Policy Brief for the EP Environment Committee
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Incineration as recovery and disposal of waste:

Analysis and interpretation of the judgements of the European Court of Justice C-458/00 and C-228/00

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By

Peter Beyer (Ecologic)

Wenke Hansen (Ecologic)

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SUMMARY

1. At the beginning of 2003, the European Court of Justice (ECJ) issued two important judgements with regard to the interpretation of the Waste Shipment Regulation 259/93[1], *the Belgian Cement Kilns,* Commission v. Germany[2], and the *Strasbourg Incinerator*, Commission v. Luxembourg[3].

2. Both rulings deal with the consideration of waste incineration as either a recovery operation according to R1 ('use principally as a fuel or other means to generate energy') of Annex II B to the EC Directive 75/442/EEC of 15 July 1975 on waste (Waste Framework Directive)[4], or as a disposal operation according to D 10 ('incineration on land') of Annex II A.

3. The Waste Shipment Regulation gives countries from which waste is being exported extensive powers to block shipments intended for disposal, but in turn limits powers to prevent exports for recovery. The question whether the intended use is therefore to be qualified as recovery or disposal decides whether the concerned Member State does or does not have the right to oppose shipments.

4. In the rulings, the ECJ defined three criteria that need to be fulfilled in order to consider an operation as a recovery operation: I) the main purpose is the generation of energy; ii) the amount of energy generated, recovered and effectively used is greater than the amount of energy consumed, and iii) the principal use of the waste is as fuel.

5. These criteria are fulfilled in cases where waste is replacing a regular fuel in industrial plants (eg cement kilns). According to the rulings, waste incinerators are *a priori* not considered a recovery installation, but the Court does not exclude waste incinerators from being a recovery operation.

6. The criteria established by the Court for waste recovery leave room for interpretation and are not entirely clear. The ECJ dismissed the criteria used by the German authorities to consider waste recovery, including *heating value, pollution content* or *waste mixing*.

7. The impacts of the *Strasbourg Incinerator* and the *Belgian Cement Kiln*-case on waste management in Europe are rather difficult to assess, as the interpretations of the rulings vary between the concerned actors throughout Europe. But some trends and possible consequences can be summarised.

8. A trend towards more co-incineration of waste in industrial plants (eg cement kilns) is expected, as this is regarded as a recovery operation. Cross-border shipment of waste that is intended for co-incineration (for recovery) will probably increase. This can also include mixed commercial waste and hazardous waste, depending on the prices for recovery.

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1 OJ 1993 L 30, p. 1; see also the Commission's Proposal on a new Regulation of the European Parliament and the Council on Shipments of Waste COM(2003) 379 final, 30 June 2003.

2 ECJ 13.2.2003, C-228/00.

3 ECJ, 13.2.2003, Case C-458/00.

4 OJ 1975 L 194, p. 39, as amended by Commission Decision 96/350/EC of 24 May 1996, OJ 1996 L 135, p. 32.

9. As waste incinerators can only in restricted circumstances be considered a recovery operation, waste will only be disposed of in waste incinerators[5] if there exists no other recovery option. As disposal of waste in landfills is much cheaper than waste incineration, there might be a trend towards more extensive landfilling.

10. Recovery targets of other EU directives and national laws, such as the Packaging and Packaging Waste Directive will be more difficult to meet.

11. In order to ensure a high standard of waste recovery and disposal across Europe that is in line with other related European policy developments (such as the Integrated Product Policy[6], and the developing thematic strategies on waste and recycling[7] and on resource management[8]), different policy options should be considered. These should be based on a legal, technical, ecological and economic analysis of possible consequences of the ECJ rulings.

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5 Or in landfills.

6 On 18th June 2003, the Commission adopted a Communication on Integrated Product Policy. IP/03/858

7 On 27 May 2003 the Commission adopted a Communication towards a thematic strategy on the prevention and recycling of waste, COM (2003) 301.

8 On 1st October 2003 the Commission adopted a Communication entitled 'Towards a Thematic Strategy on the Sustainable Use of Natural Resources'.

POLICY BRIEF FOR THE EP ENVIRONMENT COMMITTEE
EP/IV/A/2003/09/01

INCINERATION AS RECOVERY AND DISPOSAL OF WASTE: ANALYSIS AND INTERPRETATION OF THE JUDGEMENTS OF THE EUROPEAN COURT OF JUSTICE C-458/00 AND C-228/00

CONTENTS

1 Introduction

At the beginning of 2003 the fifth chamber of the European Court of Justice (ECJ), based on opinions of Advocate General Jacobs, issued two important judgements relating to the interpretation of Council Regulation No 259/93 of 1 February 1993 on the supervision and control of shipments of waste within, into and out of the European Community (Waste Shipment Regulation).[9] The cases are as follows:

- *Belgian Cement Kilns*, ECJ, 13.2.2003, C-228/00, Commission v. Germany and
- *Strasbourg Incinerator*, ECJ, 13.2.2003, Case C-458/00, Commission v. Luxembourg.

Both rulings deal with the consideration of waste incineration as either a recovery operation according to R1 ('use principally as a fuel or other means to generate energy') of Annex II B to the EC Directive 75/442/EEC of 15 July 1975 on waste (Waste Framework Directive)[10], or as a disposal operation according to D 10 ('incineration on land') of Annex II A.

The Waste Shipment Regulation gives countries from which waste is being exported extensive powers to block shipments intended for disposal, but in turn limits powers to prevent exports for recovery. The question whether the intended use is therefore to be qualified as recovery or disposal decides whether the concerned Member State has the right to oppose the shipments.

Beginning in section (2) with a short summary of the underlying facts and the legal background, this paper provides an interpretation of the above mentioned rulings (section 3) and gives an overview of the key reactions (section 4). This is followed by legal, political and economic analyses of the consequences of the judgements for the future European waste policy (section 5).

2 Summary and Background of the Rulings

2.1 Belgian Cement Kilns

The case *Belgian Cement Kilns* dealt with the shipment of waste from Germany to Belgium. The waste was to be used as a fuel in Belgian cement kilns. German authorities had objected to several of these shipments on the grounds that the waste was intended for disposal and not for recovery, as indicated by the notifying entrepreneur. They based their decisions on circulars issued by several German Länder which stipulate that in order to be classified a R1 recovery operation under the Waste Framework Directive, the waste must fulfil different criteria, *inter alia*:

- have a calorific value of at least 11,000 kJ/kg without being mixed with other substances;
- be such that any impurities must be capable of being recovered without causing harm; and
- meet the thresholds of polluting substances (§ 16[11]).

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9 OJ 1993 L 30, p. 1; see also the Commission's Proposal on a new Regulation of the European Parliament and the Council on Shipments of Waste COM(2003) 379 final, 30 June 2003.

10 OJ 1975 L 194, p. 39, as amended by Commission Decision 96/350/EC of 24 May 1996, OJ 1996 L 135, p. 32.

11 Paragraphs in the text refer to the paragraphs in the judgement as published by the Court.

The Commission claimed that by opposing the export of the waste, Germany had infringed Article 7(2) and (4) of the Waste Shipment Regulation, as the use of the waste as fuel in the cement kilns had to be qualified as a recovery operation. The Court backed the Commission and declared that by raising unjustified objections to certain shipments of waste to other Member States to be used principally as fuel, Germany failed to fulfil its obligations under the Waste Shipment Regulation.

The Court considered the objections against the waste shipments in question unfounded. It stated that the criteria laid down in the above mentioned circulars are not relevant for the purpose of determining whether the use of waste in cement kilns is to be qualified as a disposal or recovery operation.

Based on an interpretation of the formulation 'use principally as a fuel or other means to generate energy' in R1, the Court instead provided a **set of three conditions** which a combustion process must fulfil to be considered a R1 recovery operation:

- the main purpose of the operation must be to enable the waste to be used as a means of generating energy (§ 41);
- the amount of energy generated by, and recovered from, the combustion process must be greater than the amount of energy consumed during the process. In turn, this energy has to be used effectively, either in the form of heat or, after processing, in the form of electricity (§ 42); and
- the waste must be used principally as a fuel, which means that the greater part of the waste must be consumed during the operation and the greater part of the energy produced must be recovered and used (§ 43).

Quoting another case issued by the same chamber dealing with a similar question,[12] the Court derives **a general requirement** from Article 3(1)(b) and the fourth recital of the Waste Framework Directive:

> 'the essential characteristic of a waste recovery operation is that its principal objective is that the waste serve a useful purpose in replacing other materials which would have had to be used for that purpose, thereby conserving natural resources ' (§ 45).

The Court then establishes **a general definition** according to which the combustion of waste 'constitutes a recovery operation where its principal objective is that the waste can fulfil a useful function as a means of generating energy, replacing the use of a source of primary energy which would have had to have been used to fulfil that function' (§ 46).

The Court stated that the decisions of the German authorities to object to the waste shipments were not in line with the requirements of the Regulation, as their objection was not justified by failure to comply with any of the three criteria established by the Court (§ 52). Furthermore, the Court dismisses the criteria laid down in the German circulars as not relevant for the purpose of determining whether the use of waste is considered a recovery operation in line with the Waste Framework Directive and the Waste Shipment Regulation (§ 54).

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12 *ASA*, ECJ, 27.2.2002, C-6/00, ASA v. BMU, § 69.

However, the Court mentions that Member States may block waste shipments under Article 7(4)(a) Waste Shipment Regulation, especially if:

- the ratio of the recoverable and non-recoverable waste,
- the estimated value of the materials to be finally recovered, or
- the cost of the recovery and the cost of the disposal of the non recoverable fraction does not justify the recovery under economic and environmental considerations. The Court explicitly states that Member States may also under this provision take into consideration the criteria referred to in the German circulars (§ 50).

2.2 Strasbourg Incinerator

The case *Strasbourg Incinerator* dealt with the shipment of household and similar waste from Luxembourg to France. The waste was to be burned in the incinerator of the municipality of Strasbourg and the energy generated was to be recovered. While the exporter classified the incineration as waste shipment for recovery, Luxembourg's authorities reclassified them as shipment for disposal arguing that 'incineration of waste in a plant, the primary purpose of which is thermal treatment with a view to the mineralisation of waste, whether or not there is a reclamation of the heat produced, is considered in Luxembourg to be a D 10 disposal operation'.

The Commission claimed that the incineration had to be classified as a recovery operation and that in consequence, Luxembourg, by reclassifying the shipments, infringed the Waste Shipment Regulation.

The Court dismissed the Commission's application, judging that the Commission failed to produce evidence showing that the principal objective of the incineration operation was the recovery of waste.

The Court stated that the objections raised by Luxembourg's authorities in their decisions were in accordance with the distinction between disposal and recovery operations established by the Waste Framework Directive (§ 26[13]).

It then repeated the three criteria as well as the general rule and definition it established in the ruling *Belgian Cement Kilns* with reference to the incineration of household waste (§§ 32 - 37). According to the Court, incineration of waste in a processing plant designed to dispose of waste does not have as a principal objective the recovery of waste, even if the produced heat is fully or partly reclaimed (§ 41). The Court considers the reclamation of energy as a 'secondary effect' of the waste incineration whose main purpose is the disposal and not the recovery of the waste (§ 43). The Court states that the European Commission failed to produce any evidence showing that the incineration was a recovery operation. It suggests that the Commission could have done so, for example, by arguing

- that the plant unless it was supplied with waste, would have had to operate using a primary energy source, or
- that the operator of the incinerator would have paid for the delivery of the waste (§ 44).

[13] Paragraphs in the text refer to the paragraphs in the judgement as published by the Court.

3 Legal Interpretation and Consequences of the Rulings

Some consequences of the rulings are rather obvious: the German authorities and all other Member States are not entitled to use waste related criteria such as the calorific value of the waste or its impact on the environment to decide whether a combustion process is to be considered as a R1 recovery or D10 disposal operation. Instead, the Court introduces a general definition for recovery operations and establishes a set of three criteria characterising the combustion process instead of describing the character of the waste. Both judgements are in these aspects identical and based on the previous *ASA*-case.[14] All Member States have now to use these criteria to consider whether waste combustion processes are recovery or disposal operations.

3.1 Binding character of the judgements

Despite the fact that both judgements deal primarily with the Waste Shipment Regulation, they deliver a definition and new criteria with regard to how to distinguish between R1 and D10 operations under the Waste Framework Directive. This is due to the fact that Article 2 of the Waste Shipment Regulation refers to the relevant definition in the Waste Framework Directive.

The rulings are directly applicable in the Member States, which means that the authorities have to change their routine concerning waste shipments. However, the judgements – at least theoretically – do not directly affect the classification of operations for disposal or recovery under the national laws implementing the Waste Framework Directive, since they only refer to the directly applicable Waste Shipment Regulation.

However, the Court has issued another ruling that directly concerns the consideration of the same question under the Waste Framework Directive, *Belgian Cement Kilns II*.[15] The Court had to decide whether the incineration in cement kilns constitutes a recovery or a disposal operation as referred to in R1 of Annex IIB and in D 10 of Annex IIA to the Waste Framework Directive. In its judgement, the Court makes explicit reference to the first *Belgian Cement Kilns* case approving the judgement.[16] Therefore, the Member States have to bring their national enforcement practices in line under the laws implementing the Waste Framework Directive, and they eventually will have to amend these laws.

3.2 Assessment of the criteria and definition

According to the Court, combustion of waste constitutes only a recovery operation when:

i) its principal objective is that the waste fulfils a useful function as a means of generating energy; and
ii) it replaces the use of a source of primary energy which otherwise would have had to have been used to fulfil that function.

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14 *ASA*, ECJ, 27.2.2002, C-6/00, ASA v. BMU.

15 *Belgian Cement Kilns II*, 3.4.2003, C-116/01, SITA v. Minister van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer.

16 *Belgian Cement Kilns II*, 3.4.2003, C-116/01, SITA v. Minister van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer, § 53.

This definition – characterising the combustion process instead of describing the character of the waste – had already been used by the Court in the *ASA*-case.[17] In the two new rulings, the Court further elaborates the first part of the definition concerning the principal objective of the combustion by establishing the above-mentioned three criteria.

3.2.1 The principal objective of the combustion process

The **first condition**, contained in the basic definition, requires that the main purpose or principal objective of the operation has to be to 'generate' energy by burning waste. In the case *Belgian Cement Kilns* this was relatively obvious as it has been used as fuel in an industrial production process. In the *Strasbourg Incinerator* case, the Court judged that burning waste in waste incineration plants usually has as its principal aim the disposal of waste and not the generation of energy. It considered energy reclamation to be merely a secondary effect. However, the Court did not examine in detail the conditions of the operation in question as – according to the Court – the Commission already failed to provide any evidence, and therefore the action was dismissed. It is now up to the Member States to further define in which instances the principal objective of an operation is energy recovery.

The **second condition** requires that the amount of energy reclaimed and recovered from the combustion process must be 'greater' than the amount of energy consumed during the process. The reclaimed energy has to be used effectively, either immediately in the form of heat or after processing in the form of electricity. When comparing the energy required to burn the waste and the energy reclaimed, there has to be a net overspill of energy reclaimed. This condition is apparently met when waste is likely to burn after fire has been set to it, seemingly the case for waste having a calorific value of about 5,000 kJ/kg.[18] The use of the reclaimed energy has to be 'effective'. However, what exactly that means in technical terms must be clarified.

The **third condition** requires that the greater part of the waste must be consumed during the operation and the greater part of the energy produced must be recovered and used. The meaning of 'greater part' remains rather unclear as the Court failed to give any further explanation. Certainly the remaining slag, embers and ashes are considered as not having been consumed, but what about the 20 to 30 per cent of water contained in the average waste which evaporates through the smokestack? If it is seen as non-consumed, the percentage of water in the waste has to be analysed to consider whether the combustion is recovery or disposal.[19]

If the criteria of 'greater part' refers to the proportional mass (including water) of the consumed and not consumed part of the waste, one has to consider that even waste with a calorific value of around 15,000 kJ/kg might only have a proportional mass of around 40per cent of elements which will be transformed into energy.[20]

The second element of the third criteria, the reclaiming of the greater part of the transformed energy, remains ambiguous. The Court leaves open the question of how to define the energy

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17 *ASA*, ECJ, 27.2.2002, C-6/00, ASA v. BMU §§ 69-71.

18 Bothe, Dietmar, Und sie verwerten doch!, Müll und Abfall 2003, Vol 8, 396 (396).

19 Bothe, Dietmar, Und sie verwerten doch!, Müll und Abfall 2003, Vol 8, 396 (397).

20 Bothe, Dietmar, Und sie verwerten doch!, Müll und Abfall 2003, Vol 8, 396 (397).

efficiency of the plant or operation. It does not give any clear technical criteria to consider when the operation does reclaim the greater part of the energy.

3.2.2 Replacing the use of a source of primary energy

In addition to these three criteria, the waste shall, according to the second part of the definition of recovery operation, replace the use of a source of primary energy which otherwise would have had to have been used to fulfil that function. That this is always the case when waste replaces regular fuel in industrial processes is rather obvious, but concerning waste incinerators that are designed to burn waste the rulings are interpreted in different ways.

Many commentators have claimed that to consider waste combustion as a recovery operation, the waste has to replace another source of energy *within* the plant itself. In consequence only incinerators that are able to process regular fuel could be considered as carrying out recovery operations.[21] According to others, in order to fulfil this condition it would be sufficient if the main purpose of the incinerator were to produce energy fed into the grid.[22] Some require in addition a well defined purpose such as the supply of a distinct area, or an installation such as a hospital or a contract which requires the incinerator to feed a distinct amount of energy into the grid.[23]

In the *Strasbourg Incinerator* case, the European Commission argued that the saving of natural resources should be considered in a wider perspective and not only in the context of the substitution of resources other than the plant itself. The Court did not expressly discuss this argument in the ruling. In the *Strasbourg Incinerator* case, as well as in the *Belgian Cement Kilns* and the *ASA* cases, the Court requires only that the waste replaces other materials which would have had to be used for the same purpose, thereby conserving natural resources.[24] The general definition of waste combustion as a recovery operation used by the Court in all three cases requires that the waste replaces a source of primary energy which otherwise would have been used to fulfil that function.[25] The wording therefore does *not* imply that the source of primary energy has to be replaced *within* the plant itself. This interpretation is also in line with the overall aim of the Waste Framework Directive, to conserve natural resources. For this purpose, it does not matter whether primary resources are replaced within the plant or outside.

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21 Paschlau, Helmut/Rindtorff, Ermbrecht, Die EuGH- Entscheidungen zur Abfallverbrennung und Abfall-Mitverbrennung und ihre Folgen, Müll und Abfall, 2003, Vol. 6, 264 (266, 267); Frenz, Walter, Natur und Recht, Energie durch Abfall, 2003, 395 (400); German Deputy Minister for the Environment Rainer Baake (Staatssekretär) in his speech on the 15. Kasseler Abfallforum <http://www.bmu.de/de/1024/js/sachthemen/abfallwirtschaft/index_abfallrecht/?id=30&nav_id=444&page=1>,. see letter of Commissioner Wallström to the Environmental Ministers of the Member States dating 24 July 2003, PMA/da D:6539.

22 For these authors the energy efficiency of the plant is of crucial importance to consider the main purpose of the process, Reese, Moritz, Zeitschrift für Umweltrecht 2003, 217 (218-219); Giesberts, Ludger/Hilf, Juliane, Anmerkungen zu den Urteilen, DVBl. 2003, 514 (516).

23 Bothe, Dietmar, Und sie verwerten doch!, Müll und Abfall 2003, Vol 8, p. 396 (403); Schink, Alexander, Die Entscheidungen des EuGH und die kommunale Abfallwirtschaft, Abfallrecht 2003, Vol. 3, 106, (111). This is also the opinion of the German Länder as agreed in the Landesarbeitsgemeinschaft Abfall in September.

24 *Strasbourg Incinerator,* ECJ, 13.2.2003, Case C-458/00, Commission v. Luxembourg , § 36; *Belgian Cement Kilns*, ECJ, 13.2.2003, C-228/00, Commission v. Germany, § 45; *ASA*, ECJ, 27.2.2002, C-6/00, ASA v. BMU, § 69.

25 Strasbourg Incinerator, ECJ, 13.2.2003, Case C-458/00, Commission v. Luxembourg, § 37; Belgian Cement Kilns, ECJ, 13.2.2003, C-228/00, Commission v. Germany, § 46; *ASA*, ECJ, 27.2.2002, C-6/00, ASA v. BMU, § 71.

This interpretation is not in contradiction with the Court ruling, despite the **two examples** the Court cites for evidence the Commission could have provided to show that the operation in question was recovery of waste. According to the Court, the Commission could have, for example, tried to prove that the plant would without the waste have had to use a primary source of energy or that the waste was to have been delivered in exchange for payment.[26]

Both examples are not general conditions like the above-mentioned three criteria established by the Court. They do not belong to the substantive argumentation on which the judgement is based, but are only a further indication how the Commission could argue its case.

In the *Strasbourg Incinerator* ruling the Court therefore does **not** require that the waste replaces a source of primary energy within the plant. This is confirmed by a subsequent Court judgement where the same Chamber clearly states that in order to be considered an R1 operation it is both necessary and sufficient that the combustion of waste meets the three above-mentioned conditions set out in §§ 41-43 of the *Strasbourg Incinerator* Ruling.[27] Although, this condition would have been fulfilled in the case in question, the Court does not require that primary sources are replaced within the plant.

However, the operation in question must have as its primary purpose the generation of energy, and the Court makes it clear that the mere reclaim of all, or part of, the generated energy in a waste incinerator constitutes just a secondary effect. In consequence, it will in the future be more difficult to consider combustion of waste in waste incinerators as a recovery operation, but the ruling does not imply that combustion of waste in waste incinerators has at any rate to be considered as a disposal operation.

4 Key reactions

The **European Commission** had to answer several questions of MEPs that dealt with the effect of the *Strasbourg Incinerator* Judgement on the European waste policy, especially on the recovery target under the Directive 94/62/EC on packaging and packaging waste.[28]

The Commission is of the opinion that the Court decided in the *Strasbourg Incinerator* judgement that the primary objective of incineration in a dedicated municipal waste incinerator is waste disposal, and therefore excluded it from the list of recovery operations provided for in Annex II B of the Waste Framework Directive. According to the Commission energy recovery defined as 'the use of combustible packaging waste as a means to generate energy through direct incineration with or without other waste and with recovery of the heat' is excluded from the concept of recycling as it is defined in the Directive.[29]

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[26] ECJ, 13.2.2003, Case C-458/00, Commission v. Luxembourg , § 44. The first example suggests that primary sources should be replaced within the plant which is not required by the general definition established by the Court. Concerning the second example it is already questionable whether under this condition the delivered fuel would not rather be qualified as a good instead of waste. Independent whether the waste is burnt in a cement kiln or a waste incinerator the operator instead of paying is usually getting paid even if the operation is considered recovery.

[27] *Belgian Cement Kilns II*, 3.4.2003, C-116/01, SITA v. Minister van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer, § 53.

[28] Oral question no. 13/03 by Caroline F. Jackson and David Robert Bowe and written question E-0790/03 by Christopher Huhne.

[29] E-0790/03EN, answer given by Mrs Wallström on behalf of the Commission and reply to oral question, H-0360/03.

Commissioner Wallström expressed the same opinion in her letter to EU Environment Ministers dated 24 July 2003.[30] In this letter the Commissioner stated that she did not believe that the judgements would increase the shipments of waste in the Union. She pointed out that the Court stressed that the Waste Shipment Regulation allows for the restriction of shipments for environmental reasons under the Waste Shipment Regulation, especially in the case of 'sham recovery'.

The Commissioner suggested two options for how the European Commission could react to the two judgements.

- Adaptations through comitology of Annex II of the Waste Framework Directive as foreseen by its Article 17. However, adaptations are strictly limited to what is necessary to reflect the 'scientific and technical progress'. The Commission is therefore prevented from changing the current legal situation, for example, by adopting new criteria. Nevertheless it sees the possibility to 'fine-tune ' Annex II by comitology.
- If this is considered insufficient, an amendment of the Waste Framework Directive may prove necessary. Related discussions are to take place in the Technical Adaptation Committee set up under Article 18 of the Directive.

German Environment Minister Jürgen Trittin regretted the *Belgian Cement Kilns* ruling. He pledged to strengthen air pollution standards for installations burning waste. His Deputy Minister Rainer Baake called for a revision of Annex II of the Waste Framework Directive and further and stricter European standards for waste combustion. He asked the Commission to develop guidelines for the restriction of shipments for environmental reasons under Article 7(4)(a) Waste Shipment Regulation.

While **environmental groups** welcomed the *Strasbourg Incinerator* ruling as a step against low standard recovery, they were concerned about the *Belgian Cement Kilns* ruling. They fear that it encourages waste shipment throughout Europe and will increase waste exports to countries with lower environmental standards.

In reaction to the rulings, the **waste association FEAD** published a paper on the revision of Annex II of the Waste Framework Directive.[31] FEAD suggests new definitions for recovery and disposal operations. An operation should be classified as recovery provided that a single kilogram of useful material, or a single kWh of useful energy, is produced. An efficiency ratio should then characterise each operation. The higher the ratio, the better the recovery.[32] The Confederation of European Waste-to-Energy Plants (**CEWEP**) is of the opinion that the Court in the *Strasbourg* ruling does not exclude incinerators from carrying out recovery operations according to R1.[33]

5 Summary: Interpretation and Conclusions

To assess the impacts of the *Strasbourg Incinerator* and the *Belgian Cement Kiln* case on waste management in Europe is rather difficult as the interpretations of the rulings vary

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30 PMA/da D:6539.

31 FEAD Policy Paper of Annexes IIA and IIB of the Waste Framework Directive, <www.fead.be>.

32 FEAD Policy Paper of Annexes IIA and IIB of the Waste Framework Directive, <www.fead.be>, p. 5.

33 <http://www.cewep.com/why/index.html>.

between the concerned actors. It should also be taken into consideration that these rulings are individual case decisions.

5.1 Main conclusions of the Court

Waste incineration is considered recovery if the definition and the three criteria established by the Court are met. The criteria are:

- the main purpose is the generation of energy;
- the amount of energy generated and recovered and effectively used, is greater than amount of energy consumed; and
- the principal use of the waste is as fuel.

This is the case if waste is replacing a regular fuel in **industrial plants**. The Court does not exclude that **waste incinerators** may carry out recovery operations, but energy recovery is not a sufficient criteria. However, the Court does **not** require that the waste replaces a source of primary energy *within* the plant.

The criteria established by the Court for waste recovery/waste disposal leave room for interpretation and are not entirely clear. The ECJ dismissed the criteria used by the German authorities to consider waste recovery, including *heating value*, *pollution content* or *waste mixing*. The ECJ instead defines an operation being a recovery (Annex II B) or disposal (Annex II A) operation without setting strict standards for the waste to be treated in these operations.[34]

5.2 Possible economic, political and legal impact

The following interpretation does not provide an exclusive summary, but rather shows some trends and possible consequences that can be expected.

- Currently, a large amount of commercial waste is recovered in waste incinerators, in order to meet recovery quota and also to make use of existing capacities. This practice will become more difficult, as recovery in waste incinerators will be further restricted.

- Therefore, recovery targets of other EU directives and national laws, such as the Packaging and Packaging Waste Directive or the German Ordinance on Commercial Waste (Gewerbeabfallverordnung) will be more difficult to meet.

- On the other hand, a trend towards more co-incineration of waste in industrial plants (eg cement-kilns) is expected, as this is regarded as recovery. This is particularly true for packaging and for commercial waste but might also be imaginable for household waste and for hazardous waste, if the quality of waste meets the standards requested by the industrial plant.

- Cross border shipment of waste that is intended for co-incineration (for recovery) will most probably increase. This can also include mixed commercial waste and hazardous waste, depending on the prices for recovery.

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[34] For the European Commission Ökopol (Hamburg) is currently carrying out a study on a possible evolution of the Waste Framework Directive and its annexes, which list waste disposal and recovery operations. First results were discussed in July 2003 and the final study is expected by the end of 2003.

- If waste incinerators can only in very restricted circumstances be considered a recovery operation, waste would - for reasons of the hierarchy in waste management[35] - only be allowed to be disposed of in waste incinerators[36] if there exists no recovery option (such as eg material recovery or co-incineration, or other recovery operations[37]).

- As disposal of waste in landfills is much cheaper than waste incineration, there might be a trend towards more extensive landfilling.

- Member Sates rely partly on the use of renewable energy from waste to attain the Kyoto targets. If the consequence of the ECJ rulings is that less waste is burned, this might undermine efforts to reach the Kyoto targets.

5.3 Proposals for policy options

In order to ensure a high standard waste recovery and disposal across Europe, that is in line with other related European policy developments (such as the Integrated Product Policy[38], the proposed thematic strategy on waste and recycling[39] and the proposed thematic strategy on resource management[40]), the following considerations for activities and policy options are being proposed:

- A legal, technical, ecological and economic analysis of possible consequences of the ECJ rulings is needed. This scientific and empirical analysis should be the background for further policy measures taken.

- The emission standards for co-incineration in industrial plants are in most cases still lower than in waste incinerators, although they will be levelled out in the medium-term, when the Waste Incineration Directive becomes fully implemented.[41]

- Legal certainty for actors in the waste industry is needed by a clearer legal framework. This means on the one hand clearer EU definitions and on the other hand changes in national laws, especially regarding the definition of waste recovery. The European criteria (ECJ and in the Framework Directive) are still unclear.

- The EU Commission (together with Member States) should define clearer criteria for when a waste disposal is a recovery and when it is a final disposal.[42] A definition of, and

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35 Recovery being the preferred option to disposal.

36 Or in landfills.

37 As listed in Annex II B of the Waste Framework Directive.

38 On 18th June 2003, the Commission adopted a Communication on Integrated Product Policy. IP/03/858

39 On 27 May 2003 the Commission adopted a Communication towards a thematic strategy on the prevention and recycling of waste, COM (2003) 301.

40 On 1st October 2003 the Commission adopted a Communication entitled 'Towards a Thematic Strategy on the Sustainable Use of Natural Resources'.

41 This Directive aims at setting similar standards for co-incineration and waste incineration.

42 For the European Commission Ökopol (Hamburg) is currently carrying out a study on a possible evolution of the Waste Framework Directive and its annexes, which list waste disposal and recovery operations. First results were discussed in July 2003 and the final study is expected by the end of 2003.

distinction between, recovery and disposal, based on environmental impacts, might be a useful approach.[43]

- In this respect, the Commission should define clearer requirements for high-quality recovery (and for final disposal) in order to ensure a secure waste disposal on a high level and to prevent eco-dumping. There is an urgent need for harmonised standards throughout Europe (and the NIS countries) to prevent waste export to countries with lower standards.

- The transport of waste (whether it is for disposal or for recovery) should be restricted as far as possible for reasons of resource protection and in order to reduce the adverse environmental effects on climate, air pollution or noise.

- The Commission should develop criteria (according to Article 7.4 a (5) Waste Shipment Regulation) to object to cross-border shipment of waste for recovery in the case of 'sham recovery'. It could, for example, refer to criteria such as *heating value*, *pollution content* or *waste mixing*.

[43] ISWA Position on R1 and D10 Criteria's, 1 July 2003.