

# Waste management in Europe: framework, trends and issues

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## 1. Environmental legislation

### 1.1. Waste Framework Directive ([2008/98/EC](#))

The directive applies from December 2008, and has to be implemented in national legislation by December 2010.

Waste is defined simply:

Article 3 (1): “‘waste’ means any substance or object which the holder discards or intends or is required to discard”

Member States have to take measures for the treatment of their waste in line with a clear hierarchy:

Article 4: “The following waste hierarchy shall apply as a priority order in waste prevention and management legislation and policy:

- (a) prevention;
- (b) preparing for re-use;
- (c) recycling;
- (d) other recovery, e.g. energy recovery; and
- (e) disposal.”<sup>1</sup>

The principle of recycling and re-use is applied to exclude industrial by-products from the definition of waste as long as it meets criteria for re-use:

Article 5: “A substance or object, resulting from a production process, the primary aim of which is not the production of that item, may be regarded as not being waste ...but as being a by-product only if the following conditions are met:

- (a) further use of the substance or object is certain;
- (b) the substance or object can be used directly without any further processing other than normal industrial practice;
- (c) the substance or object is produced as an integral part of a production process; and
- (d) further use is lawful.”

The same principle is used to define when recycling and recovery of specific forms of waste has been achieved. Regulations will define the ‘end-of-waste’ criteria for specific forms of waste, including paper, glass, metal, tyres and textiles, based on general criteria for re-use:

Article 6: “Certain specified waste shall cease to be waste .... when it has undergone a recovery, including recycling, operation and complies with specific criteria to be developed in accordance with the following conditions:

- (a) the substance or object is commonly used for specific purposes;
- (b) a market or demand exists for such a substance or object;
- (c) the substance or object fulfils the technical requirements for the specific purposes and meets the existing legislation and standards applicable to products; and
- (d) the use of the substance or object will not lead to overall adverse environmental or human health impacts...

...End-of-waste specific criteria should be considered, among others, at least for aggregates, paper, glass, metal, tyres and textiles.”

Governments have to take measures to enable recovery and re-use, including separate collection:

Article 10: "Recovery:

1. Member States shall take the necessary measures to ensure that waste undergoes recovery operations, in accordance with Articles 4 and 13.
2. Where necessary to comply with paragraph 1 and to facilitate or improve recovery, waste shall be collected separately if technically, environmentally and economically practicable and shall not be mixed with other waste or other material with different properties."

Article 11: "Re-use and recycling

1. Member States shall take measures, as appropriate, to promote the re-use of products and preparing for re-use activities, notably by encouraging the establishment and support of re-use and repair networks, the use of economic instruments, procurement criteria, quantitative objectives or other measures. Member States shall take measures to promote high quality recycling and, to this end, shall set up separate collections of waste where technically, environmentally and economically practicable and appropriate to meet the necessary quality standards for the relevant recycling sectors. Subject to Article 10(2), by 2015 separate collection shall be set up for at least the following: paper, metal, plastic and glass."<sup>2</sup>

National governments have to achieve re-use and recycling of 50 percent of waste materials from households, and 70 percent of non-hazardous construction and demolition waste:

Article 11: "2. In order to comply with the objectives of this Directive, and move towards a European recycling society with a high level of resource efficiency, Member States shall take the necessary measures designed to achieve the following targets:

- (a) by 2020, the preparing for re-use and the recycling of waste materials such as at least paper, metal, plastic and glass from households and possibly from other origins as far as these waste streams are similar to waste from households, shall be increased to a minimum of overall 50 % by weight"
- (a) by 2020, the preparing for re-use, recycling and other material recovery, including backfilling operations using waste to substitute other materials, of non-hazardous construction and demolition waste excluding naturally occurring material defined in category 17 05 04 in the list of waste shall be increased to a minimum of 70 % by weight."<sup>3</sup>

The costs of all this are expected to be met by the producers, distributors or final users of the original waste product, and that they are responsible for arranging treatment of waste.

Article 14: "In accordance with the polluter-pays principle, the costs of waste management shall be borne by the original waste producer or by the current or previous waste holders....."

Article 15: "Member States shall take the necessary measures to ensure that any original waste producer or other holder carries out the treatment of waste himself or has the treatment handled by a dealer or an establishment or undertaking which carries out waste treatment operations or arranged by a private or public waste collector..."

In order to reduce trans-border shipments of waste out of the EU and between member states of the EU, member states are obliged to co-operate to create a network of disposal and recovery facilities so that the EU as a whole will be self-sufficient in dealing with its own waste, and member states can also move towards self-sufficiency, and waste is processed as close as possible to its origins.

Article 16: Principles of self-sufficiency and proximity.

- "1. Member States shall take appropriate measures, in cooperation with other Member States where this is necessary or advisable, to establish an integrated and adequate network of waste disposal installations and of installations for the recovery of mixed municipal waste collected from private households....."

2. The network shall be designed to enable the Community as a whole to become self-sufficient in waste disposal as well as in the recovery of waste referred to in paragraph 1, and to enable Member States to move towards that aim individually.....
3. The network shall enable waste to be disposed of or waste referred to in paragraph 1 to be recovered in one of the nearest appropriate installations, by means of the most appropriate methods and technologies..."

Member states are obliged to develop waste management (and waste prevention) programmes covering the entire country. These plans have to include a comprehensive analysis of all waste streams, existing systems for collection, recovery and disposal, an assessment of the need for new facilities (in the framework of the EU-wide network required in article 16). Waste prevention programmes also have to be produced by the end of 2013, identifying specific measures for preventing waste.

Article 28: "1. Member States shall ensure that their competent authorities establish...one or more waste management plans. Those plans shall, alone or in combination, cover the entire geographical territory of the Member State concerned.

2. The waste management plans shall set out an analysis of the current waste management situation in the geographical entity concerned, as well as the measures to be taken to improve environmentally sound preparing for re-use, recycling, recovery and disposal of waste and an evaluation of how the plan will support the implementation of the objectives and provisions of this Directive."

Article 29: "Member States shall establish....waste prevention programmes not later than 12 December 2013."

The European Commission brings infringement proceedings at the European Court of Justice against countries failing to develop and implement waste management plans (see below section 3.1).

### 1.1.1. Classification of waste incineration

The revised WFD defines recovery so that the incineration for energy can qualify as long as another energy source is replaced somewhere in the wider economy, and as long as it reaches a certain level of energy efficiency:

Article 3: "15..."recovery" means any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy."

Annex II: Recovery operations: "R1 Use principally as a fuel or other means to generate energy"<sup>4</sup>

The distinction remains uncertain in relation to hazardous waste incinerators.<sup>5</sup>

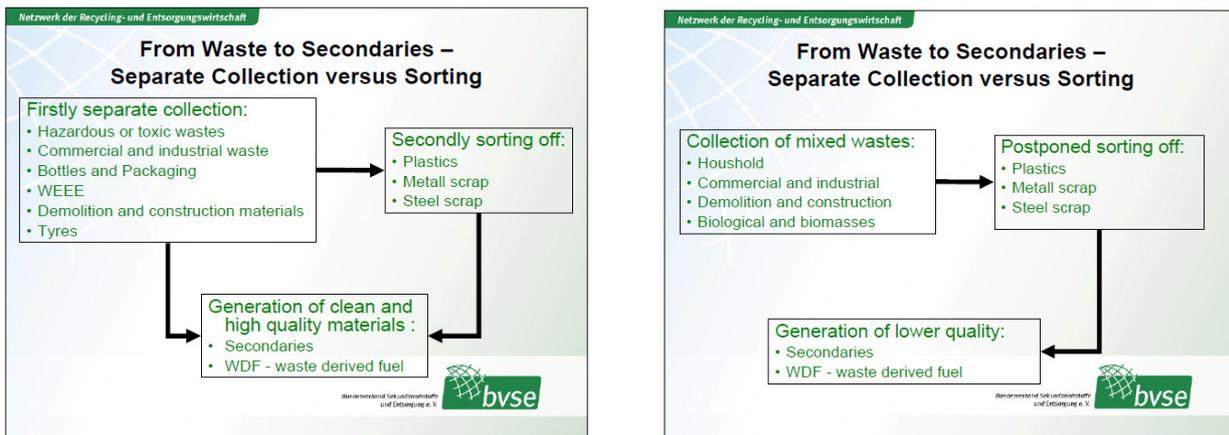
## 1.2. Landfill directive (1999/31/EC)

The EU's obliges member states to reduce the amount of municipal solid waste in landfill by 65% by 2016 compared to 1995 levels. But it does not give countries binding specifications on what to do with it: a situation that has led most member states to opt for incineration.

Recycling and generation of secondary materials involves extra stages of work (production chains) on municipal waste, which implies more employment, and also a change in types of employment. The TNO report states:

"employment has increased in the prevention and recycling industry and decreased in landfilling. In the UK, for instance, employment in recycling increases yearly with 7%, while employment in waste disposal decreases with 5%. In total a small increase of 1-2% is seen (Skills for Business, 2006). Furthermore, this change might influence skills needed in the waste sector. According to Skills for Business (2006, p. 23) substitution towards recycling affects all occupations, but particularly machine operators and drivers. Increases in incineration and other dedicated treatment plants ask also for special labour skills."

**Chart A. Recycling, separate collection and sorting**



Source: <http://www.ceep.eu/images/stories/pdf/events/16072009/thomas-probst.pdf> -Thomas Probst, bvse

**2. Waste generation, recovery, incineration and disposal**

Following the EU’s hierarchy from prevention to disposal, the first issue for countries to address is: how much waste is actually generated. This varies between countries, and richer countries tend to produce more waste per person: “Municipal waste generated per person varied from 294 kg in the Czech Republic to 801 kg in Denmark” –next lowest levels to the Czech republic were Romania, Latvia, Poland, Slovakia.

Out of all the municipal waste generated in the EU, 42% is landfilled, 38% is recovered and 20% is incinerated. Poorer countries still use most landfill, richer countries are the biggest users of incineration. The highest amount of waste is landfilled in Bulgaria, Romania, Lithuania, Malta and Poland (90% or more); Germany, Belgium, the Netherlands and Austria recycle or compost the most (59% or more); while Denmark, Luxembourg, and Sweden incinerate the largest proportion (all 47% of more).<sup>6</sup>

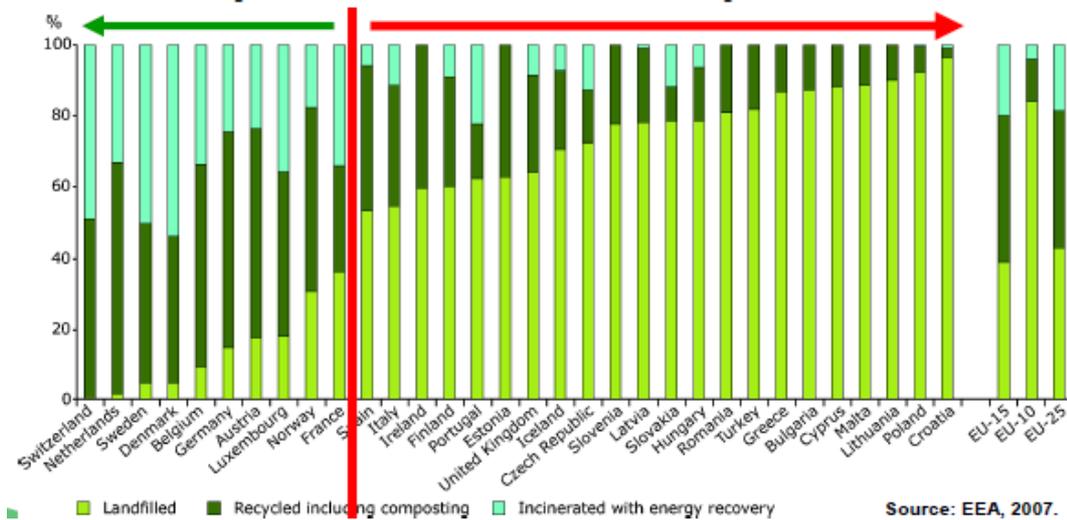
**Table 1. Variations in waste practices**

	Municipal waste generated, kg per person	Municipal waste treated, %:			
		Landfilled	Incinerated	Recycled	Composted
EU27	522	42	20	22	17
Belgium	492	4	34	39	23
Bulgaria	468	100	0	0	0
Czech Republic	294	84	13	2	1
Denmark	801	5	53	24	17
Germany	564	1	35	46	18
Estonia	536	64	0	34	2
Ireland	786	64	0	34	2
Greece	448	84	0	14	2
Spain	588	60	10	13	17
France	541	34	36	16	14
Italy	550	46	11	11	33
Cyprus	754	87	0	13	0
Latvia	377	86	0	13	1
Lithuania	400	96	0	2	2
Luxembourg	694	25	47	0	28
Hungary	456	77	9	13	1
Malta	652	93	0	2	5
Netherlands	630	3	38	32	28
Austria	597	13	28	21	38
Poland	322	90	0	6	4
Portugal	472	63	19	8	10
Romania	379	99	0	1	0
Slovenia	441	66	0	34*	-
Slovakia	309	82	11	2	5
Finland	507	53	12	26	10
Sweden	518	4	47	37	12
United Kingdom	572	57	9	22	12

Source: Eurostat 2009<sup>7</sup>

Closing landfills alone is not enough, alternatives have to be developed, otherwise rubbish gets thrown in public. Especially in new member states, small municipalities need support with transport, sorting and alternative recovery and disposal arrangements.<sup>8</sup>

**Chart B. Recycling, incineration and landfilling of municipal solid wastes in Europe**



Source: EEA, 2007.

Source: EEA, 2007; Landfill of Waste – focus of environmental policy? Helmut Maurer. European Commission – DG Environment 2009 <http://www.ceep.eu/images/stories/pdf/events/16072009/helmut-maurer.pdf>

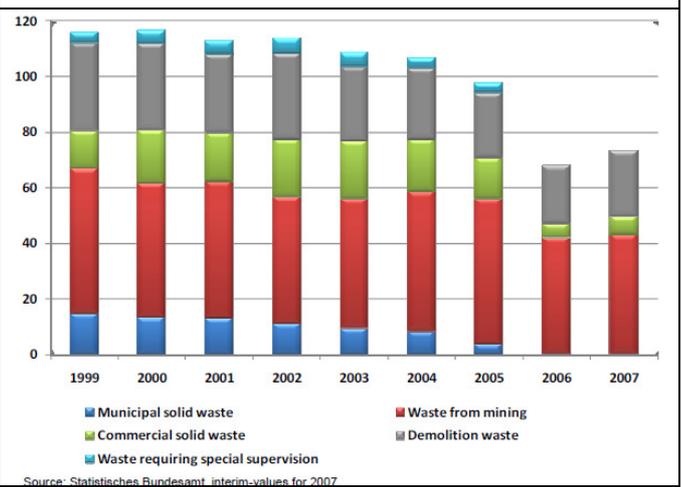
Germany now recovers or recycles over 80% of municipal solid waste, generating over 55 million tonnes of secondary materials (principally metals and paper). Landfill sites remain used for waste produced by the mining and construction industries, and to some extent for other commercial waste.

**Table 2. Recovering secondary materials from waste in Germany**

Secondaries, bvse-Data	Amounts of marketing in Mio. To	Recycling and Recovery in Mio. To
Fe-Scrap, 2006	22,2	21,2
Metal Scrap (Cu, Al, Zn, Pb), 2005	2,82	2,69
Paper, 2006	15,50	15,25
Glass, 2005	2,52	2,36
Plastics, 2007	4,86	2,17
Wood, 2007	9,68	2,2
Textiles, 2007	0,75	0,68
Biological waste, 2006	8,48	8,42
Used mineral oil, 2003	0,47	0,32
<b>Total</b>	<b>67,3</b>	<b>55,3 (82 %)</b>

Source: <http://www.ceep.eu/images/stories/pdf/events/16072009/thomas-probst.pdf>

**Chart C. Use of landfill sites for categories of waste in Germany 1999-2007**



Source: Statistisches Bundesamt interim-values for 2007

Source: <http://www.ceep.eu/images/stories/pdf/events/16072009/ruedriger-siechau-en.pdf>

### 3. ECJ cases

#### 3.1. Environmental laws: infringement proceedings (failure to implement laws)

20% of all infringement proceedings by the EC against member states concern environmental issues, and 141 (19%) of these concern the waste management sector.<sup>9</sup> Infringement proceedings are not very effective. The Commission does not even have a unit dedicated to waste, there is only one person in charge of the Landfill Directive, and ECJ judgments can take up to six years.<sup>10</sup>

The European Commission is continuing legal action against Italy over two cases involving violations of EU legislation to protect human health and the environment against the risks posed by waste. The Commission is taking Italy to the European Court of Justice (ECJ) over the waste crisis that has plagued Naples and the Campania region. The Campania region of southern Italy had submitted to the Commission a "magnificent plan", but had done "absolutely nothing" in practice. It is also sending Italy a first written warning for failing to comply in the Lazio region with an ECJ judgement that found it in breach of its obligations to adopt regional waste management plans. In this second case the Commission has the power to ask the Court to impose fines if Italy does not comply.<sup>11</sup> Civil protection official Pia Bucella said: "To this day, there is still no functional operational system that takes care of waste from A to Z. The incinerator didn't exist last year, and that is unchanged today."<sup>12</sup>

The ECJ has supported EC infringement cases against Greece, for failure to implement an adequate hazardous waste policy (Case C-286/08, 10/09/2009)<sup>13</sup>; against Ireland; and other countries.

#### 3.2. Other EU law: procurement and state aid

##### 3.2.1. Hamburg and inter-municipal waste service

On 09 June 2009, the European Court of Justice decided that local authorities are allowed to cooperate using each other's resources without applying the EU public procurement directives. The decided case dealt with the disposal of waste by neighbouring local authorities at an incinerator owned by the city of Hamburg, Germany, under a cooperation agreement between the public authorities (Case C-480/06). The court ruled that:

"a public authority has the possibility of performing the public interest tasks conferred on it by using its own resources, without being obliged to call on outside entities not forming part of its own departments, and that it may do so in cooperation with other public authorities (see *Coditel Brabant*, paragraphs 48 and 49)...."

"Community law does not require public authorities to use any particular legal form in order to carry out jointly their public service tasks" (such as a specially created and jointly owned company)

and that "such cooperation between public authorities does not undermine the principal objective of the Community rules on public procurement, that is, the free movement of services and the opening-up of undistorted competition in all the Member States, where implementation of that cooperation is governed solely by considerations and requirements relating to the pursuit of objectives in the public interest".<sup>14</sup>

Ralf Resch, General Secretary of CEEP, stated: "this decision should be seen as logical outcome of the interpretation of the EU public procurement rules. It comes at the right time: in the present economic situation it allows the local authorities to organise their services in the most economical way."<sup>15</sup>

##### 3.2.2. Italy re state aid

In Case T-222/04, the ECJ upheld a commission ruling that Italy was in breach of the state aid rules by granting of tax reliefs and loans at preferential rates to a group of local authority companies providing public services including water, gas, electricity and waste management (including ACEA (Rome), AEM Milan) and AMGA (Genoa).<sup>16</sup>

### 4. Economy and crisis

#### 4.1. Economic stimulus and cohesion funds

Environmental projects already account for a high proportion of EU cohesion funds: e.g. Romania and Bulgaria are investing 45 percent and 42 percent of their cohesion funding on such projects.

In March 2009 the EC accelerated spending of €105 billion through the cohesion fund on 'green' projects as part of its economic stimulus to counteract the crisis. €54 billion will go to aid EU member states to comply with European environmental legislation, while €28 billion will go to water and waste management schemes. The EC commissioner responsible for regional policy claimed that: "this investment will be instrumental in creating long-term employment and reviving local economies".<sup>17</sup>

This acceleration has been criticised by environmental groups because too much of the investment goes to incinerators rather than other more locally friendly and employment-intensive recycling facilities. Friends of the Earth said in relation to Poland: "The total costs of these planned projects is EUR 1.1 billion, implying a consumption of around 66% of Poland's Cohesion Fund money for waste management for the same financial period, while blocking the development of alternatives such as separate collection and recycling schemes promoted in the EU waste hierarchy. These latter alternatives are more cost-effective, easier to implement and create many more employment, frequently for people from socially excluded groups. They are also more likely to facilitate local development. Moreover, many of the planned incinerators are oversized and will compete for resources – especially paper and plastic – with recycling facilities. The projects have been facing strong public opposition, as evidenced most strikingly in recent Kraków protests."<sup>18</sup>

#### 4.2. PPPs, EIB and incineration

The EC and national governments have taken a number of steps to rescue PPPs, including many in the waste sector. This effectively prioritises the use of public funds to rescue private operations. CEEP has criticised the Commission for its "deus ex machine" approach to rescuing PPPs, and also insisted that "It is not acceptable that public enterprises are not being consulted the same way as private ones when it comes to the public-private partnerships. This surely is not the level playing field which the Commission wants to guarantee. After all, the public side is always ultimately responsible for public services, and has to cope with the consequences when something goes wrong in such partnerships."<sup>19</sup>

The European Investment Bank (EIB) has been prominent in financing PPPs in this sector, as in other sectors, and this has also provided significant support for incineration: "Out of 33 waste management projects financed by the EIB between 2000 and 2006, 22 have included an incinerator.... at least 68 percent of EIB financing went to incineration... Suez and its waste subsidiaries SITA and Novergie-Azalys have benefited from three EIB loans for incineration, in Issy-Les-Moulineaux<sup>44</sup> and St-Germain-En-Laye<sup>45</sup>, France, and Cornwall in the UK."<sup>20</sup>

#### 4.3. Secondary materials

The recovery of metals and other materials is an important economic and environmental function. The sale and use of secondary materials generates extra revenue and at the same time substitutes for production of new materials.<sup>21</sup>

Materials that can be recovered from municipal solid waste include:

- **Paper:** basis for new paper production
- **Glass:** basis for new glass production or direct re-use of bottles
- **Electronic scrap and metals:** recovering of gold, molybdenum, copper etc.
- **Plastics:** basis for new plastic production
- **Organic waste:** fermentation for gas production (=> electricity and thermal energy), compost production
- **Energy** from residual waste: incineration with CHP (combined heat and power)

The business plans of the major waste companies expected significant revenues from the sale of secondary materials, which was central to the business case for investment in waste recovery and processing. The economic crisis has had a severe effect in depressing the demand for most of these materials, with a fall in volume and price of sales in 2009.<sup>22</sup>

## 5. Outsourcing and municipal direct service

### 5.1. No public/private efficiency differences

Recent empirical research has confirmed that, contrary to common assumptions, there are no significant differences in efficiency between public and private waste operators (empirical studies also find the same result in respect of water, electricity and other sectors<sup>23</sup>). A Spanish-American team analysed all econometric empirical studies of efficiency and privatisation in waste management and in water, and found “no systematic support for lower costs with private production...we do not find a genuine empirical effect of cost savings resulting from private production”.<sup>24</sup> Two of the authors carried out a further empirical study on waste management in rural areas, finding that inter-municipal arrangements reduce costs but outsourcing does not: “small towns that cooperate incur lower costs for their waste collection service. Cooperation also raises collection frequency and improves the quality of the service in small towns. By contrast, the form of production, whether it is public or private, does not result in systematic differences in costs.”<sup>25</sup>

This was further confirmed by a separate study in Spain, which found no efficiency difference between municipal and private: in “street cleaning and waste collection services in Spanish municipalities with a population exceeding 50 000....There is no difference between the inefficiencies observed in municipalities managed directly by town councils and those which have been transferred to private companies.”<sup>26</sup>

### 5.2. Remunicipalisation

There has been some re-municipalisation of refuse collection contracts in France.

The town of Lodeve, near Montpellier, decided to terminate the street-cleaning contract of Nicollin and re-municipalise the service from the end of 2009. The company’s workers went on strike, protesting that they would lose their jobs and their pay would be reduced; but returned to work after a meeting with the mayor.<sup>27</sup> The city council estimated that the re-municipalisation would save €202,000 Euros in 2010 and €153,000 Euros in 2012 (“cette reprise en régie devrait se traduire pour l’année 2010 (avec trois CAE) par une économie de 202 000 euros et pour 2012 (après titularisation des CAE) par une économie de 153 000 euros.”)<sup>28</sup>

In 2008 the city of Paris also decided in favour of direct labour for refuse collection, by cancelling plans to contract out two of the districts of Paris (IX<sup>e</sup> et XVI<sup>e</sup> arrondissements).<sup>29</sup> The city of Marseilles nearly did the same thing. The service in the centre of the city has been operated by a Veolia affiliate, Bronzo. The city council decided that their contract would be terminated, and drew up tender documents to invite bids from other companies, with Veolia debarred from bidding. In reaction to this, Veolia employees went on strike, in protest at the company being excluded, and demanding to be transferred with full protection for their pay. After a week of the strike, the council first cancelled the call for tenders, and then proposed to simply re-municipalise the service – not only in this area, but in all other areas of the city operated by contractors.<sup>30</sup> In November 2009 the socialist president of Marseille council proposed re-municipalising refuse collection in all areas of the city, but in early 2010 the council voted narrowly to continue to contract-out the service, as there was not sufficient time to set up a regime before the current private contracts expire.<sup>31</sup>

There may be similar trends in other countries. For example, in Germany, both E.on and RWE have been required to sell some holdings in stadtwerke, which have been bought by consortia of municipalities. Some of these stadtwerke may provide waste services.

### 5.3. Beyond Europe

In Egypt, the government introduced large-scale privatisation in 2000, issuing 18 year contracts to three companies – including FCC – for refuse collection, street cleaning and waste disposal, at an annual cost of \$500 million. This year it was reported that the government wanted to terminate the contracts as a result of poor performance – in the city of Giza, for example: “Their repeated failures to carry out their mission

resulted in heaps of disgusting garbage piling up on the streets”, but have not done so because of fear that the companies would claim compensation through arbitration.<sup>32</sup>

## 6. Employment issues

### 6.1. Jobs and skills report<sup>33</sup>

A new report on jobs and skills was published in May 2009 for the EC DG Employment, as one of a series of studies covering all sectors of the economy. It covers electricity, gas, and water in some detail, but there is much less detail on the waste sector, partly due to statistical classification problems. The report has no data on employment in the sector more recent than data published by the EC in 2004.

The occupational breakdown shows a dominance of technicians, drivers, and elementary occupations. It notes that: “Labour unions play an important role in the sectors. ....resistance against lower paid work and less job security when waste collection is contracted out”.

**Table 3. Occupational breakdown in waste sector 2006**

**Table 3.16 Occupation shares waste, 2006**

	EU 15	NMS	EU	Winning	Losing momentum	Upcoming	Retreating
Managers	5	6	5	9	8	3	4
Technicians	13	10	13	16	14	13	12
Clerks	8	6	8	11	10	8	4
Skilled agricultural and fishery workers	1	1	1	1	0	1	11
Craft and related trade workers	6	8	6	7	6	7	8
Drivers & mobile plant operators	21	18	20	20	23	22	19
Other plant and machine operators	5	6	6	6	8	4	3
Domestic helpers, cleaners, launderers	3	5	3	2	4	3	2
Other elementary occupations	37	38	37	27	27	38	34

Note: Country groupings are based on value added (Table 3.6).

Source: TNO et al 2009<sup>34</sup>

The study suffers from following a standard approach applied to all sectors, making assumptions which are not supported by evidence in relation to the waste sector – for example, that the existence of multiple private companies is automatically beneficial. Thus it refers to contracting-out as growing due to “the influence of efficiency regulation (privatisation, competition, incentive regulation)”, which suggests that the authors are unfamiliar with the empirical evidence on comparative efficiency discussed above, for example. It also makes some simple errors, with no apparent source: for example, it says, correctly, that the level of outsourcing varies a lot, but also asserts, incorrectly, that it never exceeds 50% (cf. Finland).

It presents data on the growth of the sector to 2004: “The waste sector has experienced high growth rates over the last decade which were especially policy driven. .... specialized waste management (collection, incineration, landfill, composting, etc.) employs about 50,000 people in the EU and experiences annual growth rates of around 11% and the waste recycling sector (for paper, glass, metals, etc.) with 500,000 to 1,000,000 in the EU-25 (European Commission, 2004b)”. It notes that value added – the combined total of profits and wages - has been growing at 2.4% per year in the waste sector between 1995 and 2006, faster than water (2.0%) or electricity and gas (0.3%) . Environmental standards have required higher spending on investments: for example “in ten years time, the investment needed for a waste-incineration plant doubled (leaving variable costs untouched) as a result of stricter regulation of dioxins, NOx, particles, HF and SO2. Costs per ton of waste processed increased from 31 euro to 79 euro.” It fails to note the forecasts made by the IRC in 2005 that employment in waste recycling would roughly double between 2000 and 2020.<sup>35</sup>

**Table 4. Value added in waste sector 1995-2006****Table 3.7 Value added waste, 1995-2006**

	Value added		Share in country		Share in EU	
	Level	Change	Level	Change	Level	Change
EU	65	2.4	0.6	0.0	100	0
EU 15	61	2.2	0.6	0.0	94	-2
NMS	4	5.9	0.7	0.2	6	2
Winning	6	5.7	0.7	0.2	9	2
Losing momentum	31	0.6	0.7	-0.1	48	-9
Upcoming	26	4.7	0.5	0.1	39	7
Retreating	2	-0.2	0.5	-0.2	4	-1
Definition	Value added Billion euro	Annual average growth	Share in national GDP	Total change in share	Share in value added sector EU	Total change in share
	2006	1995-2000	2006	1995-2006	2006	1995-2006

Source: TNO et al 2009<sup>36</sup>

## 6.2. Strikes and disputes

There have been several strikes and disputes in the refuse collection and waste management sectors in Europe in the last year. Some have arisen from general restructuring of payment systems, but most are caused by low pay and unhealthy working conditions, or by contractors withholding wages.

Recent disputes include:

- In Palermo, Sicily, there has been an indefinite strike by workers because the private contractor Coinres, stopped paying their wages in an attempt to improve the company's own finances.<sup>37</sup>
- In Ireland, there was a 5 month strike against a contractor which tried to cut workers' pay.<sup>38</sup>
- In France there have been a number of strikes by workers employed in waste sorting stations, largely migrants without official papers, working for obscure companies, without proper cleaning facilities, often without protective gloves, in "19<sup>th</sup> century" conditions.<sup>39</sup> In 2007 and 2008 there were also strikes by refuse workers in the Ile de France region, against Suez/Sita, over pay.<sup>40</sup>
- Strikes in Italy over a number of years have led to major problems with uncollected waste<sup>41</sup>
- There were strikes in France over the harmonisation of pay and conditions in newly formed intercommunal organisations in Toulouse (where 2700 workers were involved covering many services) and Bastia.<sup>42</sup>
- In the UK, there have been strikes in at least 2 cities (Leeds and Brighton because municipalities have attempted to implement equal pay rulings by cutting the pay of (largely male) refuse collectors, rather than increasing the pay of the mainly female occupations who won the ruling. In Leeds, there has been a 10-week strike, against council proposals to cut collectors pay, on average, from £18,000 to £13,000 on average.<sup>43</sup> There has also been a strike in the Scottish capital, Edinburgh, over proposals to cut wages.<sup>44</sup>

Bitter disputes over pay, working conditions and job security are a long-standing problem in this sector, globally: Martin Luther King was assassinated while supporting a strike by refuse collection workers in Memphis, Tennessee, in 1968. His widow summed up his work by saying that "He gave his life for the poor of the world, the garbage workers of Memphis and the peasants of Vietnam."<sup>45</sup> Many contractors still base their business model on exploiting the most vulnerable groups of people – often illegal migrants, or disadvantaged minorities - with the lowest possible rates of pay and minimum expenditure on health and safety.<sup>46</sup> The development of EU environmental standards has created new sectors of the industry, such as waste sorting, in which contractors apply the same practices. The lack of efficiency gains (see above) makes it more likely that the profit margins of private contractors are sustained at the expense of their employees.

According to Danish research, the outsourcing process has damaging effects on health and safety and security of employment: "The results of a recent study of developments in the working conditions at commercial collection companies show deterioration in respect of health and safety, competence building

and job security concurrent with the increase in outsourcing and competition in the sector.”<sup>47</sup> These factors are further reinforced by the influence of private equity in the sector. A massive study of private equity firms – which have bought and sold a number of major European waste contractors – showed that PE firms have no better managerial practices than other firms, but the pay of workers in workplaces taken over by PE falls 3% behind the pay of workers in other comparable companies, and job insecurity is much worse.<sup>48</sup>

These problems are not confined to Europe. Strikes in waste management remain common in the USA, and in many other countries.<sup>49</sup> In South Africa, Tshwane, the local authority that includes the capital Pretoria, contracted-out refuse collection: “it stood to save time, money and the hassle of dealing with human resources. But, unfortunately, when the contractors' staff go on strike, and it impacts on the city, the council cannot simply shrug off the problem as someone else's.”<sup>50</sup> The nearby Ekurhuleni municipality also contracted out to a private company, and also experienced a month-long strike by workers demanding parity of pay and conditions with municipal employees.<sup>51</sup>

## Annexe 1. Summary of EU legislation on waste

Reproduced

from

[http://europa.eu/legislation\\_summaries/environment/waste\\_management/index\\_en.htm](http://europa.eu/legislation_summaries/environment/waste_management/index_en.htm) .

Details of each piece of legislation can be found by following the links from this web page.

### ☐ GENERAL FRAMEWORK

- [Directive on waste](#)
- [Waste disposal \(until the end of 2010\)](#)
- [Strategy on the prevention and recycling of waste](#)
- [Integrated pollution prevention and control: IPPC Directive](#)
- [Waste management statistics](#)
- [Competitiveness of the recycling industries](#)
- [Landfill of waste](#)
- [Waste incineration](#)
- [Supervision and control of shipments of waste](#)

### ☐ HAZARDOUS WASTE

- [Controlled management of hazardous waste \(until the end of 2010\)](#)
- [Basel Convention](#)

### ☐ WASTE FROM CONSUMER GOODS

- [Packaging and packaging waste](#)
- [Disposal of polychlorinated biphenyls \(PCBs\) and polychlorinated terphenyls \(PCTs\)](#)
- [Disposal of spent batteries and accumulators](#)
- [Disposal of waste oils](#)
- [Management of end-of-life vehicles](#)
- [The reusing, recycling and recovering of motor vehicles](#)
- [Environmental issues of PVC](#)
- [Waste electrical and electronic equipment](#)

### ☐ WASTE FROM SPECIFIC ACTIVITIES

- [Management of waste from extractive industries](#)
- [A strategy for better ship dismantling practices](#)
- [Ship dismantling](#) Archives
- [Removal and disposal of disused offshore oil and gas installations](#)
- [Use of sewage sludge in agriculture](#)
- [Port infrastructure: facilities for ship-generated waste and cargo residues](#)
- Titanium dioxide
  - [Disposal of titanium dioxide industrial waste](#)
  - [Surveillance and monitoring of titanium dioxide waste](#)
  - [Reduction of pollution caused by waste from the titanium dioxide industry](#)

### ☐ RADIOACTIVE WASTE AND SUBSTANCES

- [Shipments of radioactive waste: supervision and control](#)
- [Shipments of radioactive substances](#)
- [Situation in 1999 and prospects for radioactive waste management](#)
- [Management of spent nuclear fuel and radioactive waste](#)

## Notes

<sup>1</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:312:0003:01:EN:HTML>

<sup>2</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:312:0003:01:EN:HTML>

<sup>3</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:312:0003:01:EN:HTML>

<sup>4</sup> “[\*] This includes incineration facilities dedicated to the processing of municipal solid waste only where their energy efficiency is equal to or above:

- 0,60 for installations in operation and permitted in accordance with applicable Community legislation before 1 January 2009,  
- 0,65 for installations permitted after 31 December 2008, using the following formula: Energy efficiency =  $(E_p - (E_f + E_i)) / (0,97 \times (E_w + E_f))$  In which:

-  $E_p$  means annual energy produced as heat or electricity. It is calculated with energy in the form of electricity being multiplied by 2,6 and heat produced for commercial use multiplied by 1,1 (GJ/year)

-  $E_f$  means annual energy input to the system from fuels contributing to the production of steam (GJ/year)

-  $E_w$  means annual energy contained in the treated waste calculated using the net calorific value of the waste (GJ/year)

-  $E_i$  means annual energy imported excluding  $E_w$  and  $E_f$  (GJ/year)

- 0,97 is a factor accounting for energy losses due to bottom ash and radiation. This formula shall be applied in accordance with the reference document on Best Available Techniques for waste incineration.”

<sup>5</sup> PARLIAMENTARY COMMISSIONER FOR FUTURE GENERATIONS dr. Sándor Fülöp

[http://jno.hu/en/?&menu=downloads&doc=ECJ\\_case\\_law](http://jno.hu/en/?&menu=downloads&doc=ECJ_case_law)

<sup>6</sup> Euractiv 17 July 2009 Commission eyes tighter enforcement of EU waste law

<sup>7</sup> Eurostat 31/2009 - 9 March 2009 Municipal waste Half a ton of municipal waste generated per person in the EU27 in 2007 [http://www.eds-destatis.de/en/press/download/09\\_03/031-2009-03-09.pdf](http://www.eds-destatis.de/en/press/download/09_03/031-2009-03-09.pdf)

<sup>8</sup> Situation des décharges communales en Roumanie . Ilie Brie 2009

<http://www.ceep.eu/images/stories/pdf/events/16072009/ilie-brie.pdf>

<sup>9</sup> <http://ec.europa.eu/environment/legal/law/statistics.htm>

<sup>10</sup> Euractiv 17 July 2009 Commission eyes tighter enforcement of EU waste law

<sup>11</sup> Reference: IP/08/705 06/05/2008 <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/705&-fnB2>

<sup>12</sup> Euronews 06/05/08 <http://www.euronews.net/2008/05/06/italy-s-rubbish-handling-festers-all-the-way-to-the-ecj/>

<sup>13</sup> [http://curia.europa.eu/jurisp/cgi-](http://curia.europa.eu/jurisp/cgi-bin/form.pl?lang=en&newform=newform&alljur=alljur&jurcdj=jurcdj&jurtpi=jurtpi&jurftp=jurftp&alldocrec=alldocrec&docj=docj&docor=docor&docop=docop&docav=docav&docsom=docsom&docinf=docinf&alldocnorec=alldocnorec&docnoj=docnoj&docnoor=docnoor&radtypeord=on&typeord=ALL&docnodecision=docnodecision&allcommjo=allcommjo&affint=affint&affclose=affclose&numaff=&ddatefs=01&mdatefs=01&ydatefs=2007&ddatefe=01&mdatefe=12&ydatefe=2009&nomusuel=&domaine=&mots=%22waste+management%22&resmax=100&Submit=Submit)

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<sup>14</sup> 09 June 2009 Case C-480/06: Failure of a Member State to fulfil obligations – Directive 92/50/EEC – No formal European tendering procedure for the award of waste treatment services – Cooperation between local authorities - the *Landkreise* (administrative districts) Rotenburg (Wümme), Harburg, Soltau-Fallingb. and Stade directly concluded with Stadtreinigung Hamburg (City of Hamburg Cleansing Department) a contract for waste disposal without there having been a call for tenders) [http://curia.europa.eu/jurisp/cgi-](http://curia.europa.eu/jurisp/cgi-bin/form.pl?lang=en&alljur=alljur&jurcdj=jurcdj&jurtpi=jurtpi&jurftp=jurftp&numaff=&nomusuel=&ddatefs=08&mdatefs=06&ydatefs=2009&ddatefe=10&mdatefe=06&ydatefe=2009&docnodecision=docnodecision&allcommjo=allcommjo&affint=affint&affclose=affclose&alldocrec=alldocrec&docor=docor&docav=docav&docsom=docsom&docinf=docinf&alldocnorec=alldocnorec&docnoor=docnoor&radtypeord=on&newform=newform&docj=docj&docop=docop&docnoj=docnoj&typeord=ALL&domaine=&mots=&resmax=100&Submit=Rechercher)

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<sup>15</sup> CEEP welcomes a further step towards freedom of choice for local authorities

[http://www.ceep.eu/index.php?option=com\\_content&view=article&id=146%3Acep-welcomes-a-further-step-towards-freedom-of-choice-for-local-authorities&catid=1%3Alatest-news&Itemid=1](http://www.ceep.eu/index.php?option=com_content&view=article&id=146%3Acep-welcomes-a-further-step-towards-freedom-of-choice-for-local-authorities&catid=1%3Alatest-news&Itemid=1)

<sup>16</sup> JUDGMENT OF THE COURT OF FIRST INSTANCE (Eighth Chamber, Extended Composition) 11 June 2009 (State aid – Scheme of aid granted by the Italian authorities to certain public utilities in the form of tax exemptions and loans at preferential rates – Decision declaring the aid incompatible with the common market – Existing aid or new aid – Article 86(2) EC) In Case T-222/04. [http://curia.europa.eu/jurisp/cgi-](http://curia.europa.eu/jurisp/cgi-bin/form.pl?lang=en&newform=newform&alljur=alljur&jurcdj=jurcdj&jurtpi=jurtpi&jurftp=jurftp&alldocrec=alldocrec&docj=docj&docor=docor&docop=docop&docav=docav&docsom=docsom&docinf=docinf&alldocnorec=alldocnorec&docnoj=docnoj&docnoor=docnoor&radtypeord=on&typeord=ALL&docnodecision=docnodecision&allcommjo=allcommjo&affint=affint&affclose=affclose&numaff=&ddatefs=01&mdatefs=01&ydatefs=2006&ddatefe=01&mdatefe=11&ydatefe=2009&nomusuel=&domaine=&mots=waste+AND+Italy&resmax=100&Submit=Submit)

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<sup>17</sup> 'Green jobs' focus for €105bn in funds to EU regions 09.03.2009 EUOBSERVER / BRUSSELS

<sup>18</sup> [http://www.bankwatch.org/billions/files/Letter\\_FoEE-BW\\_to\\_%20Barroso-11-05-09.pdf](http://www.bankwatch.org/billions/files/Letter_FoEE-BW_to_%20Barroso-11-05-09.pdf)

- <sup>19</sup> CEEP warns against the Commission's deus ex machina approach on the PPPs  
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- <sup>21</sup> Landfill in Europe – Challenges for European public enterprises? by Dr. Rüdiger Siechau President of VKS im VKU  
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<http://www.psiru.org/reports/2009-03-W-companies.doc> , <http://www.psiru.org/reports/2005-10-W-effic.doc>
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- <sup>28</sup> MIDI LIBRE 29 décembre 2009 mardi Un dernier conseil
- <sup>29</sup> Le Parisien 27 Novembre 2008 Ordures/; Collecte des déchets : la privatisation attendra
- <sup>30</sup> Agence France Presse 9 novembre 2009 Le ramassage des poubelles pourrait redevenir 100% public à Marseille
- <sup>31</sup> Agence France Presse, 26 janvier 2010 [Collecte des ordures: Marseille renonce à revenir au 100% public](#)
- <sup>32</sup> Daily News Egypt Nov 9, 2009 Foreign garbage collection companies to remain operational until contract expires
- <sup>33</sup> Investing in the Future of Jobs and Skills - Scenarios, implications and options in anticipation of future skills and knowledge needs Sector Report: Electricity, Gas, Water and Waste. May 2009. TNO Netherlands, SEOR Erasmus University Rotterdam, ZSI Centre for Social Innovation. <http://ec.europa.eu/social/BlobServlet?docId=3761&langId=en>
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<http://www.psiru.org/reports/2006-02-G-EUwaste.doc> , <http://www.psiru.org/reports/2007-06-G-EWCs.doc>
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- <sup>50</sup> Pretoria News (South Africa) November 04, 2009 Contingency plan on waste is needed
- <sup>51</sup> Sowetan (South Africa) September 16, 2009 Thembisa stinks as waste collectors strike drags on