2004
Key Legislation	n/a
Scope of the scheme	REPIC members currently represent over 80% by weight of the electrical and electronic products sold annually in the UK. REPIC provides national WEEE compliance solutions to large, medium and small obligated companies from the producer and retail sectors and for all categories of WEEE.
Targets set for the scheme (including planned future targets)	Not targets as such, but in 2005 (prior to the scheme starting to function) it was expected to collect the following amounts of WEEE: Cooling appliances – approx 150,000 tons Other large domestic appliances – approx 500,000 tons CRT's - TV's and monitors – approx 100,000 tons Small domestic appliances and mixed – approx 200,000 tons Lighting – approx 5,000 tons
Principle	REPIC is a producer compliance scheme in the form of a not-for-profit company established by three of the main trade associations in the electrical and electronics industry (AMDEA, SEAMA and Intellect), to meet their WEEE Directive producer obligations. REPIC aims to provide maximum WEEE compliance for its members at lowest achievable cost consistent with excellent environmental performance. It offers: cradle to grave tracking and reporting of WEEE collected and treated to provide auditable compliance; provision of regular information on WEEE collected, cost updates and forecasts; a national WEEE take-back solution for retailers (alternative to joining the Distributor Take-back Scheme)
Level of payment to scheme	System financed by its members who pay REPIC according to their market share within the individual WEEE category.
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	REPIC aims for 'Low Cost Compliance', only charging for the costs of WEEE returned, not EEE sold.
Producer-led/funded or government-led/funded?	REPIC was established by three of the main trade associations in the electrical and electronics industry (AMDEA, SEAMA and Intellect) to meet their WEEE Directive obligations.
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.weee-forum.org/att/members/info_Repic%202020(LUX)_46.pdf http://www.replic.co.uk/ http://www.bis.gov.uk/weee
End-of-life vehicles (ELV)	
[Name of existing scheme]	
Year introduced	2005
Key Legislation	End of Life Vehicles (Producer Responsibility) Regulations 2005

Scope of the scheme	The Autogreen and Cartakeback schemes act on behalf of vehicle manufacturers and ensure that consumers have adequate access to vehicle recycling facilities and that the recycling targets are met.
Targets set for the scheme (including planned future targets)	The reuse, recycling and recovery target currently stands at 85% and is due to rise to 95% from 2015.
Principle	Both the Autogreen and Cartakeback schemes are voluntary, providing a service provision function to vehicle manufacturers who face statutory obligations to maintain a network of facilities to treat their vehicles at end of life at no cost to the last owner, and for ensuring that the required targets are met.
Level of payment to scheme	These are voluntary schemes with the charges agreed on a commercial basis between vehicle manufacturers and the two service providers
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	Last owners have an absolute right for their vehicle to be treated at no charge to them. Because of robust scrap metal prices, the inherent value of the scrap car almost always adequately covers collection and treatment costs. In some remote areas of the UK (e.g. parts of Scotland) collection costs are higher, but these costs are covered as part of the arrangement between vehicle manufacturers and service providers in respect of the total service provided.
Producer-led/funded or government-led/funded?	Producer-led
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	www.autogreen.org.uk www.cartakeback.com
Batteries	
Arrangements are in place to implement the EU Batteries Directive in respect of industrial, automotive and portable batteries and accumulators.	
Year introduced	2009
Key Legislation	The Waste Batteries and Accumulators Regulations 2009
Scope of the scheme	BatteryBack has 53 producer members. The five other battery compliance schemes have 370 members between them.
Targets set for the scheme (including planned future targets)	By 2012, 25% of all batteries placed on the market by the schemes members have to be collected and recycled to the required standards dependant on chemistry. From 2016, the target rises to 45%.
Principle	Producers placing more than a tonne of portable batteries on the market are required to join a compliance scheme. The compliance scheme has a legal obligation to ensure that it collects sufficient batteries based on their members activities to ensure the collection target can be met, and for ensuring that all batteries collected are delivered into appropriate battery recycling facilities.
Level of payment to scheme	Compliance schemes are in competition with each other for members, and have complete commercial freedom on the setting of their prices. Compliance schemes pay an annual subsistence charge of £117,000 to the environmental regulator plus £680 for each of their scheme members.

Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	Producers are under an obligation to fund the net costs arising from the collection, treatment and recycling of their battery share.
Producer-led/funded or government-led/funded?	Producer-led
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	http://www.valpak.co.uk/batteries/
Paper/cardboard	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Other (if any)	
[Name of existing scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	

Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	
Planned future schemes (if any)	
[Name of planned future scheme]	
Year introduced	
Key Legislation	
Scope of the scheme	
Targets set for the scheme (including planned future targets)	
Principle	
Level of payment to scheme	
Is there an estimate of the extent to which the scheme covers all of the costs of collection, recycling and recovery?	
Producer-led/funded or government-led/funded?	
Problems encountered/ solutions found/ lessons learned from implementation	
Perceived costs (financial and administrative) of the instrument	
Reference/source	

27.6 Other interesting instruments

e.g. Landfill Allowance Schemes

Principle (one/two lines describing the instrument)	The Landfill Allowance Scheme in England (see below for schemes in the Devolved Administrations) is a cap and trade scheme. Local authorities are allocated a set number of allowances which limits the amount of Biodegradable Municipal Waste they can send to landfill. They can sell or buy allowances with other authorities depending on whether they have a surplus or deficit of BMW.
Structure of incentive (how is it applied and at what levels?)	The price of allowances in England is determined by the market price. Northern Ireland allow free trades of allowances between authorities. Scotland and Wales have no trading.
Scope (waste streams)	Biodegradable Municipal Waste
Voluntary or mandatory/legislative?	Targets are mandatory but the landfill schemes in England and the Devolved Administrations operate on a different basis . See above.
Geographical coverage	Landfill Schemes operate in England and the Devolved Administrations
Target group (e.g. consumer, households, business, manufacturer)	Local Authorities
Problems encountered/ solutions found/ lessons learned from implementation	The Market Price for allowances in England has not been as high as envisaged when the scheme started. However, as it is a market system Defra has not intervened in the situation. LATS has been seen by local authorities as a barrier to the integration of their household and commercial waste collections. The former is a statutory duty that they have to collect. The latter only becomes a duty when they are asked to collect by the business. Defra is looking at ways of addressing this.
Perceived costs (financial and administrative) of the instrument	The cost of purchasing allowances is based on the market price. The average price in 2009/10 was £16, however in future years the rising landfill tax leads would lead to a decrease in the price of allowances.
Reference/source	