Policy briefing

Stopping the Waste:

Maximising resource efficiency and minimising our climate impacts through the review of Europe's main waste law

A chance to:

- **Promote recycling, ending the landfill *and* incineration of recyclable and compostable materials**
- **Ensure that Europe really does prevent waste**
- **Divert waste away from landfill *and* incineration, with no counter-productive rebranding of incineration**

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1. Introduction

Waste policy is a key part of improving Europe's sustainability, maximising our resource efficiency and minimising our impacts on the climate. More efficient use of resources in Europe will both help protect the environment, and leave more resources available for the rest of the world, particularly poorer countries.

A large part of waste policy in European Union (EU) Member States is defined at European level. One of the key pieces of EU legislation, the Waste Framework Directive, is currently being reviewed and amended.

This briefing outlines why this directive is important, what is happening in the review, what are the key changes that Friends of the Earth Europe and EEB are calling for, and answers some common questions.

1.1 Why is the Waste Directive important?

The Waste Framework Directive (WFD) originates from 1975, though it has been reviewed a number of times since. It provides the umbrella for all EU waste legislation, for example it defines what should be classified as waste (a surprisingly complex issue), and lays out general requirements for permitting of waste installations.

This umbrella nature also means that changes in this directive will have impacts on other directives, for example those on recycling specific types of products or materials. It also means that this directive is a good place to place new European targets and processes to minimise waste and maximise recycling.

1.2 What is the European Commission proposing?

In December 2005, the Commission proposed revisions to the Waste Framework Directive [1], and produced a Thematic Strategy on Waste Prevention and Recycling [2]. The Commission

claimed that these proposals were intended to move Europe towards being a 'recycling society'. However, the revisions focussed on making it easier to define 'end of waste', rebranding certain incinerators as 'recovery' and an obligation on Member States to produce waste prevention plans.

In our view, the Commission's proposed amendments to the WFD are more likely to discourage recycling, and certainly do not address the environmental challenges that face Europe and the world.

1.3 The key issues

In our view, Europe's waste policy should aim at the long term goal of phasing out waste – i.e., ensuring that waste is prevented as far as possible, and then that which remains is reused, recycled or composted. Achieving this target will be challenging, and will require innovation from industry, but the new approaches created will be of global value in a world where resources are increasingly under pressure – and improved industrial efficiency will support the competitiveness of European business.

This is a brief summary of key improvements we think should be made – there is more detail in the next section:

- **The five step waste hierarchy must be binding and directly applicable**, with clear differentiation between prevention, reuse, recycling, energy recovery and landfill. The Commission is proposing a three step hierarchy, with re-use, recycling and recovery at the same level.
- **The Commission's proposed process on waste prevention must be strengthened and further developed**, including a clear definition and a target for the stabilisation of total waste generation by 2012. It must be supported by a Commission-led process to define indicators, share best practice and develop further targets and policy measures,.
- **There need to be a range of measures to boost recycling**, including: a phase-out, by 2020, of the incineration or landfill of any waste that can be reused, recycled or composted; an EU-wide, "Recycling society" target of 70% by 2020, an obligation to pre-treat waste to remove recyclables by 2015 and an obligation to separate, or separately collect, key recyclable waste streams and materials.
- **There should be a requirement for incinerators to be as efficient as possible, but not for municipal waste incinerators to be reclassified as recovery.** Any attempt to redefine incineration from 'disposal to 'recovery' (as proposed by the Commission) will drive waste down the hierarchy by reducing efforts to promote recycling which is known to be the most resource-efficient, job creating and climate friendly approach. This redefinition would also make it easier to transport waste around Europe for incineration, and potentially divert structural funds from investment in recycling infrastructure, which is not acceptable.
- **There should be a continued commitment to further legislative measures on individual product or material streams** (e.g. a biowaste composting directive) and continued use of product-based producer responsibility, to oblige manufacturers to make their products reusable, recyclable or more durable. Any EU-wide decisions defining 'end of waste' should be defined through this process, not through the undemocratic comitology process,.

There is more detail on these proposals in the next section; in addition we have set out our views in a briefing in May 2006 [3], amendment recommendations to the parliament in July 2006 [4], and in a talk to a hearing organised by the Socialist Group of the European Parliament [5].

1.4 What is happening now, and how will the final decision be made?

Europe's Environment Ministers (Environment Council) reached conclusions on the Thematic Strategy in June, and is expected to discuss the Waste Framework Directive at its meeting in December. The Finnish EU presidency was originally intending this meeting to reach a political agreement; it is now clear that this won't happen, though it is not yet clear whether any policy decisions will be taken at this meeting.

The Parliament's Environment Committee should take their first reading vote on 28th November. They will be voting on a number of key potential improvements to the directive, including:

- Waste prevention – many amendments call for an initial waste prevention target (stabilisation by 2012), and a co-ordinated EU-level process to share best practice and develop further policy measures and targets.
- Recycling – many amendments call for more substantive measures to improve levels of recycling, and to work towards a phase out of residual waste.

The Parliament is also discussing a number of more negative amendments, including various amendments aimed at excluding different materials from waste management legislation, for example by defining them as by-products.

The predicted timetable is as follows:

- 28th November 2006: MEPs on the Parliament's Environment Committee will vote on their first reading amendments to the revised waste law
- 18th December 2006: Environment Ministers will discuss the waste law at Environment Council.
- Mid-February 2007: The full European Parliament will vote on its first reading position on the Commission's proposal and amendments.
- March or June 2007: Environment Ministers will agree the Council Common Position following the Parliament's first reading vote.
- Late 2007/early 2008: Any disagreements between the European Parliament and the EU Member States will be resolved in a second reading, involving further votes. There may even be a further compromise process (conciliation) after these votes in order to get agreement
- 2008: The new Directive will be finalised once the European Parliament and EU Member States agree. It will then be translated into national law in all 27 EU Member States.

2. Key issues in more detail

This briefing only covers our highest priority issues; for more detail on our position, please see our amendment recommendations [4].

2.1 Key issue: The waste hierarchy

The Commission proposes a three step waste hierarchy, placing prevention first, then reuse, recycling and recovery on the same level, with disposal at the bottom.

We consider that waste policy should be guided by the well established waste hierarchy (reduce > reuse > recycle and compost > energy recovery > disposal). We do accept that, exceptionally, in certain cases where there is overwhelming evidence of environmental benefit, life cycle assessment tools can be used to interpret the hierarchy flexibly, but this should be the exception to the rule.

The five step hierarchy has been shown to be effective by many studies, e.g. that done by ERM for the UK Government [7] and it is a key part of the waste policy in many countries, for example in the UK [6].

2.2 Key issue: Waste prevention

Waste prevention has always been talked about as a high priority in waste policy, including being mentioned in the original 1975 Waste Framework Directive. However, the little progress has been made, despite the clear environmental gains that flow from it.

In this revision, the Commission is suggesting a new measure for Member States to draw up national programmes and objectives and compile reports on their efforts in Waste Prevention. We consider that these measures will not be effective by themselves.

Our proposed improvements have three key elements:

- An initial target of stabilisation of total waste by 2012. We believe that this target is both achievable and sensible, with municipal waste levels already stabilising in a number of Member States. We would then suggest that the EU-level process works on identifying future targets and the measures to achieve them.
- An effective EU-level process to set

Notes on some important words

Waste:
The definition of waste is a complex issue, but it is basically defined in EU law as something that is discarded by its owner.

Recovery vs Disposal:
The argument about recovery vs disposal may seem to be very complex, however the core principle is fairly simple, as it is about signalling the desirability of different waste management approaches. The description of a process as recovery gives a strong positive signal to the market, something that we want to encourage, e.g. materials recovery such as recycling paper. Recovery is something we are trying to promote, disposal is something we are trying to avoid.

Recycling and composting:
It's worth noting that the definition of recycling used by the EU includes composting.

common measurement indicators, share information, best practice and establish what further policy measures (including product eco-design requirements) that assist the Member States to meet their waste prevention objectives.

- An additional focus on preventing residual waste, which supports our recycling proposals (below). This would add another role to the EU-level process, to identify policy measures that could contribute to the gradual phase out of residual waste (that which cannot be prevented, reused, recycled or composted).

2.3 Key issue: Recycling

Recycling not only saves resources such as metals, forests, oil etc – it also saves climate emissions, as recycling is generally more energy efficient than manufacturing from virgin materials. This conclusion is confirmed by a recent study done for the UK Government by the consultants ERM [7], and by a second UK study, carried out for the government-funded Waste and Resources Action Programme [8], which concluded that:

"UK recycling currently saves between 10-15 million tonnes of CO_2 equivalent greenhouse gases per year compared to other waste management options"

Unfortunately this fact is often ignored when simplistic claims are made that burning waste will reduce greenhouse emissions. For example, a recent study for Friends of the Earth has shown that a waste to electricity incinerator actually releases 33% more fossil-fuel derived CO_2 per unit energy produced than a gas-fired power station [9].

The Commission's proposal includes very limited measures on recycling, focussing primarily on a process to define 'end of waste' using comitology, in order to develop markets for recycled products. We have two fundamental concerns with this approach:

- We do not consider that recycling will be sufficiently promoted through measures to develop markets. Aluminium cans are worth around £800 per tonne, uncrushed, yet the UK recycles less than 50% of them [5]. Those countries that have very high levels (>90%) of recycling of aluminium cans achieve it through policy measures such as deposit-return schemes or very effective recycling programmes. This example demonstrates that a market is not, in itself, sufficient for achieving high levels of recycling.
- We do not support the comitology approach to 'end of waste', and consider that the EU should instead develop more material- and product-specific recycling directives. The Anglo-Welsh Environment Agency's experience in developing a compost standard has demonstrated the complexities of 'end of waste', and has shown that it is not just a question of the quality of the output, you must also control the quality of inputs (e.g. source separation of waste in this case), and control where the product is used [10].

Given the importance of increasing levels of recycling to improving Europe's sustainability, Friends of the Earth and EEB are proposing a package of amendments to ensure that this directive really makes a difference. Key elements of these amendments include:

- A ban on landfill or incineration of reusable, recyclable or compostable materials by 2020/2025, except where landfill or incineration are unequivocally demonstrated to be the best environmental option for the material.
- A general obligation on Member States to avoid the generation of waste that cannot be reused, recycled or composted.
- A requirement to separately collect, or separate after collection, key recyclable materials. It is only after they are separated from general waste that recyclable materials achieve their value.
- A requirement to pre-treat waste before landfill or incineration to remove recyclables, by 2015.
- An EU "Recycling Society" target for recycling 70% of total waste by 2020

2.4 Key issue: What is waste?

Definitions are extremely important to waste policy, and are one of the most complex areas. We welcome the fact that the Commission has not decided to re-open the issue of definition of waste.

However, we are very concerned at suggestions that would lead to a large number of wastes being exempted as a result of their re-naming as "by-products'. We consider that such amendments would reduce the level of protection of the public and the environment. Any exemptions of process wastes from the definition of waste should be left

to detailed jurisprudence on a case by case basis, to ensure a precautionary approach.

2.5 Key issue: What is recovery?

The issue of what processes can be defined as recovery (and are therefore encouraged) is a crucial one. If the wrong decisions are made, then the system will encourage inefficient use of waste and resources.

We have two serious concerns with the Commission's proposals in this area:

- The Commission is proposing a very wide definition of recovery, based on a simplistic single criteria of the replacement (saving) of resources anywhere (and in any way) in the wider economy. This very unselective definition does not consider what is the best environmental option for the waste material, and could allow activities such as filling in holes or those that generate or save small amounts of energy or other resources to be defined as recovery – even if they have a higher overall environmental impact.
- Along the lines of this `single criteria approach´ the Commission is proposing to enable the rebranding of household waste incinerators from 'disposal' to 'recovery', based solely on an energy efficiency threshold. This is in contrast to the current European Court jurisprudence which rules that waste incinerators status are disposal, based on 'primary purpose' of the facilities i.e. waste mineralisation, with the recovery of energy being a secondary function. We do not consider that the Commission's justifications for this measure make any sense (see *Questions and Answers* below for more details), and we consider that issues of incinerator efficiency are best dealt with in the two Directives that already address this issue, the IPPC Directive regulating industrial installations, and the Waste Incineration Directive, regulating incinerators. Both these directives are to be reviewed in 2007.

Given the vital importance of the criteria that define recovery operations from disposal and thus steer waste material towards the best type of recovery operations (for all potential types of recovery operations) the EEB and Friends of the Earth are proposing:

- A multi criteria definition of recovery, based on resource savings, a lower overall environmental impact, and the minimisation of formation and transfer of pollutants. The status of recovery should only be given to the best performing potential recovery operation, assuming best management practices (e.g. separate collection).
- This Directive should maintain the current EU jurisprudence approach to waste incineration based on the criteria of `principal purpose´. Incinerators clearly have a principal purpose of disposal rather than energy or heat generation, as if no waste is available they will not buy-in other fuels (e.g. coal).
- Any further criteria should be based on a multi-criteria recovery definition and be undertaken via fully democratic legislative process.

3. Questions & Answers

3.1 Isn't reclassifying some incinerators as recovery needed to ensure diversion of waste from landfill?

In the impact assessment [11], the Commission claim that "*there are concerns that if incineration is defined in the same category as landfilling, some local authorities could be tempted to choose the cheapest option (Landfilling), which will in turn degrade the environment*"

In reality, diverting biodegradable waste from landfill is a legal requirement of the landfill directive. The landfill directive sets legally binding targets on Member States; breach of these targets is likely to result in fines from the European Commission. If Member States wish to avoid these fines, then they must ensure that their local authorities divert biodegradable waste from landfill.

The Commission has already fined Member Sates for breaches of waste law, for example in 2001 the Commission fined Greece nearly €4.8 million for a landfill that failed to follow EU waste laws [12].

3.2 Surely encouraging incinerators to be more efficient is a good thing?

The Commission claims that their equation '*will classify only the most energy efficient incinerators as recovery operations…..a strong incentive for increasing the energy efficiency of future MWSI*' [13].

In fact, the suggested figure does not only classify the 'most energy efficient incinerators as recovery - and in any case, the imposition of Best Available Technology is the job of IPPC. Incinerators are also regulated by the Waste Incineration Directive (WID).

Eunomia consultants analysed the Commission's efficiency formula and concluded [14]:

"existing legislation, the Incineration Directive and the IPPC Directive – effectively requires measures to be taken at incinerators to make use of heat 'as far as is practicable' as a condition of their being allowed to operate at all."

"a theoretical incinerator could, on the one hand, meet the Commission's efficiency threshold which ensured that it could be defined as 'recovery', even though it was not allowed to operate because it was not recovering heat as far as was practicable"

3.3 Don't incinerators generate renewable energy, helping in the fight against climate change?

No. Incinerators burn a mixture of fossil-fuel derived materials (e.g. plastics) and biological materials. They then generate energy inefficiently from these materials, due to the fact that they are primarily designed to burn mixed waste, and they have to have a lot of air pollution control equipment.

Research has shown [9] that an electricity-only waste to energy incinerator emits 33% more fossil fuel derived CO_2 than a gas fired power station. If heat from the incinerator is used, then performance is similar to a gas-fired power station – certainly not 'renewable'!. The analysis is even more negative if recyclable materials are burnt, as the research shows that recycling is almost invariably better than incineration from a climate point of view [8].

There are 100% renewable energy from waste technologies. One of the best of these is anaerobic digestion of source-separated food waste. With this technology, food waste from homes and businesses is separately collected and digested, producing a methane-based biogas which can be used for power generation or fuelling vehicles. In addition, a soil conditioner is produced which can be used in agriculture.

3.4 Didn't the letter from the European Commission to the environment committee deal with all the questions about the impacts incineration re-classification?

The Commission claimed to demonstrate their case for reclassification in their impact assessment, and in their letter to the Environment Committee. Yet these have serious deficiencies, e.g:

- There is no serious analysis of how promotion of incineration will impact on recycling, despite many examples of negative impacts
- The letter is based almost entirely on an industry study, which is not fully available (which are the affected incinerators?) and has apparently had no peer review
- There is no analysis of other options of improving incinerator efficiency - e.g. changes in the Waste Incineration Directive (WID) or IPPC - even though WID is to be reviewed in 2007.
- There is no analysis of why promotion of fossil CO_2 emitting incineration is best way to get material out of landfills, rather than fining of MS through the landfill directive, or a promotion of biowaste collection and composting (e.g. a biowaste directive).

3.5 But don't the figures show that high incineration goes with high recycling?

No, what the figures show is that those Member States who either had little landfill, or who decided to move away from landfill earlier than most, have got higher recycling and incineration rates than those who didn't.

You don't achieve high recycling rates through incineration – you have to invest in collection systems, market development and incentive systems such as deposit-refund. In other words, all countries that show high levels of recycling (e.g. Austria, Netherlands, Germany, Denmark) do so because of effective separate collection and recycling targets and policies, not because of their incineration capacity. In fact, Eurostat data shows that Austria achieves one of the highest recycling rates in Europe, 64%, with less than 11% incineration.

Eurostat figures show that France incinerated 34% and recycled 27% of its waste in 2003. In contrast, the latest, 2005/2006, figures from England show the same recycling rate, but a much lower rate of incineration of only 10% [15]. This shows that higher incineration capacity does not lead to higher recycling rates. In reality, recycling rates in England have been increasing rapidly in recent years, due to more investment in separate collection, coupled with investment in recycling and composting infrastructure, and the development of stronger markets for recyclable materials [see 16].

Large incinerators with long contracts actively complete with recycling for materials, and can stop waste prevention. This is a particular issue in

those countries, like the UK and many new Member States, where incinerators are operated by private companies with long (25-60 year) contracts which demand fixed tonnages of waste.

4. Conclusions

This waste policy revision provides a real opportunity to create more efficient and sustainable use of resources in Europe. Unfortunately, the Commission's proposals do not address this challenge, and seem to be more focussed on promoting incineration. In addition, this proposal does not address the real inadequacies in waste management within many EU Member States.

Friends of the Earth Europe and EEB are looking to Members of the European parliament, and European Union governments, to improve this proposal to ensure that it really does set Europe in the right direction, promoting innovation towards a more sustainable future.

5. Contacts and web sites

For further information, see the following web sites, or contact us directly:

http://www.eeb.org/activities/waste/Index.htm

http://www.foeeurope.org/activities/waste_management/index.htm

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12. "*Legal Actions Announced Over EU Waste Rules*", ENDS Environmental Daily, 30th July 2001 http://www.endseuropedaily.com/articles/index.cfm?action=article&ref=10384
13. "*Additional information concerning the impacts of the proposed classification of municipal waste incinerators as recovery installations using an*

energy-efficiency threshold", Letter from Commission Dimas to Karl-Heinz Florenz, Chair of Environment Committee, 24th August 2006.

14. "*A changing climate for energy from waste?*", Eunomia Consulting, May 2006 http://www.foe.co.uk/resource/reports/changing_climate.pdf

15. " *Municipal Waste Management Statistics 2005/2006*", DEFRA press release, 16th November 2006 http://www.defra.gov.uk/news/2006/061116a.htm

16. For more details, see the "*Waste and Resources Action Programme*" web site, www.wrap.org.uk