

The United Kingdom Without Incineration Network (UKWIN) welcomes this opportunity to present evidence to the Environmental Audit Committee. UKWIN was founded in 2007 to promote sustainable waste management and currently has more than 100 member groups.

## **UKWIN's evidence to the Environmental Audit Committee inquiry into Budget 2013**

### **Summary of fiscal measures that will help to promote the efficient management of waste:**

- To encourage reduction, re-use and recycling the Government should:
  - Eliminate / restrict existing subsidies to incineration, e.g. to avoid overcapacity;
  - Introduce an incineration tax that fully internalises environmental externalities and that reflects the environmental benefits of reduction, re-use and recycling; and
  - Introduce measure to further support the management of discarded material at the top tiers of the waste hierarchy, including anaerobic digestion (AD).
- To encourage reduced GHG emissions from landfill the Government should:
  - Introduce a lower landfill tax rate, i.e. a middle band, for bio-stabilised waste.

### **The context of waste-related market failures:**

1. Market failures impede the efficient management of waste and therefore hamper efforts to achieve a green economy. The Government stated in the Waste Review that they: “will provide the necessary framework to address market failures and deliver the most sustainable solutions”<sup>1</sup>.
2. According to the Waste Review 2011 (Waste – The Economic Rationale for Action): “...It is... important to make sure that waste is optimally managed, so that the costs to society of dealing with waste, including the environmental costs are minimised. There may be market failures and other barriers that prevent this ideal situation from occurring. These include externalities, for example where the environmental cost of different options is not included in market prices, and information failures, which are situations where businesses and consumers do not have the right information to make the best choices...”
3. The importance of internalising environmental externalities is highlighted in the Impact Assessment of the Waste Review, which rightly points out that: “Failing to price in the environmental cost and benefit of generating waste leads to inefficient production and consumption patterns, and excess waste being produced...”
4. The Impact Assessment goes on to explain that: “...Without government intervention, waste treatment options with better environmental performance may be penalised relative to treatments with poorer performance. Accounting for the environmental impact requires that the costs of various treatment options and levels of the hierarchy fully reflect the costs to society of each option. For example, government intervention such as the landfill tax raises the

---

<sup>1</sup> Government Review of Waste Policy in England 2011, Paragraph 239.

cost of sending waste to landfill, reflecting the environmental externality of disposing waste in this way. However, it does not reflect the relative scale of the environmental impact of treatment and disposal methods further up the hierarchy; for example, the externality associated with incineration, recycling or re-use. Although the recycling rate has risen, further intervention is required to further move waste to an efficient level amongst the various management options<sup>2</sup>.

5. *The Economics of Waste and Waste Policy*, produced by the Defra's Economics Team, and published alongside the Waste Review, lists the following externalities for the treatment and disposal of waste:
  - “On the whole, those treatment options which reduce embedded emissions by reducing energy associated with extraction, primary production etc., such as re-use and recycling, do not have their full external benefits reflected in the price of disposal.
  - “The emissions from waste combustion of non-biogenic material (via any technology including mass-burn incineration) are also not comprehensively reflected in the price of disposal. Unless the installation in question is in the ETS (municipal solid waste incinerators are excluded) a negative externality persists – such installations are creating GHG emissions without paying the relevant price.
  - “Subject to proving its environmental performance, MBT-landfill does not have its environmental benefits reflected in the price of disposal.”
6. The proposals set out below are primarily intended to work towards addressing the three primary market failures outlined within Defra's June 2011 *Economics of Waste and Waste Policy* report, namely those relating to the environmental externalities of re-use, recycling, incineration and MBT-Landfill, where the current treatment costs do not fully reflect their full respective environmental impacts.

### **Introducing an incineration tax to internalise externalities and promote reduction, re-use and recycling:**

7. The Government already recognises the externality of non-biogenic waste combustion, the environmental benefits of anaerobic digestion (AD) and composting ahead of incineration of food waste, and the need to encourage the top tiers of the waste hierarchy.
8. The price of disposal in relation to incineration reflects neither the full environmental costs of the CO<sub>2</sub> emissions nor the relative environmental benefits of reduction, re-use, recycling and AD.
9. The most effective fiscal remedy would be an incineration tax, which could also be considered as an expansion of the existing landfill tax into a broader 'residual waste' or 'disposal' tax.
10. The introduction of an incineration tax would help to ensure that the environmental cost of all forms of incineration, i.e. incineration plant as defined under the Waste Incineration Directive,

---

<sup>2</sup> Review of Waste Policies Impact Assessment, Paragraphs 10-12.

are reflected in the price of disposal, and also to encourage separate collection of food waste, alongside promoting reduction, re-use and recycling. This will help to address some of the aforementioned market failures and push waste management further up the waste hierarchy.

11. According to the Waste Review 2011 (Waste – The Rationale for Action): “...The potential for greater use of environmental taxes to deliver better environmental and economic outcomes is recognised in the Government’s commitment to increase the proportion of revenues accounted for by environmental taxes. Market-based instruments such as taxes and trading systems are an efficient and cost effective way of pricing in the value of environmental resources...Where appropriate, consideration will be given to taxes in waste policy that can support the implementation of the waste hierarchy – reflecting the environmental benefits of shifting waste up the hierarchy...”
12. An incineration tax could meet the three principles that underpin the definition of environmental tax as set out by the Government in July 2012, which are as follows:
  - The tax is explicitly linked to the Government’s environmental objectives;
  - The primary objective of the tax is to encourage environmentally positive behaviour change; and
  - The tax is structured in relation to environmental objectives, for example: the more polluting the behaviour, the greater the tax levied.
13. In relation to the requirement that “The tax is explicitly linked to the Government’s environmental objectives”, UKWIN notes that the Government is committed to ensuring that waste is managed in accordance with the waste hierarchy.
14. UKWIN further notes that Government support for AD is currently threatened by incinerators that compete with AD facilities for feedstock, despite the Government’s position that “It is important to treat food waste as high up the hierarchy as possible” (Waste Review, Paragraph 204), and the evidence that: “...of the main options for the treatment of food waste, anaerobic digestion offers the greatest environmental benefit...To be treated by anaerobic digestion, it is best if food waste is collected separately at source...” (Waste Review, Paragraph 196).
15. An incineration tax would encourage investment in the move towards separate collection of food waste for AD, which would provide significant environmental benefits over incineration. The Director of the Anaerobic Digestion and Biogas Association (ADBA) has specifically identified incineration as a threat to this, referring to the spread of incinerators as a “really worrying” threat to separate collection of food waste for AD<sup>3</sup>.
16. The [Chief Executive] of ADBA has also gone on record as saying: “Source-segregation and the treatment of organics through AD is the only way that we can recoup the value both of the energy and nutrients trapped in the food we throw away, as well as saving money.

---

<sup>3</sup> Liberation of AD from its shackles. Neil Roberts. MRW, Vol 199, Issue 16. 4th May 2012. Available from: <http://www.mrw.co.uk/opinion/big-interview/big-interview-charlotte-morton-adba/8629581.article>

Incinerating valuable resources that can be recycled does not make environmental or economic sense in the long term".<sup>4</sup>

17. UKWIN has firsthand experience of local authorities that do not collect food waste for AD simply because it is cheaper to send that food waste to incineration as part of the mixed waste stream.
18. Similarly, an incineration tax would make it economic to treat 'hard-to-recycle' materials at a higher point in the waste hierarchy and encourage the appropriate investment in collection, sorting and processing infrastructure currently being impeded by the artificially low price of incineration.
19. A tax on incineration would support the implementation of the waste hierarchy, reflecting the environmental benefits of shifting waste further up the hierarchy.
20. In relation to the requirement that "The primary objective of the tax is to encourage environmentally positive behaviour change", in addition to the points made above, UKWIN notes that an incineration tax would reduce the marginal cost of reduction, re-use, recycling, composting and AD, and thus encourage treating waste further up the waste hierarchy. This would result in better environmental outcomes and would help to avoid excess waste being produced. For example, it has been shown that separate collection of food waste results in a drop in the quantities of food that is wasted.
21. In relation to the requirement that "The tax is structured in relation to environmental objectives, for example: the more polluting the behaviour, the greater the tax levied", UKWIN notes that without an incineration tax, externalities are not internalised, and as such incinerators "are creating GHG emissions without paying the relevant price". Thus the current situation improperly subsidises and encourages pollution.
22. The incineration tax could be structured to be set at a rate that remains lower than the higher rate of landfill tax. For example, increasing at increments of £10 per year until the tax reaches half of the standard landfill tax rate, i.e. £10/tonne from April 2013, £20/tonne from April 2014, £30/tonne from April 2015 and £40 from April 2015, would discourage the incineration of compostable and recyclable material but would not make the incineration of genuinely residual waste prohibitively expensive.
23. UKWIN agrees with Policy Exchange's *A Wasted Opportunity: Getting the most out of Britain's Bins* that: "The landfill tax should be reformed into a broader waste tax...By introducing taxation on incineration a clear preference is signalled to reduce, reuse, recycle or compost where possible. To limit uncertainty, escalating rates should be set over a long enough period to encourage investment"<sup>5</sup>.

---

<sup>4</sup> Use our understanding of resource efficiency. MRW, 24 February 2012.

<sup>5</sup> Dated 20 July 2009, available from: <http://www.policyexchange.org.uk/images/publications/a%20wasted%20opportunity%20-%20jul%2009.pdf>

24. The idea of an incineration tax is well established, with many European countries already benefitting from an incineration tax. The OECD Working Party on Environmental Performance recently advised Germany to consider introducing an incineration tax, as follows: “[Recommendations:] Consider creating an effective carbon tax in the sectors not covered by the EU ETS and ensure that other, non-carbon related, externalities are adequately priced...Strengthen waste prevention, for instance by: broadening and strengthening extended producer responsibility systems; expanding the use of economic instruments to promote primary resource substitution (e.g. incineration tax); and expanding knowledge networks and dissemination of best practices...”<sup>6</sup>.
25. In April 2012 European Commission research reported that “higher incineration charges are generally associated with higher percentages of municipal waste being recycled and composted, indicating that higher incineration charges may help to push waste treatment up the waste hierarchy...Landfill and incineration taxes will help discourage disposal of, or energy recovery from, waste that could be dealt with higher up the waste hierarchy”<sup>7</sup>.
26. The need for an incineration tax, and the benefits to be derived from an incineration tax, have also been put forward by various groups in the United Kingdom over the years.
27. The Environment, Transport and Regional Affairs Committee, for example, stated in 2001 that: “There must be no subsidy to the growth of incineration. If fiscal instruments favour the development of incineration, then the result in 20 years time could be a large and overbearing incineration industry which effectively crowds out the more attractive options of minimisation, re-use, recycling and composting...there is considerable evidence that incineration has significant 'external costs' or costs to the environment and community which are not currently being met... it is important to remember that landfill is now subject to a tax which will rise progressively in the future. As a result it can be argued that, without a tax on incineration, we risk swapping a landfill-based waste management system for an incineration-based one...”, going on to recommend that: “...the Government introduce a tax on incineration. This tax would ensure that waste management did not simply shift from being a landfill-dominated system to an incineration-centred one...”<sup>8</sup>.
28. When he was the Liberal Democrat Shadow Environment Secretary in 2006, Chris Huhne stated that: “...the Government should set a target of Zero Waste for all municipal rubbish in the UK by 2020. This will mean more doorstep collection of dry recyclables and

---

<sup>6</sup> Pages 5 and 6 of OECD Environmental Performance Review of Germany – Revised Assessment and Recommendations. Environment Policy Committee / OECD Working Party on Environmental Performance, 19 January 2012. Available from: <http://www.oecd.org/dataoecd/42/28/50067378.pdf>

<sup>7</sup> European Commission (DG ENV). Use of Economic Instruments and Waste Management Performances. Final Report, 10 April 2012. Available from: [http://ec.europa.eu/environment/waste/pdf/final\\_report\\_10042012.pdf](http://ec.europa.eu/environment/waste/pdf/final_report_10042012.pdf)

<sup>8</sup> Environment, Transport and Regional Affairs Committee Report on Delivering Sustainable Waste Management. Fifth Report of Session 2000-01, Volume I (published March 2001). Available from <http://www.parliament.the-stationery-office.co.uk/pa/cm200001/cmselect/cmenvtra/36/3602.htm>

reforming the landfill tax into a broader waste tax, to remove the incentives for incineration and other less sustainable waste disposal options”<sup>9</sup>.

29. The September 2007 Blueprint for a Green Economy submission by the Conservative Party Quality of Life Policy Group stated that: “As the landfill tax increases, we need to ensure that waste is not just diverted to the next cheapest or easiest option in the waste hierarchy. An incineration tax would ensure that the relative cost of recycling reflects its environmental desirability”.
30. The July 2009 Policy Exchange report *A Wasted Opportunity: Getting the most out of Britain’s Bins* similarly recommended that: “The landfill tax should be reformed into a broader waste tax covering all disposal processes in line with the waste hierarchy. The rates of this tax would reflect the relative damage done to the environment by different processes and incentivise reuse, recycling and energy recovery, including the separation of food waste where possible. By introducing taxation on incineration a clear preference is signalled to reduce, reuse, recycle or compost where possible. To limit uncertainty, escalating rates should be set over a long enough period to encourage investment.”
31. This recommendation was adopted by Conservative Shadow Environment Secretary Nick Herbert in his *Framework for Action*, which included: “The reform of the landfill tax into a wider disposal tax [that includes incineration], to reflect the waste hierarchy outlined in the revised Waste Framework Directive”<sup>10</sup>.
32. Funds raised through an incineration tax could be ring-fenced to investment in infrastructure, education and schemes that promote sustainable waste management, e.g. to support local authorities to introduce separate collection of food waste, or to improve recycling collections, waste minimisation education, etc. Our thoughts regarding areas that would most benefit from such investment are outlined below.
33. In short, by introducing an incineration tax the Government would internalise externalities, whilst promoting reduction, re-use and recycling, and contributing to the green economy.

### **Introducing a new middle-rate tax band for bio-stabilised waste to landfill to reflect relative GHG savings:**

34. The Government has set out that “the more polluting the behaviour, the greater the tax levied” forms part of the concept of environmental taxes. However, the landfill tax does not differentiate between biodegradable waste that has gone through no pre-treatment and

---

9

[http://www.chrishuhne.org.uk/news/15/labour\\_failing\\_to\\_implement\\_effective\\_strategy\\_for\\_waste\\_reduction.html](http://www.chrishuhne.org.uk/news/15/labour_failing_to_implement_effective_strategy_for_waste_reduction.html)

<sup>10</sup> Herbert attacks government's "zero ambition" for waste. [letsrecycle.com](http://www.letsrecycle.com/news/latest-news/waste-management/herbert-attacks-governments-zero-ambition-for-waste), 21 July 2009. Available from: <http://www.letsrecycle.com/news/latest-news/waste-management/herbert-attacks-governments-zero-ambition-for-waste>

biodegradable waste that has been substantially bio-stabilised prior to landfill to reduce its environmental impact.

35. Introducing a new middle-rate tax band for bio-stabilised waste would address the fact that MBT-landfill does not have its environmental benefits reflected in the price of disposal.
36. This band should be set at a rate that will encourage pre-treatment prior to landfill of residual waste whilst encouraging separate collection of food waste and reduction, re-use and recycling.
37. *The Economics of Waste and Waste Policy*, produced by the Defra's Economics Team and published alongside the Waste Review, lists the following as an externality for the treatment and disposal of waste: "Subject to proving its environmental performance, MBT-landfill does not have its environmental benefits reflected in the price of disposal".
38. The report also notes that: "MBT (mechanical biological treatment)-landfill provides the best emissions performance in terms of the treatment/disposal of residual waste".

**Eliminating or restricting existing incineration subsidies and investment, to avoid unintended consequences:**

39. Existing and additional subsidies and investments for incineration are wholly inappropriate, not least because, as outlined above, even in the absence of such support mechanisms incineration is unfairly advantaged as the price of disposal and the relative benefits of reduction, re-use and recycling are not reflected in the price of incineration. This unlevel playing field results in negative environmental outcomes.
40. Similarly, issues of incineration overcapacity and put-or-pay clauses in incinerator contracts further exacerbate these problems.
41. A question also arises regarding whether subsidies and investments for incineration, if they are to be retained, could be better targeted to reduce undesirable environmental outcomes.
42. Removing subsidies for incinerators where operators have not demonstrated that their incineration facilities treat only genuinely residual waste would be consistent with the European Parliament resolution of 24 May 2012 on a resource-efficient Europe, which calls for "the phasing-out, by the end of this decade, of incineration of recyclable and compostable waste".
43. A ban / restriction of this nature should include the requirement for metal to be extracted prior to incineration, but must go much further than this to ensure that necessary upstream activities are carried out, e.g. separate collection of food waste and kerbside collections of a large array of materials in a manner suitable to facilitate high quality recycling.
44. The endgame would be to remove all subsidies and Government investment in the incineration of biogenic materials, as well as the phasing-out of support for the incineration of recyclable fossil-based materials, i.e. material that could be recycled if the correct facilities,

services and/or collection systems were available, with waste that is not recyclable/compostable being the focus of concerted waste prevention efforts.

45. Such measures would address the issue of incineration overcapacity, another unintended consequence arising from the current approach to subsidising and investing public funds to support incineration.
46. According to Eunomia's National Residual Waste Infrastructure Review (Issue 2, May 2012): "Modelling of our central scenario suggests that the capacity gap between residual waste arisings and available treatment capacity will fall over time, decreasing from the current (2011/12) 19 million tonnes, and moving to a situation of overcapacity in GB of around 1.2 million tonnes in 2015/16...The extent of this overcapacity rises to almost 9.2 million tonnes in 2020/21. It should be acknowledged, however, that this does not include potential future capacity, which has not yet entered the planning system, and which may result in earlier overcapacity..."
47. When looking to the future, and anticipating potential quantities of feedstock that might be available for incineration, one should take into account the European vision to end the incineration of recyclable and compostable material by 2020.
48. This vision is expressed in Section 3.2 of the European Commission's 20 September 2011 Roadmap to a Resource Efficient Europe: "By 2020...Energy recovery is limited to non recyclable materials...", and as Action 33 of the European Parliament's 24 May 2012 Resolution on a Resource Efficient Europe: "[The European Parliament] Calls on the [European] Commission...to make proposals by 2014...for the phasing-out, by the end of this decade, of incineration of recyclable and compostable waste..."
49. This vision is especially important in relation to Commercial and Industrial (C&I) waste. According to the North West of England C&I Waste Survey 2009 for the Environment Agency (Urban Mines), only 1.0% of C&I waste sent to landfill in the North West was considered to be "not recyclable" and "...up to 97.5% of the C&I waste landfilled in the [North West] region could be recycled if the correct facilities and services were available".
50. Furthermore, one should take into account the advice of the European Commission specifically in relation to the UK: "The big challenge is to reduce the amount of waste that is sent for incineration which could be recycled instead. In the UK there is a decrease in the proportion of waste that is going to landfill, which is good, but this is still a high proportion of the total waste...To solve this, the UK should look to reuse and recycling and not to over capacity of incineration – Countries like Denmark and Switzerland are burning much more than they should and that's not good. There is an opportunity for the UK to take positively; I hope they will move in the right direction".<sup>11</sup>

---

<sup>11</sup> UK edges up European recycling league table. LetsRecycle, 1 March 2012. Available from: <http://www.letsrecycle.com/news/latest-news/waste-management/uk-creeps-up-european-recycling-league-table>

51. If one compares residual treatment capacity with *genuinely residual waste* (i.e. that which would still remain even when there was appropriate infrastructure, education, collection systems and pre-treatment in place to ensure that waste is reduced, re-used, recycled, composted and anaerobically digested where practicable), taking RDF exports into account, then there is already an overcapacity of incinerators existing and coming on-stream, and this is the case even before consideration of the argument about whether or not incineration should be used for such waste in preference to other approaches, e.g. MBT-Landfill, and consideration of the combustibility of future genuinely residual waste.

**Increased investment in recycling and separate collection of food waste:**

52. The *Economics of Waste and Waste Policy* report notes that: “Other market failures and barriers to an optimised waste management system” include “lack of access to credit”.

53. Additional financial support is required to promote the management of waste at the top tiers of the waste hierarchy, i.e. reduction (including waste minimisation education), reuse, recycling, composting and AD.

54. This support could take the form of low-interest loans or grants to encourage: weekly separate collection of food waste; kerb-side sorting; increasing both the quality and the quantity of materials recycled; and zero waste education campaigns.

55. While introducing AD of food waste may be cheaper for the local authority in the long run, such an initiative could require financing of new waste collection vehicles, new bins and new AD facilities, as well as communicating the changes and bringing the community on board.

56. These could be financed through an incineration tax and by discontinuing financial support for incineration. These actions would also have the effect of reducing the marginal cost of treating waste through the top tiers of the waste hierarchy.

57. UKWIN outlined what we feel should and should not receive financial and other support within our November 2011 submission to DCLG’s informal consultation on the Weekly Collections Support Scheme and within our February 2012 submission to HM Treasury’s PFI Reform Call for Evidence<sup>12</sup>.

58. In summary, the following should be promoted: ambitious recycling and waste reduction targets; kerbside sorting; educating householders and businesses about waste minimisation; increasing the types of Local Authority Collected materials accepted for recycling; educating householders about what is and is not recyclable to increase recycling rates and reduce contamination, thus improving recyclate quality; promoting re-use, including introducing re-use schemes at Household Waste Recycling Centres as per the Waste Review; and further improving recyclate quality through increased waste segregation.

---

<sup>12</sup> Both of these documents are available from <http://ukwin.org.uk/resources/consultation-submissions/>