

UK National Waste Policy – A Bridge Half Built

A Zero Waste Alliance Declaration

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company number 4452297, www.zwallianceuk.org**

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In July 2002 the Zero Waste Charter was launched at the House of Commons, and has since received wide national and international backing. It argued that there was a growing environmental imperative for the reduction, recycling and composting of waste to reduce:

- the dangers to human health of incinerators and landfills,
- CO2 emissions,
- the pressure on virgin forests, on minerals and on rapidly degrading soils.

The 10 point charter set out a strategy for moving to Zero Waste in the UK, notably by:

- maximising the recycling of dustbin and of bulky waste,
- introducing the doorstep collection of organic waste and a composting infrastructure
- banning the thermal treatment of mixed waste and the landfilling of untreated biological waste
- limiting waste disposal authorities to 10 year contracts to ensure flexible facilities to complement the growth of recycling and composting
- introducing a disposal tax and earmarking its proceeds to promote Zero Waste.
- accelerating and extending producer responsibility legislation

After the launch of the Charter, the Government's Strategy Unit supported many of the principles of the Charter. It led to a radical increase in the landfill tax. It supported increased rates of recycling and composting, secured additional funding for WRAP to engage in waste prevention and recycling, and for the first time recommended Mechanical and Biological Treatment as an alternative to incineration and landfill as a means of handling residual waste.

But it left a bridge half built. And policy has in the meantime slipped back to its previous groove: timid on targets, and a promoter of incineration.

Climate change will not be countered by limited ambition. Leading countries and regions in Europe are now recycling and composting 60% of their municipal waste. The UK remains a straggler. Recycling has doubled in four years, but still stands at no more than 23.5% in 2004/5. DEFRA's current review proposes a maximum target of 50% by 2020, a level that the best UK

authority is already meeting. This sets the bar too low. It offers too little too late.

Holding back recycling and composting and promoting incineration will not reduce CO2 emissions. Yet this has been the consistent thread of Government policy since the Strategy Unit Review:

- The UK government is notorious in Europe for its opposition to the EU Bio waste directive, and has had it shelved
- The UK Animal By-Products Regulations have set levels of treatment way beyond those operating in the rest of the EU, raising the cost and discouraging the composting of domestic and commercial food waste
- The Government is pressing the EU Commission to redefine incineration as recovery rather than disposal
- Funds for PFI waste disposal contracts have been increased, encouraging large scale, capital intensive disposal technologies and 20-25 year contracts and reducing the incentive to maximise recycling¹
- In proposing long term national targets for incineration, but only modest short term recycling and composting targets for individual local authorities (a maximum of 30% for 2007/8) Government encourages disposal authorities to crowd out recycling and composting by the construction of large scale incinerators.
- The escalating landfill tax coupled with LATS, without graduated taxes on other forms of disposal, encourages a switch from landfill to other disposal options rather than the maximisation of recycling and composting.
- DEFRA has substituted a tick box sustainability appraisal for the Best Practical Environmental Option, which has facilitated proposals for incineration at public enquiries
- In spite of massive local opposition the DTI has approved the proposal for a giant incinerator at Belvedere in East London (up to 800,000 tonnes, making it the largest incinerator in Europe), so creating a long term appetite for paper and plastic from Greater London, that should be recycled to save CO2 emissions. Belvedere's approval sets a precedent for giant schemes throughout the country.

DEFRA's current Review is strong on the rhetoric of recycling, but it fails to will the means. It remains a charter for incineration not for Zero Waste. It argues for incineration as a means of countering climate change on two

¹ The National Audit Office report notes that PFI deals take longer to bring to financial close than other types of procurement, and that after nine years, only six residual waste plants are in place or under construction.

grounds: that it replaces methane producing landfill, and that it substitutes carbon neutral electricity production for fossil fuel power stations.²

But it under-estimates:

- The loss of stored up energy embodied in recyclable materials prematurely incinerated (notably paper, aluminium, organic waste and plastic).

And it takes no account of:

- the capture of methane from landfill, which at the high rates assumed elsewhere by DEFRA makes landfill broadly comparable in terms of net CO₂ emissions to electricity-only incineration.³
- the fact that electricity-only incinerators generate⁴ more fossil CO₂ than gas fired power stations and more in total than coal power stations, while CHP or heat only incinerators are only marginally better than gas fired stations even if the heat is put to good use - not always possible even in areas like Scandinavia where the demand for heat is higher than in the UK⁵
- the sequestration of carbon in depleting soils through the application of compost, or stabilised residues from MBT plants.
- the lifecycle energy costs involved (and the waste generated) in the production of the incinerators themselves

Incinerators are producers of brown energy not green. They do not reduce green house gas emissions but increase them, both because of the overall CO₂ emissions at their strikingly low current levels of efficiency of 25% or less, and because their destruction of the 'grey energy' embodied in the materials they burn increases the need for new energy intensive virgin materials.

The incentive structure and the process of decisions on disposal of waste are tilted towards incineration. Whereas stabilised residues from MBT that are

² Defra (2006) Review of England's Waste Strategy: A Consultation Document, February 2006. Its wording is: "EfW reduces emissions of greenhouse gases in two ways: because the wastes could otherwise go to landfill and generate methane; and because emissions from the biomass fraction of the waste, which are carbon-neutral, are likely to replace those from fossil generation." p.60

³ Eunomia, A Changing Climate for Energy from Waste, Friends of the Earth, May 2006.

⁴ Eunomia, op. cit. By 2020 forecast advances in power station technology and the growing proportion of plastic in residual waste means that energy only incinerators will emit twice the fossil CO₂ of gas power stations, and probably more than new or refitted coal power stations using up to 20% biomass. Wastes contain both fossil carbon derived from oil and other fossil fuels and biogenic carbon from wood and plants. When biogenic carbon and time are included in the analysis, energy from waste incineration – where only electricity is generated – looks like a mediocre performer (Eunomia 5.2). Indeed, if the residual waste is landfilled after the stabilising treatment now required, it is only marginally better than landfilling. The Eunomia report contains a valuable critique of the ERM Report for DEFRA that has been used to justify the Government's incinerator policy, see pp.74 sq. and ERM (2006) Impact from Energy from Waste and Recycling Policy on UK Greenhouse Emissions, Final Report for Defra, January 2006

5. Eunomia, p6

landfilled are subject to the full landfill tax, bottom ash from incinerators is classed as inert, and charged only £2 a tonne.

Far from facing a graduated tax as a means of disposal, incinerators receive more Government funding, and have greater access to private finance, than recycling or composting. Accordingly they remain the technologies of choice for disposal authorities which the Government have left with the decisive institutional power in municipal waste management.⁶

Even where, because of public opposition, disposal authorities have fought shy of incineration or its modern variants pyrolysis and gasification, they have continued to negotiate 20-25 year inflexible contracts, incorporating Mechanical and Biological Treatment (MBT) plants, that produce 'refuse-derived fuel' as a feedstock. They have made MBT, a potentially more flexible means of stabilising residual organic waste and suitable for the transition to Zero Waste, into a processing arm for incineration, and a barrier rather than a support to Zero Waste strategies.

Zero Waste Alliance Proposals

Zero Waste policies have had to swim against the institutional and policy tide, rather than being carried along by it. The Zero Waste Alliance therefore urges the Government and local authorities to re-orient their policies in the direction of Zero Waste, in line with leading regional and national governments overseas, and further to the 10 points of the original charter, adopt the following specific measures:

- 1. Set long term recycling and composting targets of 75% for all local authorities by 2015, (and a minimum of 60% for each individual local authority) along with waste minimisation targets, to prevent their crowding out by local and regional long term disposal contracts.**
- 2. Press the EU to introduce the Biowaste Directive, and its requirement for kerbside kitchen waste collections in all cities, towns and villages with over 1,500 population.**
- 3. Switch the government subsidy of PFI schemes to the start up costs of food waste collection and composting, as part of the Treasury's forthcoming Comprehensive Spending Review.**
- 4. Extend the grant of carbon credits to recycling and composting to reflect their impact on the reduction of CO2 emissions generated by the production of virgin materials.**
- 5. Extend Producer Responsibility Legislation to cover all materials in the household waste stream, and raise the targets for recycling**

⁶ DEFRA's lack of clarity on MBT residues and composting requirements is a further discouragement to disposal authorities seeking an alternative to incineration.

of plastic packaging, glass and metals under existing legislation to those set by the leading countries in Europe.

- 6. Recognise incineration as disposal not recovery, in line with the EU Waste Framework Directive and rulings of the European Court of Justice.**
- 7. Fund a major research programme to identify the hazards of nano particles, particulate aerosols, and brominated flame retardants that arise from the burning of mixed waste.**
- 8. Introduce an incineration tax of at least £12 per tonne.**
- 9. Charge incinerator bottom ash at the full level of landfill tax (rather than the £2 a tonne which it currently enjoys by virtue of its unwarranted classification as inert waste) and reduce the landfill tax to £6 a tonne for bio-degradable waste, stabilised to the levels set out in the 2nd draft of the Biowaste Directive.**
- 10. Require compulsory insurance against future pollution and health claims for all disposal and recovery facilities.**

The past four years have not been wasted. The ground for a radical increase in recycling and composting is now prepared. St Edmundsbury has become the first council to pass the 50% recycling and composting target. The leading continental and North American authorities are now reaching 75%. They mark the path to Zero Waste.

The imperative of climate change has, too, at last been unequivocally recognised by scientists, by the media and now by all major political parties. But it is not reflected in waste policy. In spite of the evidence that recycling and composting lead to major CO₂ savings relative to incineration and landfill - WRAP estimates the savings of current levels of recycling and composting at 10-15 million tonnes of carbon equivalent per year⁷ and in spite of its higher CO₂ emissions relative to gas fired electricity generation, the Government is still promoting incineration as a source of green energy.

What is required is return to the boldness of the Strategy Unit's policy, and a shift of finance and incentives towards composting and recycling. Climate Change policy calls for it. The Government should respect the evidence, free itself from the disposal centred waste industry, and complete the work that was left half finished after the Strategy Unit's Review.

The Zero Waste Alliance

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⁷WRAP, Environmental Benefits of Recycling. An international review of life cycle comparisons for key materials in the UK recycling sector, May 2006. The study was based on a comparative review of 55 international life cycle studies, assessing 200 scenarios.

