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**REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE  
COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE  
COMMITTEE OF THE REGIONS**

**on the implementation of EU waste legislation for the period 2010-2012**

**Implementation of Directive 2008/98/EC on waste, Directive 86/278/EEC on sewage  
sludge, Directive 1999/31/EC on the landfill of waste, Directive 94/62/EC on packaging  
and packaging waste, Directive 2002/96/EC on waste electrical and electronic equipment  
(WEEE), and Directive 2006/66/EC on batteries and accumulators**

# **REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS**

## **on the implementation of EU waste legislation for the period 2010-2012**

### **1. INTRODUCTION**

This report provides information about the implementation of the following waste directives over the period 2010-2012:

- Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain directives (the Waste Framework Directive (WFD));
- Council Directive 86/278/EEC of 12 June 1986 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture (the Sewage Sludge Directive);
- Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste (the Landfill Directive);
- European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste (the Packaging and Packaging Waste Directive);
- Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (the WEEE Directive);
- Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC (Text with EEA relevance) (the Batteries Directive).

The report is based on information Member States provided in their replies to the implementation questionnaires. In cases in which Member States did not provide the information requested, the report draws on other available sources of information such as European Environment Agency reports, information from Member State websites and replies submitted for previous reporting periods. Detailed information on the implementation of individual directives can be found at: <http://ec.europa.eu/environment/waste/reporting/index.htm>.

## 2. TIMELINESS AND QUALITY OF REPORTING

Of the 27 Member States under the obligation to report,<sup>1</sup> most have submitted replies to the implementation questionnaires for the directives this report covers. Member States could better fulfil their reporting obligations, by providing reports on time, answering all the questions and giving complete information. Annex 1 gives an overview of the reports provided.

The quality and level of detail of reporting and of the information provided varied considerably. Unclear, vague answers were repeatedly provided. For instance, answers frequently only referred to national legislation or to answers given in previous reporting periods, without providing further information on the implementation of the directives on the ground, even when this was explicitly requested.

When asked to provide statistical data and data on compliance with targets set in the directives, most Member States referred to the annual reports submitted to Eurostat.<sup>2</sup>

## 3. DIRECTIVE 2008/98/EC ON WASTE

Member States had to transpose the new Waste Framework Directive by 12 December 2010 at the latest. At the time of reporting all Member States had either transposed it or were in the process of doing so.

Compared to the previous reporting period, municipal waste generation per capita was lower, the landfill of municipal waste had decreased and recycling and incineration with energy recovery had increased. By the end of 2012, at least half of the Member States reached or exceeded the 2020-target of preparing for re-use and recycling 50 % of household and similar waste or were well on track to reach them by then. Seven Member States reported that by 2012 they had already reached or exceeded that target. Seven other Member States reported that they had prepared for re-use and recycled more than 40 % of household and similar waste.

A number of Member States submitted data on the recovery rates of construction and demolition waste for 2010-2012. Fourteen Member States reported that they had already reached or exceeded the target of recovering 70 % of construction and demolition waste.

Most Member States have published waste prevention programmes. Eight Member States were still updating their waste management plans in line with the requirements of the Waste Framework Directive. Member States have incorporated the principles of extended producer responsibility, self-sufficiency and proximity and the polluter pays principle, along with the TEEP requirements,<sup>3</sup> into national legislation and policy.

There are significant shortcomings in the application of EU waste legislation to waste management in a number of Member States that still largely rely on landfilling of municipal

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<sup>1</sup> Croatia became a Member State of the European Union (EU) on 1 July 2013. It was therefore not required to implement these directives during the reporting period. However, it submitted replies to Implementation Questionnaires 2010-2012 for the Waste Framework, Packaging and Packaging Waste and Sewage Sludge Directives and the information provided is included in this report.

<sup>2</sup> <http://ec.europa.eu/eurostat/web/environment/waste/database>.

<sup>3</sup> Meaning that waste shall be collected separately if this is technically, environmentally and economically practicable (Article 10 WFD).

waste. The Commission has developed targeted advice on the implementation of specific measures and the use of European funds to help these Member States improve their waste management.<sup>4</sup>

#### **4. DIRECTIVE 86/278/EEC ON SEWAGE SLUDGE**

The Sewage Sludge Directive has been in force for almost three decades and its implementation remains unproblematic. Little has changed since the previous reporting period.

During the reporting period not all Member States used sewage sludge for agricultural purposes. In some Member States there is no or very little agricultural use of sludge. One Member State reported that it has begun to use sewage sludge for agricultural purposes.

All Member States have put sludge treatment infrastructure in place and reported on the methods of treating sewage sludge before it is applied to land.

The performance of Member States varies greatly with regard to the requirement to set frequencies for the testing of soil on which sludge is used. Some Member States have stipulated times at which soil should be analysed subsequent to initial applications of sludge. Other Member States have set frequencies as long as 10 or even 20 years. Others have not set frequencies, requiring soil testing only if it is expected that the limit values will be exceeded.

The data the Member States have provided on sludge produced and used in agriculture confirm that this remains one of the predominant uses. Although the generation of sludge was reduced by 2 % between 2010 and 2012 compared to between 2007 and 2009, the Member States reported that almost the same amount of sludge was used in agriculture as in the previous period.

This corresponds to approximately 45 % of the amount of sludge produced.

#### **5. DIRECTIVE 1999/31/EC ON THE LANDFILL OF WASTE**

The Landfill Directive has been in force for a long time and there has been little change since the previous reporting period

Member States have taken measures to minimise or eliminate waste to landfill. The landfill of municipal waste in the EU-27 has decreased from a total of 96,055 million tonnes/193 kg per capita in 2009 to a total of 78,036 million tonnes/152 kg per capita in 2012. The average rate of landfilling of the total waste generated decreased to 32 % in 2012. Some Member States reported landfilling rates for municipal waste below 5 % in 2012. In a number of Member States, however, landfilling is still the predominant municipal waste treatment operation, with landfilling rates of more than 80 % of the total waste generated. These Member States have a lot to do to reduce landfilling.

Most Member States reported a year-by-year reduction of landfilling of biodegradable municipal and other biodegradable waste. The completeness of the data submitted varies however.

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<sup>4</sup> [http://ec.europa.eu/environment/waste/framework/support\\_implementation\\_1st\\_phase.htm](http://ec.europa.eu/environment/waste/framework/support_implementation_1st_phase.htm).

Member States have taken measures to provide for the collection, treatment and use of landfill gas and to minimise nuisances and hazards.

They have also transposed the requirement for waste acceptance criteria into their national legislation, including technical requirements such as the monitoring of leachate, surface water, ground water and gas emissions. Data on the practical enforcement of these requirements by landfill operators were not always provided however.

Fifteen Member States reported that all of their hazardous waste landfills meet the requirements of the directive and seven reported that they still had non-compliant landfills. Eleven Member States reported that all non-hazardous waste landfills comply with the directive and 10 Member States reported that they still had non-compliant landfills. Ten Member States reported that all inert waste landfills comply with the directive and eight Member States reported that they still had such non-compliant landfills.

The number of non-compliant landfills in operation for all waste streams (hazardous, non-hazardous and inert) remains a matter of concern in certain Member States. This was also the case in the previous reporting period. A lot needs to be done to tackle the problem.

## **6. DIRECTIVE 94/62/EC ON PACKAGING AND PACKAGING WASTE**

The Packaging and Packaging Waste Directive has been in force for more than twenty years and there has been little change since the previous reporting period.

Member States have taken action to prevent the generation of packaging waste through a variety of measures. These include prevention plans, producer responsibility schemes, taxation measures, pay as you throw systems, green public procurement, information and awareness-raising campaigns, eco-design and action plans for key industries. Between 2010 and 2012, the amount and composition of packaging and packaging waste reported remained stable, with the reported amount of packaging waste being generated across the EU-27 increasing by 0.16 % during that period.

Most Member States have taken a variety of measures to encourage re-use. These include deposit and return systems for specific types of packaging, taxation measures, obligations to offer products in reusable packaging, promoting re-use in waste plans and as waste prevention measures, and information and awareness-raising measures. Some Member States have introduced, or plan to introduce, new deposit refund systems.

The vast majority of Member States reached the targets for the overall recovery and recycling of packaging waste and the material-specific recycling targets.

In general, Member States' performance improved slightly for recovery (from 76.3 % in 2010 to 78.5 % in 2012) and recycling (from 63.3 % in 2010 to 64.6 % in 2012).

Most Member States oblige producers to collect packaging waste for recovery and recycling. Packaging producers fulfil their obligations by setting up their own take-back schemes or by participating in a scheme covering the return, collection, re-use, recycling or other recovery of packaging waste. Some Member States have made progress by expanding existing collective packaging waste management schemes or by setting up additional return schemes and increasing the number of collective compliance schemes for packaging waste.

Most Member States reported the existence of national standards for the maximum concentration levels of heavy metals in packaging. Based on Commission Decision 2009/292 EC of 24 March 2009, a derogation for plastic crates and plastic pallets from the heavy metal

concentration levels set out in the Packaging and Packaging Waste Directive is in place. Despite the obligation to report on the functioning of the system provided for in this decision and on progress made in phasing out plastic crates and plastic pallets with too high a concentration of heavy metals, no Member State provided any information about this.

## **7. DIRECTIVE 2002/96/EC ON WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)**

The current reporting exercise covers the old WEEE Directive. Directive 2012/19/EU has since replaced it.

All Member States have set up collection systems and introduced measures concerning the environmentally sound treatment of WEEE and measures ensuring financing by producers of the collection, treatment, recovery and environmentally sound disposal of WEEE from private households. They have also introduced measures to ensure that producers provide consumers and the WEEE treatment facilities with relevant information.

More WEEE was collected, re-used/recycled and recovered between 2010 and 2012 than during the previous reporting period.

The amount of WEEE collected from private households across the EU-27 increased from 2.97 million tonnes by the end of 2009 to 3.02 million tonnes by the end of 2012. During this period, 17 Member States reached the collection target of 4 kg per inhabitant of WEEE from private households.

Most Member States reached the directive's category-specific targets for re-use/recycling and recovery, with rates improving over the reporting period. The highest rates were reported for consumer equipment and small household appliances. With regard to consumer equipment, 26 Member States reached the 65 % re-use/recycling target and the 75 % recovery target. These Member States also reached the 50 % re-use/recycling target and the 70 % recovery target for household appliances. The number of Member States that reached these targets was slightly higher than in the previous reporting period, although the list of Member States changes with each category of WEEE. The number of Member States that reached the category-specific targets for re-use and recycling fell slightly for only a few categories of WEEE.<sup>5</sup>

## **8. DIRECTIVE 2006/66/EC ON BATTERIES AND ACCUMULATORS**

This was the first time Member States were required to report to the Commission on the Batteries Directive. It is therefore not possible to compare with the previous reporting period.

All Member States have transposed the requirements of the Batteries Directive into national legislation.

Most Member States set up collection schemes for batteries and accumulators in the reporting period and a few reported that they were still making these schemes fully operational.

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<sup>5</sup> In 2009, 26 Member States reached the targets for the re-use and recycling of waste electrical and electronic tools. In 2012, 25 Member States reached these targets. In 2009, 24 Member States reached the targets for the re-use and recycling of waste gas discharge lamps. In 2012, 23 Member States reached these targets. In 2009, 26 Member States reached the target for the recovery of waste electrical and electronic tools. In 2012, 25 Member States reached these targets.

Member States have measures in place for the treatment and recycling of waste batteries and accumulators.

Member States reported that they had put in place a range of measures to prevent waste batteries and accumulators being sent to landfill, such as permit systems and lists of types of waste prohibited from landfilling. Eleven Member States reported to have put in place measures going beyond the obligations of the directive. These include minimising the disposal of waste from industrial and automotive batteries and accumulators as mixed municipal waste, awareness-raising campaigns in schools and communities and making collection points for free take-back available.

By 26 September 2012 20 Member States had reached the minimum collection target of 25 %.

Four Member States reported that they had achieved 100 % recycling and eight Member States reported rates between 50 % and 99 %.

Nineteen Member States reached and/or exceeded the recycling efficiency rates for lead-acid, nickel-cadmium and other batteries and accumulators. Two Member States reached and/or exceeded the rates for lead-acid and other batteries and accumulators and two Member States reached and/or exceeded them for lead-acid batteries and accumulators only.

Two Member States exported waste batteries and accumulators to third countries. A number of Member States exported them to other Member States, something the implementation questionnaire doesn't fully convey. Member States without any domestic treatment or recycling facilities exported all of their collected batteries and accumulators. However, a number of Member States with domestic treatment facilities also reported that they had exported their waste batteries and accumulators for treatment elsewhere in the EU.

## **9. CONCLUSIONS**

Not all Member States fulfilled the obligation in the directives to report to the Commission on their implementation every three years. Some did not submit replies to the Implementation Questionnaire 2010-2012.

Replies vary between detailed and complete to only referring to national legislation. Most Member States reported on whether measures had been transposed into national law but did not comment on whether actions had proved effective or had led to improvements in practice. Replies were also sometimes inconsistent. In some cases data were missing. In others, the replies did not enable any comparison between Member States or between a Member State's performance in the previous and the current reporting period.

In many cases replies did not provide sufficient information for an assessment of the state of actual implementation of the directives. For instance, many replies simply referred to national legislation or transcribed parts of legislative texts, without providing any further information on implementation, or referring only to replies to the implementation questionnaires for previous reporting periods, without providing the information requested or information on the evolution of the situation over time.

In conclusion, the triennial implementation reports prepared by the Member States have not proven effective for verifying compliance with the directives, their implementation and their impact. The reporting exercise also requires a lot of resources and it may create unnecessary administrative burden.

The most objective and accurate information for assessing performance on waste management across Member States is the data they have to provide every year on waste generated, waste collection, waste recycling and recovery, landfill and sewage sludge generation and use. They should therefore do more to improve the quality, reliability and comparability of such data. They could do this by benchmarking reporting methodologies and introducing a data quality check report, so that when reporting on the achievement of the targets set out in the legislation, Member States use the most recent and harmonised methodology.

These conclusions are addressed in the recent review of waste policy and legislation.<sup>6</sup> In it, the Commission proposed to repeal provisions obliging Member States to produce triennial implementation reports and to base compliance monitoring exclusively on quality statistical data that Member States must provide the Commission with annually.

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<sup>6</sup> [http://ec.europa.eu/environment/waste/target\\_review.htm](http://ec.europa.eu/environment/waste/target_review.htm)



**ANNEX 1: MEMBER STATES' RESPONSES TO THE IMPLEMENTATION QUESTIONNAIRES RECEIVED BY THE COMMISSION BEFORE THE END OF 2014**

Member States	Waste Framework Directive 2008/98/EC	WEEE Directive 2002/96/EC	Landfill Waste Directive 1999/31/EC	Packaging and Packaging Waste Directive 94/62/EC	Sewage Sludge Directive 86/278/EEC	Batteries Directive 2006/66/EC
Austria	+	+	+	+	+	+
Belgium	-	+	+ <sup>7</sup>	+	+	+
Bulgaria	+	+	+	+	+	+
Croatia	+ not required	Not Required	Not Required	+ not required	+ not required	Not Required
Cyprus	+	-	+	+	+	+
Czech Republic	+	+	+	+	+	+
Denmark	+	-	+	-	-	-
Estonia	+	+	+	+	+	+
Finland	+	+	+	+	+	+
France	-	+	-	+	-	+
Germany	+	+	+	+	+	+
Greece	+	+	+	+	+	-
Hungary	+	+	+	+	+	+
Ireland	+	-	+	+	+	+
Italy	+	+	-	+	+	+
Latvia	+	+	+	+	-	-
Lithuania	+	+	+	+	+	+
Luxembourg	+	-	+	+	+	+
Malta	+	+	-	+	+	+
Netherlands	-	+	+	+	+	+
Poland	+	+	-	+	-	+
Portugal	+	+	+	-	+	+
Romania	+	-	+	-	-	+
Slovakia	+	+	+	+	+	+
Slovenia	+	+	+	+	+	+
Spain	+	+	+	+	+	+
Sweden	+	+	+	+	+	+

<sup>7</sup> Reports received from the Walloon Region and Flanders, but not from the Brussels Capital Region.

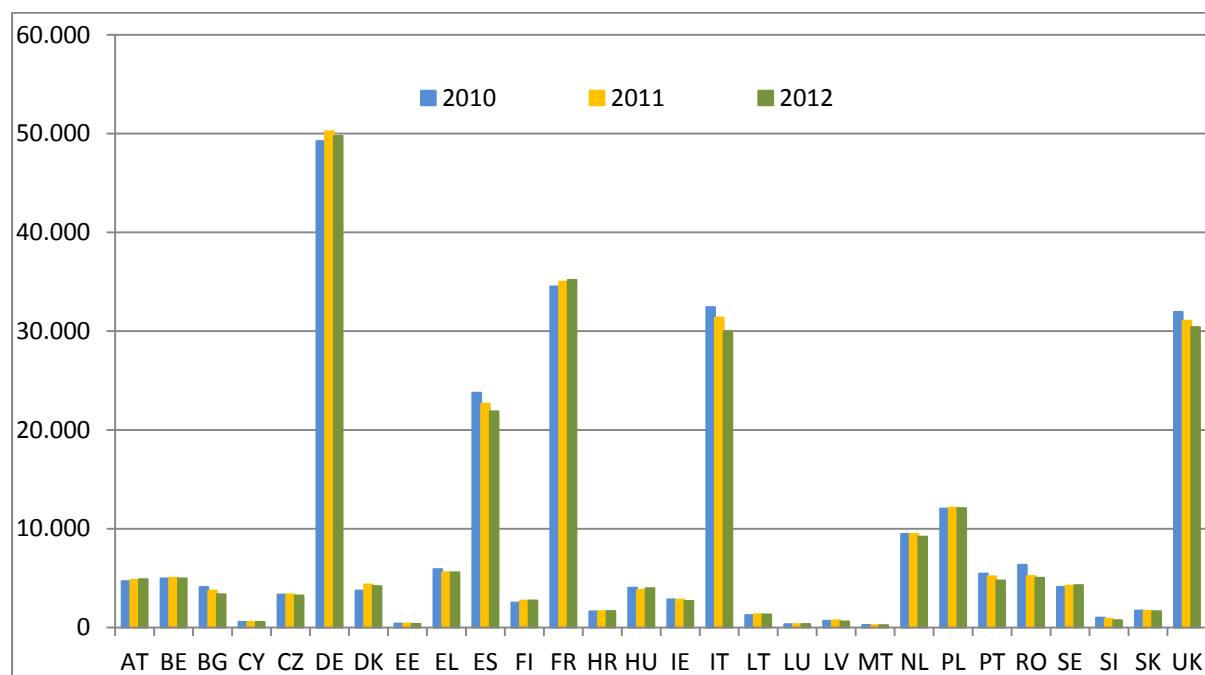
<b>Member States</b>	<b>Waste Framework Directive 2008/98/EC</b>	<b>WEEE Directive 2002/96/EC</b>	<b>Landfill Waste Directive 1999/31/EC</b>	<b>Packaging and Packaging Waste Directive 94/62/EC</b>	<b>Sewage Sludge Directive 86/278/EEC</b>	<b>Batteries Directive 2006/66/EC</b>
<b>United Kingdom</b>	+	-	+	+	+	+
<b>EU-28: percentage received (%)</b>	<b>89 % (25/28)</b>	<b>75 % (21/28)</b>	<b>82 % (23/28)</b>	<b>89 % (25/28)</b>	<b>82 % (23/28)</b>	<b>86 % (24/28)</b>

	On time: by 30.09.2013
	Between 1.10.2013 and 31.10.2013

	Between 1.11.2013 and 31.12.2014
	No report received before 31.12.2014

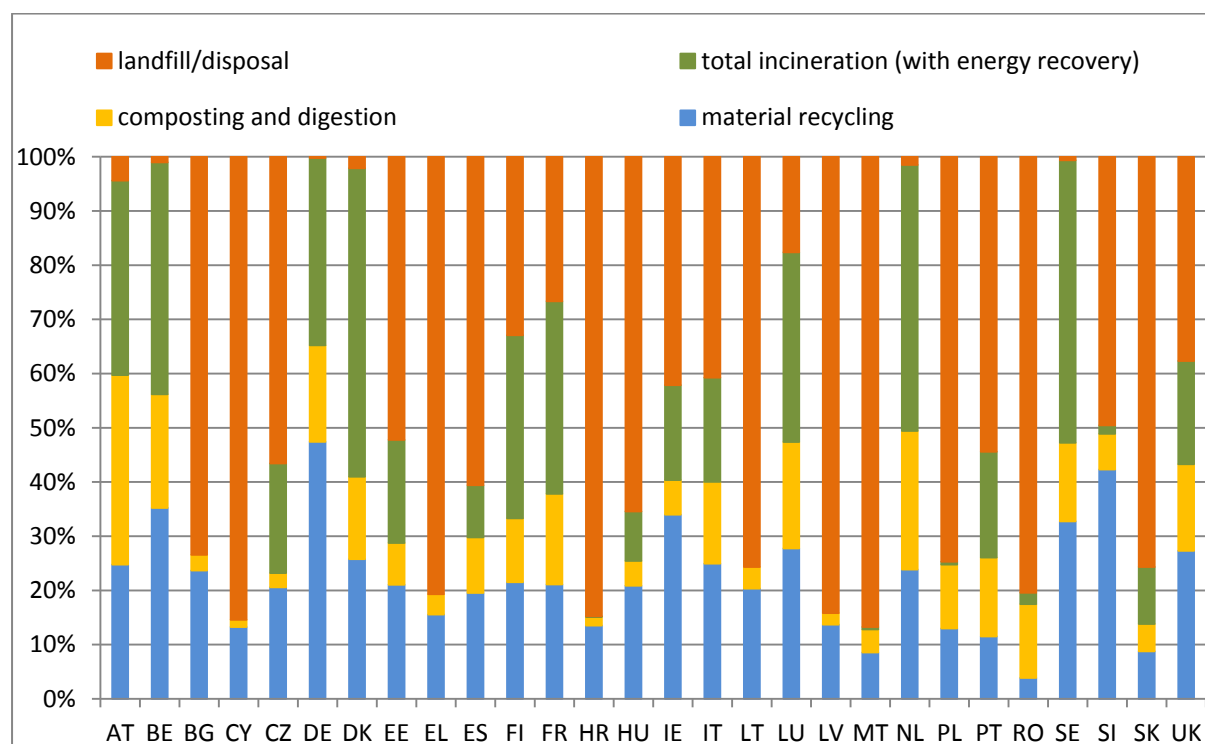
## ANNEX 2: GENERATION AND TREATMENT OF WASTE

### Municipal waste generated by Member State (thousand tonnes)



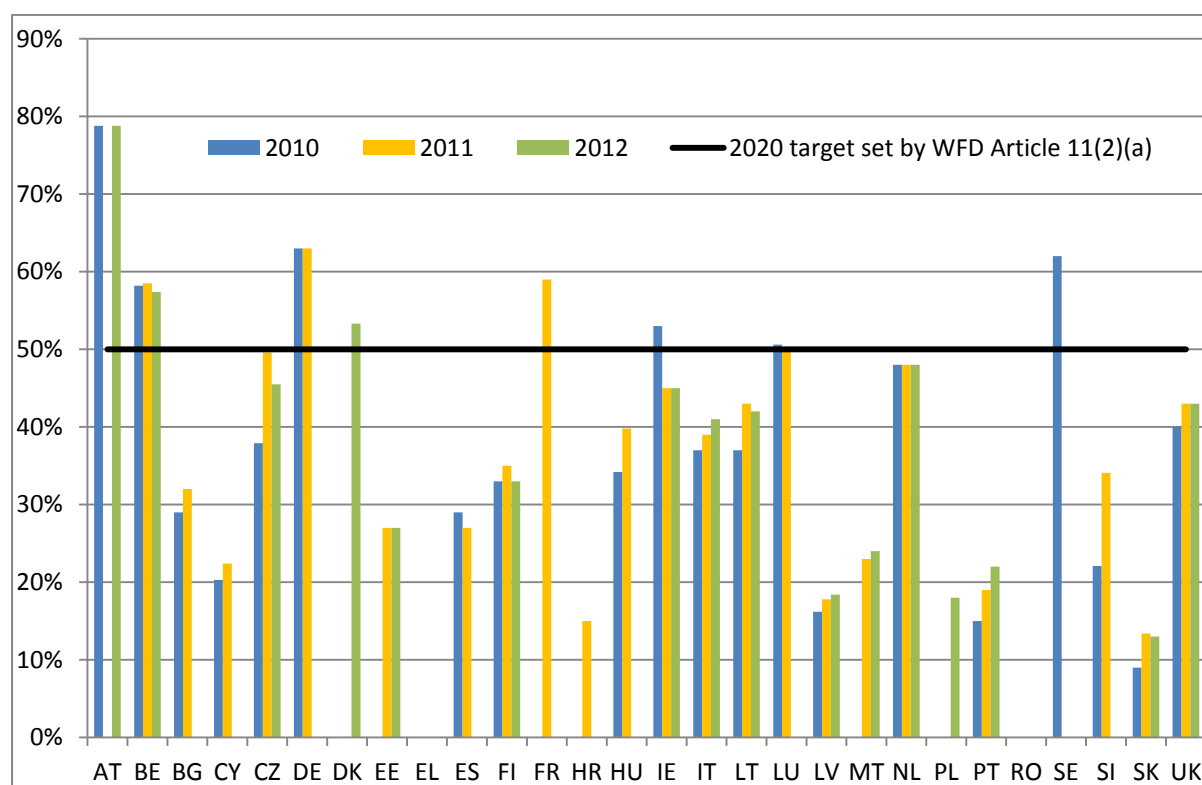
Source: EUROSTAT (online data code: *t\_env\_wasst*)

### Treatment of municipal waste by Member State (2012)



Source: EUROSTAT (online data code: *t\_env\_wasst*)

## Re-use and recycling of household waste by Member State



Source: Data provided by Member States to the European Commission in Implementation Questionnaires 2010-2012 or to EUROSTAT using the EDAMIS portal

## Preparation for the re-use and recycling of household waste — calculation method

Member State	Calculation method the Member State used: <sup>8</sup>	Rates of preparation for the re-use and recycling of household waste		
		2010	2011	2012
<b>Austria</b>	2	79 %	-	79 %
<b>Belgium</b>	3	58 %	59 %	57 %
<b>Bulgaria</b>	3	29 %	32 %	-
<b>Croatia</b>	2	-	15 %	-
<b>Cyprus</b>	2	20.3 %	22.4 %	-
<b>Czech Republic</b>	2	38 %	50 %	46 %
<b>Denmark</b>	1	-	-	53 %
<b>Estonia</b>	2	-	27 %	27 %
<b>Finland</b>	4	33 %	35 %	33 %
<b>France</b>	2	-	59 %	-
<b>Germany</b>	4	63 %	63 %	-
<b>Greece</b>	-	-	-	-
<b>Hungary</b>	2	34 %	40 %	-
<b>Ireland</b>	1	53 %	45 %	44 %
<b>Italy</b>	2	37 %	39 %	41 %
<b>Latvia</b>	4	16 %	18 %	18 %
<b>Lithuania</b>	2	37 %	43 %	42 %
<b>Luxembourg</b>	3	51 %	50 %	-
<b>Malta</b>	1	-	23 %	24 %
<b>Netherlands</b>	2	48 %	48 %	48 %
<b>Poland</b>	2	-	-	18 %
<b>Portugal</b>	2	19 %	19 %	22 %
<b>Romania</b>	-	-	-	-
<b>Slovakia</b>	3	9 %	13 %	13 %
<b>Slovenia</b>	4	22 %	34 %	-

<sup>8</sup> Commission Decision of 18 November 2011 establishing rules and calculation methods for verifying compliance with the targets set in Article 11(2) of Directive 2008/98/EC of the European Parliament and of the Council (2011/753/EU) (OJ L 310/11).

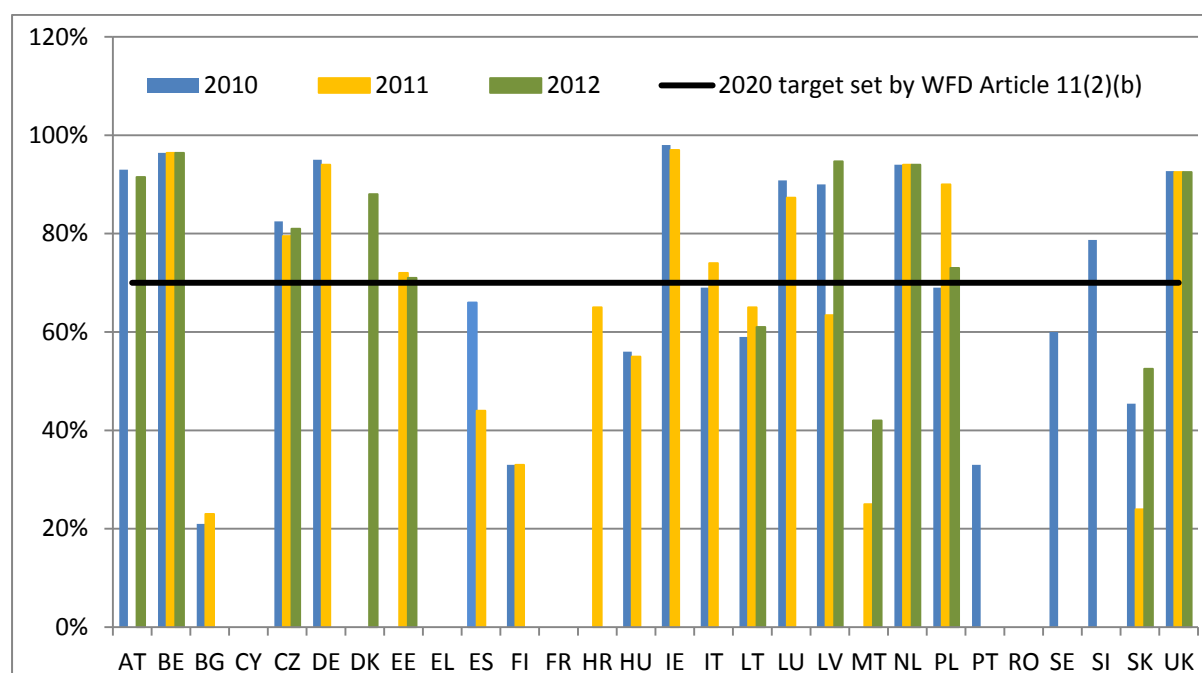
Member State	Calculation method the Member State used: <sup>8</sup>	Rates of preparation for the re-use and recycling of household waste		
		2010	2011	2012
Spain	4	29 %	27 %	-
Sweden	2	62 %	-	-
United Kingdom	3	40 %	43 %	44 %
Notes:	<p>To verify compliance with the target under Article 11(2)(a) of the Waste Framework Directive, Decision 2011/753/EU<sup>9</sup> allows Member States to use four different calculation methods to report their re-use and recycling rates for household waste. The difference between the calculation methods relates to the waste types each covers, as follows.</p> <ul style="list-style-type: none"> <li>• Method 1: paper, metal, plastic and glass household waste.</li> <li>• Method 2: paper, metal, plastic and glass waste and other single waste streams from households or similar waste streams.</li> <li>• Method 3: household waste.</li> <li>• Method 4: municipal waste.</li> </ul>			

Source: Data provided by Member States to the European Commission in Implementation Questionnaires 2010-2012 or to EUROSTAT using the EDAMIS portal.<sup>10</sup>

<sup>9</sup> Commission Decision of 18 November 2011 establishing rules and calculation methods for verifying compliance with the targets set in Article 11(2) of Directive 2008/98/EC of the European Parliament and of the Council (2011/753/EU) (OJ L 310/11).

<sup>10</sup> ARGUS (2014), *Compliance Reporting on Waste Framework Directive — Recycling and Recovery Rates for 2010, 2011 and 2012: Report on the validation of household waste data (draft)*, December 2014.

## Recovery of construction and demolition (C&D) waste by Member State



Source: Data provided by Member States to the European Commission in Implementation Questionnaires 2010-2012 or to EUROSTAT using the EDAMIS portal.<sup>11</sup>

<sup>11</sup> ARGUS (2014) *Compliance Reporting on Waste Framework Directive — Recycling and Recovery Rates for 2010, 2011 and 2012: Report on the validation of construction and demolition waste data (draft)*, October 2014.

### ANNEX 3: SEWAGE SLUDGE

#### The amounts of sludge produced and used in Member States, 2010-2012

	Amounts of sludge produced by waste water plants, dry matter (tonnes/year)			Amounts of sludge used in agriculture		
	2010	2011	2012	2010	2011	2012
<b>Austria *</b>	117 471	119 069	34 798	33 076	113 248	13 029
<b>Bulgaria</b>	49 757	51 388	59 261	13 644	17 561	21 241
<b>Croatia</b>	21 315	18 570	19 457	546	681	954
<b>Cyprus</b>	7 083	6 815	6 533	5 294	3 912	2 756
<b>Czech Republic</b>	162 724	163 739	162 217	27 253	20 562	35 542
<b>Denmark</b>	131 900	no data	no data	79 140	no data	no data
<b>Estonia</b>	27 950	27 780	22 796	14 100	16 030	12 536
<b>Finland</b>	142 700	140 900	no data	7 500	3 800	no data
<b>France</b>	1 127 039	1 094 836	1 124 363	779 609	790 780	787 300
<b>Germany</b>	1 774 793	1 836 952	1 742 920	610 249	600 270	580 031
<b>Greece</b>	103 866	90 655	89 978	270	180	9 358
<b>Hungary **</b>	236 043	217 494	no data	24 580	22 322	no data
<b>Ireland</b>	89 991	85 648	72 429	82 670	57 699	68 329
<b>Italy</b>	839 725	851 760	654 024	248 215	299 159	274 095
<b>Latvia</b>	23 258	22 458	22 686	8 131	5 307	6 740
<b>Lithuania</b>	67 990	65 971	no data	15 517	15 877	no data
<b>Luxembourg</b>	7 434	7 852	8 733	2 738	3 569	4 292
<b>Netherlands</b>	523 744	513 786	510 000	23 853	20 708	20 000
<b>Poland</b>	533 400	567 300	562 000	98 200	112 000	123 000
<b>Portugal ***</b>	162 680	140 013	284 776	5 646	23 087	29 171
<b>Romania ****</b>	138 850	124 500	no data	0	0	no data
<b>Slovakia</b>	54 760	58 720	58 706	923	462	1 140



<b>Slovenia</b>	29 996	26 808	26 171	3	0	2
<b>Spain</b>	1 086 720	1 058 999	1 082 669	895 791	863 765	870 059
<b>Sweden</b>	211 100	214 420	207 460	49 600	44 170	48 340
<b>United Kingdom</b>	1 422 024	1 434 710	1 152 327	1 067 672	1 074 424	834 202

- \* Data for 2011 do not include data from Lower Austria.
- \*\* Not final data as the final calculation of 2011 data is ongoing.
- \*\*\* An estimated average value of 20 % dry matter was used.
- \*\*\*\* Data used for 2007-2009.

## ANNEX 4: WASTE LANDFILL

**Table 1: Number of Landfills in 2012**

Member State	hazardous waste	Non-hazardous waste	Inert waste	Other waste
<b>Austria</b>	0	156	35	505 <sup>12</sup>
<b>Belgium</b>	7	31	14	1
<b>Bulgaria</b>	8	174	3	-
<b>Cyprus</b>	1 <sup>13</sup>	119	2	-
<b>Czech Republic</b>	26	152	62	-
<b>Croatia</b>	Not required			
<b>Denmark</b>	6	52	6	0
<b>Estonia</b>	7	6	-	-
<b>Finland</b>	22	90	4	-
<b>France</b>	-	-	-	-
<b>Germany</b>	76	2 643	1 742	11 <sup>14</sup>
<b>Greece</b>	2	74	-	2 <sup>15</sup>
<b>Hungary</b>	13	72	11	-
<b>Ireland</b>	0	36	5	45
<b>Italy</b>	-	-	-	-
<b>Latvia</b>	1	11	-	-
<b>Lithuania</b>	0	11	3	0
<b>Luxembourg</b>	0	2	11	0

<sup>12</sup> Excavated soil dumps.

<sup>13</sup> The landfill was constructed before the Directive was published.

<sup>14</sup> Underground storage and long-term storage.

<sup>15</sup> Non-hazardous industrial waste.

Member State	hazardous waste	Non-hazardous waste	Inert waste	Other waste
Malta	0	-	-	-
Netherlands <sup>16</sup>	22	22	22	-
Poland	-	-	-	-
Portugal	2	63	4	0
Romania <sup>17</sup>	105	105	105	-
Slovakia	11	90	17	-
Slovenia	2	71	14	0
Spain	14	206	170	-
Sweden	46	108	30	0
United Kingdom	225	423	429	-
EU27:	355 <sup>18</sup>	3 719 <sup>19</sup>	2 362 <sup>20</sup>	564

<sup>16</sup> The figures the Netherlands submitted in Implementation Questionnaire 2010-2012 do not differentiate between landfills for hazardous waste, non-hazardous waste or inert waste.

<sup>17</sup> The figures Romania submitted in Implementation Questionnaire 2010-2012 do not differentiate between landfills for hazardous waste, non-hazardous waste or inert waste.

<sup>18</sup> EUROSTAT estimate (phased out)

<sup>19</sup> EUROSTAT estimate (phased out)

<sup>20</sup> EUROSTAT estimate (phased out)

**Table 2: Rest capacity of landfills for non-hazardous waste in 2012 (in 1 000 tonnes or m<sup>3</sup>)**

Member State	hazardous waste	Non-hazardous waste	Inert waste	Other waste	
<b>Austria</b>	0	38 900	5 300	-	
<b>Belgium</b>	3 354 t + 607 460 m <sup>3</sup>	8 763 t + 16 385 m <sup>3</sup>	3 992	2 076.52	
<b>Bulgaria</b>	3 693	235 258	1 439	0	
<b>Cyprus</b>	-	-	-	0	
<b>Czech Republic</b>	8 821	33 584	9 830	0	
<b>Croatia</b>	Not required				
<b>Denmark<sup>21</sup></b>	463	692	260	0	
<b>Estonia</b>	205 500	6 200	0	0	
<b>Finland</b>	18 061	48 667	496	0	
<b>France</b>	-	-	-	-	
<b>Germany</b>	54 800	455 200	184 100	7 600	
<b>Greece</b>	1.5 <sup>22</sup>	-	0	-	
<b>Hungary</b>	185 per year	38 900	16 800	0	
<b>Ireland</b>	-	14 500	-	-	
<b>Italy</b>	-	-	-	-	
<b>Latvia</b>	180	16 211	0	0	
<b>Lithuania</b>	0	1 250 per year	106 per year	0	
<b>Luxembourg</b>	0	1 160 127 m <sup>3</sup>	14 593 544 m <sup>3</sup>	0	
<b>Malta</b>	0	-	-	-	
<b>Netherlands<sup>23</sup></b>	-	39 690 m <sup>3</sup>	0	0	
<b>Poland</b>	-	-	-	-	
<b>Portugal</b>	1 670	28 275	653	0	
<b>Romania<sup>24</sup></b>	-	-	-	-	

<sup>21</sup> Includes landfills for mineral waste and landfills for mixed waste.

<sup>22</sup> Data refer to one of the two sites.

<sup>23</sup> The figures submitted by the Netherlands in Implementation Questionnaire 2010-2012 do not differentiate between landfills for hazardous waste, non-hazardous waste or inert waste.

<sup>24</sup> The figures Romania submitted in Implementation Questionnaire 2010-2012 do not differentiate between landfills for hazardous waste, non-hazardous waste or inert waste.

Member State	hazardous waste	Non-hazardous waste	Inert waste	Other waste	
<b>Slovakia</b>	813	8 964	-	0	
<b>Slovenia</b>	75	6 464	609	0	
<b>Spain</b>	5 130 t + 80 000 m <sup>3</sup>	124 168 t + 53 307 000 m <sup>3</sup>	102 254	0	
<b>Sweden</b>	7 050	34 726	637	0	
<b>United Kingdom</b>	18 545	485 174	130 024	0	
<b>EU-27</b>	551 120 <sup>25</sup>	2 288 590 <sup>26</sup>	978 550 <sup>27</sup>		

Source: Implementation Questionnaires 2010-2012 and EUROSTAT 2015.<sup>28</sup>

<sup>25</sup> EUROSTAT estimate (phased out)

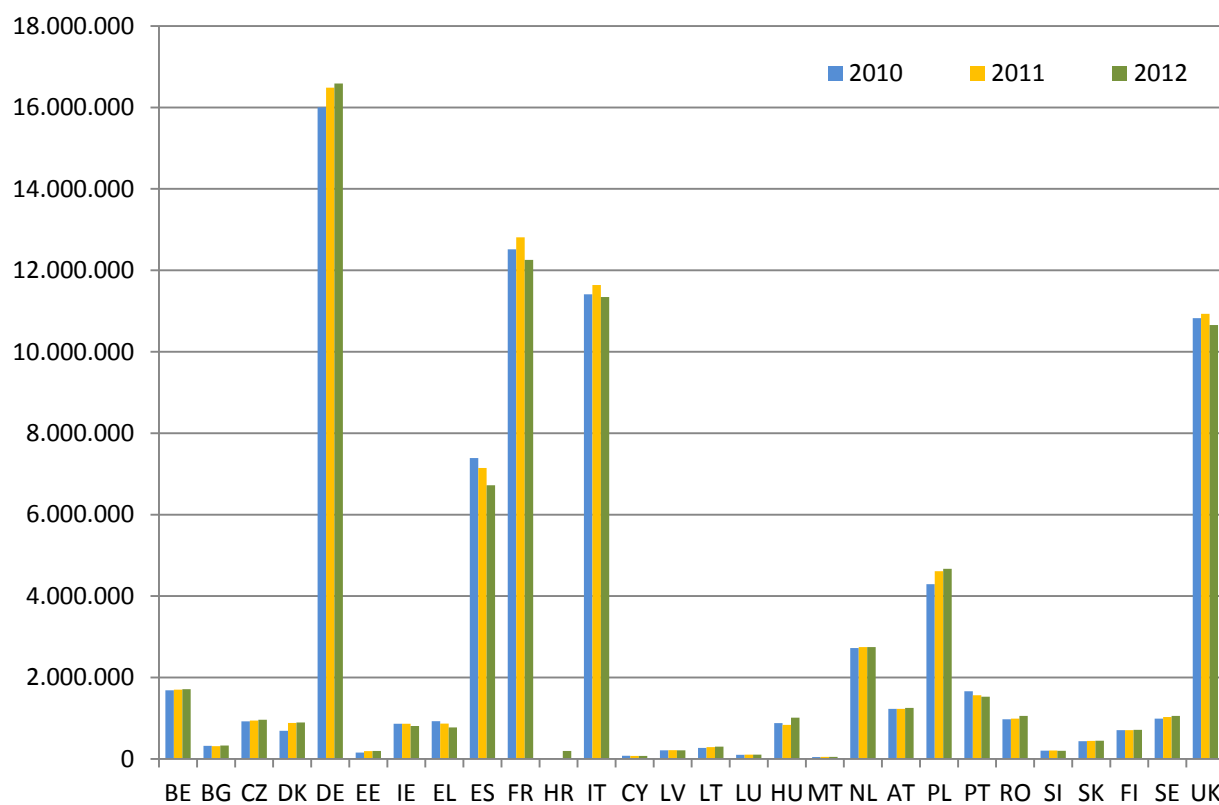
<sup>26</sup> EUROSTAT estimate (phased out)

<sup>27</sup> EUROSTAT estimate (phased out)

<sup>28</sup> Database EUROSTAT. Available at: <http://ec.europa.eu/eurostat/web/environment/waste/database>. The table shows all available data at the time of writing this report.

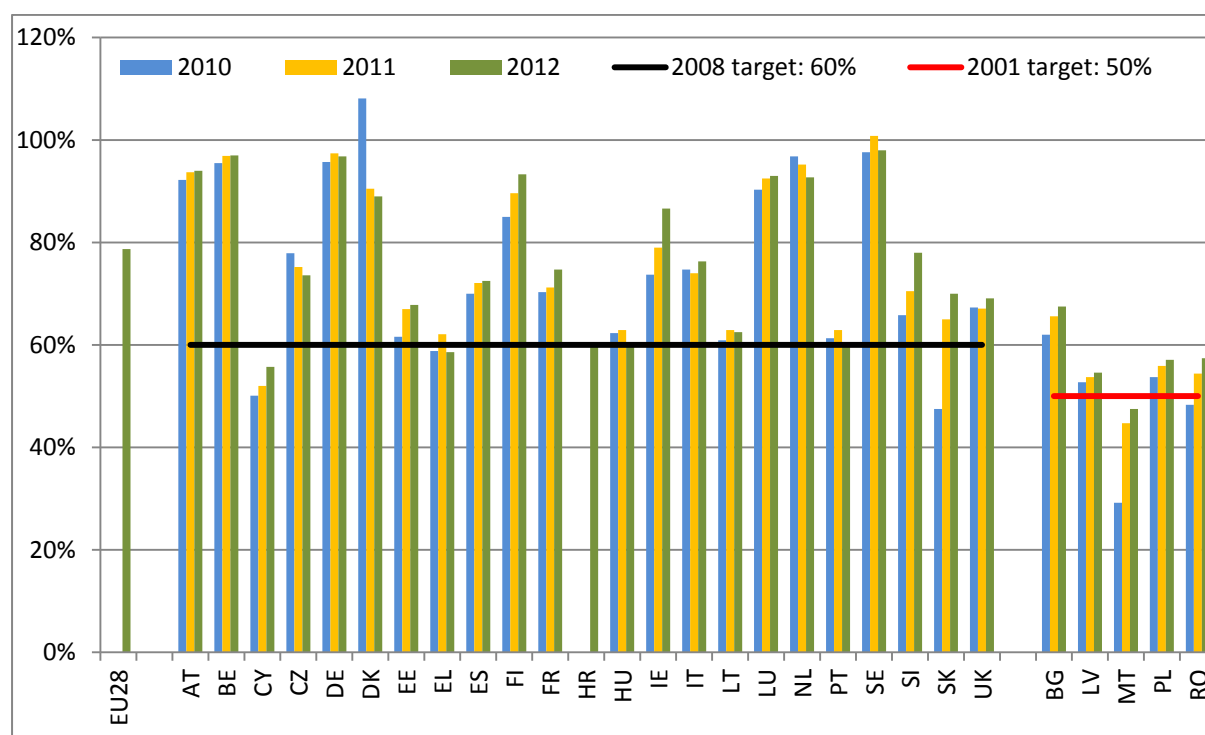
## ANNEX 5: PACKAGING AND PACKAGING WASTE

### Packaging and packaging waste generated by Member State (tonnes)



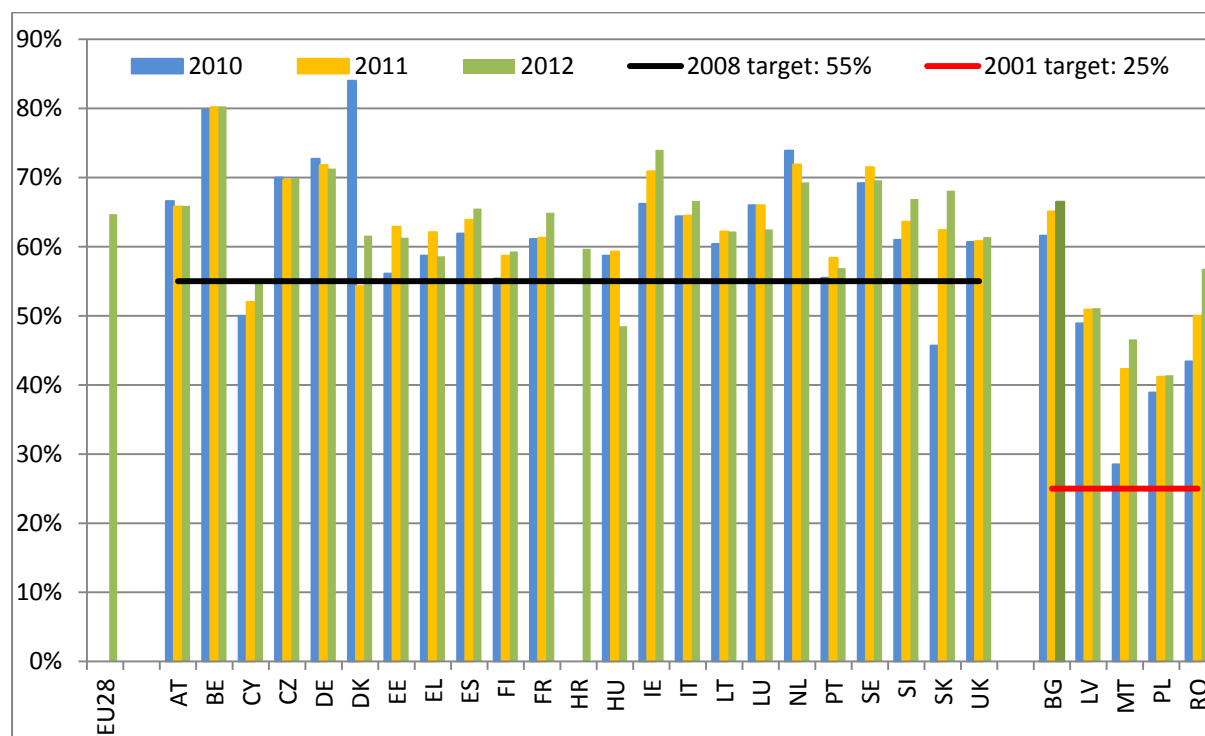
Source: EUROSTAT (online code: *t\_env\_wasst*)

## Recovery of packaging waste by Member State (%)



Source: EUROSTAT (online code: *t\_env\_wasst*)

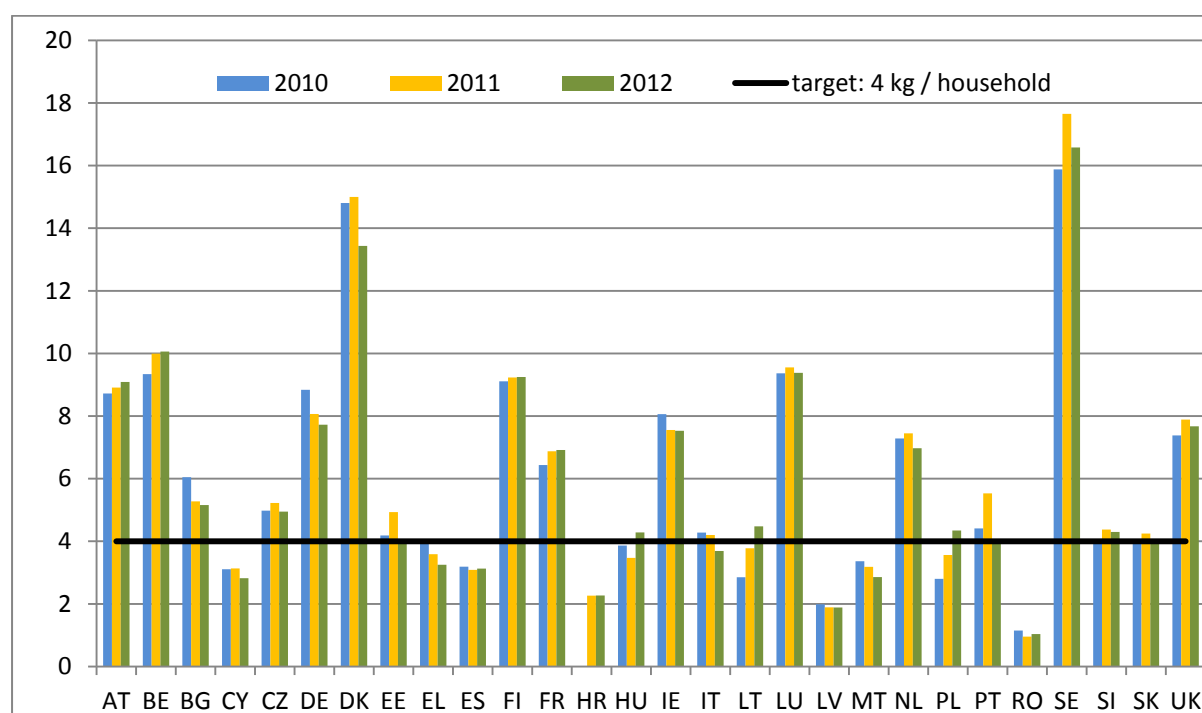
## Recycling of packaging waste by Member State (%)



Source: EUROSTAT (online code: *t\_env\_wasst*)

## ANNEX 6: WASTE OF ELECTRICAL AND ELECTRONIC EQUIPMENT

### Total amount of WEEE collected from private households by Member State (kg per capita)

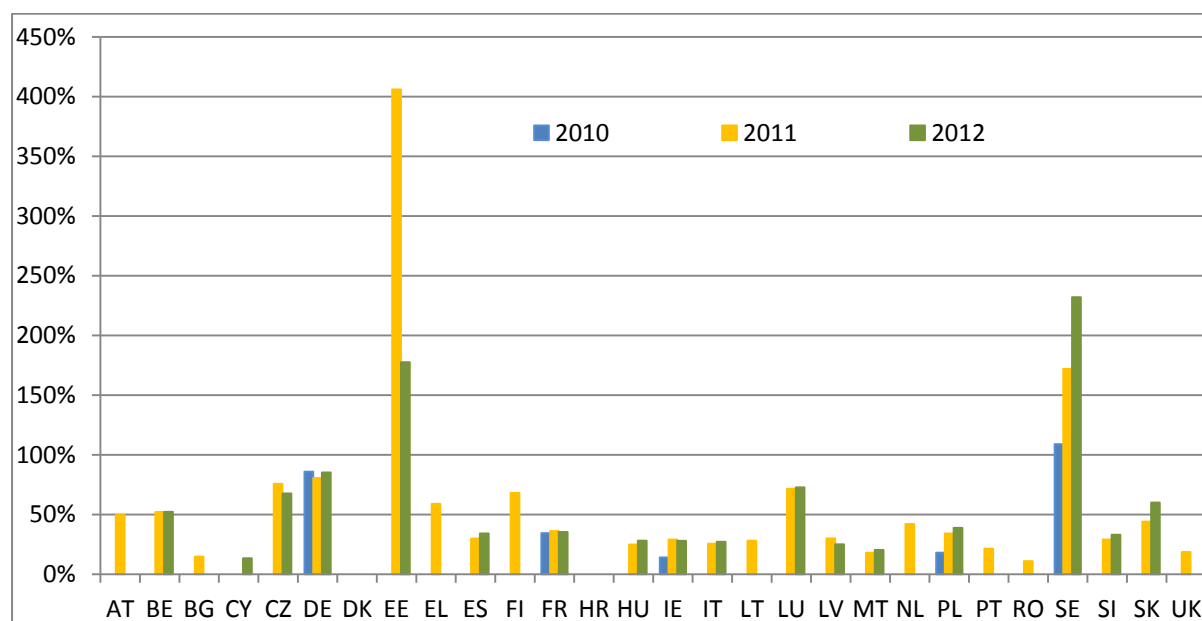


Source: EUROSTAT (online code: env\_waselee)



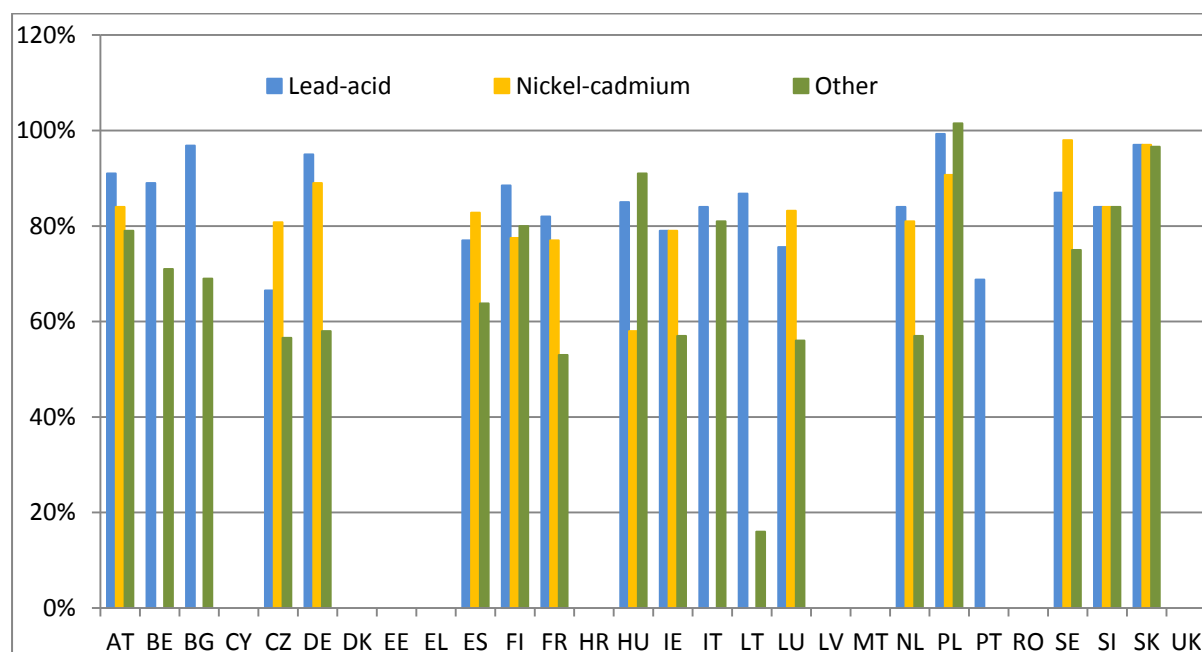
## ANNEX 7: BATTERIES AND ACCUMULATORS

### Collection of waste batteries and accumulators by Member State (%)<sup>29</sup>



Source: Data provided by Member States to the European Commission (EC, 2014)

### Recycling efficiency of waste batteries and accumulators by Member State (%)<sup>30</sup>



Source: Data provided by Member States to the European Commission (EC, 2014)

<sup>29</sup> For comparative purposes, collection rates are calculated as an average percentage rate across battery types.

<sup>30</sup> The most recent year of data has been used for each Member State to show recycling efficiency across battery types between 2010 and 2012.