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Dear Minister Hogan,

It must be stated from the outset that the Environmental Pillar is opposed to the use of mass burn incineration as a part of the waste management strategy. This opposition is based on the many impacts that incineration will have on the health and well-being of the public, and the damage it will do to the agri-food, tourism, blood-stock and green industries and their capacity to provide jobs and sustainable employment. The impact on the economy is discussed further in appendix 1 below.

In the short-term, given the current circumstances where incineration has already become part of the waste management infrastructure, the Pillar asserts the urgent necessity for an incineration levy to recover at least some of the costs, to society and the economy, of the pollutants released in the process. That said, it is clear that no levy could ever compensate for the long-term health impacts resultant from incineration.

The EU waste hierarchy, as adopted into Irish law earlier this year obliges Irish waste management, legislation and policy to prioritise the prevention of waste over other management strategies. The absence of a levy on incineration would appear to be in conflict with this requirement. There is also the need be consistent in legislating in order to reduce waste production rather than create a market demand in order to feed the incineration industry.

Without a levy, incineration would gain undue market share simply by 'free riding' its pollution costs. This is the principle reason the ESRI[1][2] and Eunomia reports[3], both

[1] Gorecki, Paul K. / Acheson, Jean / Lyons, Seán. An Economic Approach to Municipal Waste Management Policy in Ireland, 2010. ISBN/ISSN No 9780707002989. [accessed 22/08/2011] http://www.esri.ie/publications/latest_publications/view/index.xml?id=2972 [accessed 22/08/2011

[2] Paul Gorecki, Response by ERSI Authors to Comments on An Economic Approach to Municipal Waste Management in Ireland. ESRI March 2010

completed with the last two years, recommended an incineration levy. A review of their findings and a discussion of the possible levy rates to be applied are to be found in Appendix 2 below.

The pollutants released during incineration include arsenic, cadmium, chromium, lead, mercury, dioxins, and furans among others. Although a levy is likely to only reduce the impact from the release of these highly toxic substances on those receiving the fallout from incinerators, any failure to charge for these pollutants would run counter to a core principle in European and Irish waste management – that the polluter pays.

The urgent need to establish a clear regulatory infrastructure that protects the environment, the economy and the tax-payer is brought into focus by the imminent commissioning of the Carranstown incinerator, located close to Duleek in Co Meath, and the on-going discussions regarding the proposed incinerator at Poolbeg in Dublin. This infrastructure must include the immediate introduction of a levy set at a rate that will maintain the push to reduce, reuse or as a last option to recycle.

I hope you find this letter of assistance and look forward to working with you to bring about a situation where incinerator operators have a real incentive to minimise the release of what are highly toxic pollutants, and moreover, that the toxins and other harmful chemicals which are released carry a financial burden for the plant operator.
The Environmental Pillar stresses again its willingness and dedication to work with you on this and other environmental matters.

Kind regards,

Michael Ewing

Coordinator, on behalf of the Environmental Pillar

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http://www.esri.ie/news_events/latest_press_releases/response_by_esri_authors_/index.xml [accessed 22/08/2011]

[3] International Review of Waste Management Policy: 2009. Authors: Eunomia (UK), Tobin Consulting Engineers (Ireland), Öko Institute (Germany), Arcadis (Belgium), Scuola Agraria del Parco di Monza (Italy), TBU Engineering(Austria), Eunomia New Zealand (New Zealand). http://www.environ.ie/en/Environment/Waste/WasteFacilityLevies/ [accessed 22/08/2011]

This letter was developed using the Environmental Pillar processes but is not necessarily the policy of each member group in the Pillar.

Environmental Pillar members:
An Taisce. Bat Conservation Ireland, BirdWatch Ireland. CELT - Centre for Ecological Living and Training. Coast Watch. Coomhola Salmon Trust. Crann. ECO UNESCO. Feasta. Forest Friends. Friends of the Earth. Global Action Plan Ireland, Gluaiseacht. Grian. Hedge Laying Association of Ireland. Irish Doctors Environment Association. Irish Natural Forestry Foundation. Irish Peatland Conservation Council. Irish Seal Sanctuary. Irish Seed Saver Association. Irish Whale and Dolphin Group. Irish Wildlife Trust. The Organic Centre. Sonairte. Sustainable Ireland Cooperative. VOICE. Zero Waste Alliance Ireland

Appendix 1 The Impact of Incineration on Jobs and the wider Economy

In the current economic context the imperative for jobs has never been more important for Ireland. Such jobs need to be sustainable and compatible across a number of viable sectors in our economy.

- **The Agri-Food Sector** in Ireland is worth in the region of 16.8 Billion Euro. Some fifty per cent of this is exported, with 75% of those exports being to the highly quality sensitive markets in the European Union. In the order of ***165,000 people*** find gainful and productive employment consequent on Ireland's Agri-Food business.

- **Our Tourism Sector** – again another critical indigenous industry, which is independent of variable multi-national investments, is responsible for employing directly and indirectly in the order of ***200,000 people***.

- Ireland's **Equine Industry** employs in the order of ***16,000 people*** and the gross tax contribution from the breeding of Irish bloodstock was in the order of **€330 million** (Indecon report).

The common and fundamental element necessary to the success of these critical industries for Ireland and its people is - The Environment; and it is that Environment that you as Minister have a critical role in protecting.

There is also the matter of the impact of the introduction of incineration on the nascent reuse and recycling infrastructure and the associated jobs that are being developed in that sector.

One only has to consider the hundreds of millions lost to the state in managing the pork dioxin scare to appreciate the reputational issues at stake. When one considers that Ireland has a unique competitive advantage based on the acknowledged low level of dioxins in our milk the matter of the impact of incineration warrants the most serious consideration, in particular the charging for externalities. Any proposals thereon have to be subject to full Strategic Environmental Appraisal. The issues of charging or not charging for externalities such as resulting pollution is not something which can be taken in isolation as a simple convenience to a waste problem. This matter has fundamental and far reaching implications for our wider economy and for hundreds of thousands of jobs and people – against which the couple of hundred jobs from incineration pales into insignificance.

Appendix 2 - Summary of what the Eunomia and ESRI reports say on the levy

In setting an incineration levy two reports are instructive. For greenhouse gas emissions, mainly made up of carbon dioxide, Eunomia[4] recommended a rate of €10 per tonne in 2010, rising to €20 per tonne in 2011 and €26 in 2012. For other pollutants it recommended a rate per kilogramme, with these costs to be added to the price for greenhouse gas emissions. The rate per kg does not vary year-to-year and covers the following toxins:

Ammonia (NH 3) - €9.15 per kg
Volatile Organic Compounds (VOCs) - €2.50 per kg
Fine particles (PM 2.5) - €52 per kg
Sulphur dioxide (SOx) - €17.30 per kg
Nitrate Oxides (NOx) - €13.60 per kg
Cadmium (Cd) - €26 per kg
Chromium (Cr) - €21 per kg
Mercury (Hg) - €7,400 per kg
Nitrogen (Ni) - €2.60 per kg
Lead (Pb) - €740 per kg
Dioxin/s - €46m per kg

[4] International Review of Waste Management Policy: 2009. Authors: Eunomia (UK), Tobin Consulting Engineers (Ireland), Öko Institute (Germany), Arcadis (Belgium), Scuola Agraria del Parco di Monza (Italy), TBU Engineering(Austria), Eunomia New Zealand (New Zealand). http://www.environ.ie/en/Environment/Waste/WasteFacilityLevies/ [accessed 22/08/2011]

Arsenic (As) - €99 per kg

Clearly, only a dedicated fee per kg creates the incentive necessary to minimise the emission of what are highly toxic pollutants. The above information is taken from Table 6-2 of the Eunomia report. Eunomia conceded that the data could have been better presented and we would add that the background rationale should also have been better communicated.

The ESRI produced an original report[5] and a revision[6]. In its revision it admitted it had made a mistake in assuming greenhouse emissions are counted in the European Emissions Trading Scheme when in fact they are not. Correcting for this error the ESRI raised its proposed levy on incineration in urban areas to €10 per tonne in respect of greenhouse gas emissions – i.e. precisely the same as the 2010 value in the Eunomia report.

The ESRI declined to impose a charge for the pollutants listed above (which are not greenhouse gases) - arsenic, cadmium, chromium, dioxins, lead, mercury etc. – on the basis that the Environmental Protection Agency examines such pollutants as part of its licensing process. This is true. However, the EPA operates a licensing process which is not intended to capture the societal costs caused by the emission of such pollutants. It should be noted here that An Bord Pleanala recently recommended that the baseline health study and a health monitoring system be installed in areas adjacent to proposed incinerators and that these costs be borne by the promoters. These are real lifetime costs that a simple levy does not address.

Remove the misunderstandings and misconceptions between both the ESRI and Eunomia reports and they offer a substantial base for rate-setting. The Eunomia report was produced in advance of the application of the carbon tax in Budget 2010 and so some downward revision to the greenhouse gas rates in respect of 2011 and 2012 may be appropriate. Indeed, Dominic Hogg of Eunomia signalled this in writing to Professor Frances Ruane of the ESRI of 24 Feb 2010 (see Table 2 of his letter[7] -

[5] Gorecki, Paul K. / Acheson, Jean / Lyons, Seán. An Economic Approach to Municipal Waste Management Policy in Ireland, 2010. ISBN/ISSN No 9780707002989. [accessed 22/08/2011] http://www.esri.ie/publications/latest_publications/view/index.xml?id=2972 [accessed 22/08/2011

[6] Paul Gorecki, Response by ERSI Authors to Comments on An Economic Approach to Municipal Waste Management in Ireland. ESRI March 2010 http://www.esri.ie/news_events/latest_press_releases/response_by_esri_authors_/index.xml [accessed 22/08/2011]

[7] http://www.eunomia.co.uk/shopimages/Letter%20to%20Professor%20Ruane%20ESRI.pdf) [accessed 22/08/2011]

This table is particularly constructive, pointing the way for a harmonised Eunomia/ESRI approach, and is included below for your convenience.

Table 2: Assumptions Concerning Effect of Policies on Internalisation of Externalities

Externality	ESRI view	Eunomia view	Correct approach
GHGs from process energy use other than electricity	Internalised (Carbon Tax) – not included in levy	Not internalised – included in levy	Internalised to the extent that the Carbon Tax, announced after the international review, internalises externalities. There is not full internalisation of the damages unless one believes that the damages from GHGs are less than, or equal to, €15 per tonne CO_2. The correct approach would be to estimate the GHG-related damages, and then to subtract the element which is already internalised. **Eunomia need to change (ESRI would have to also)**
Non-GHG emissions from process energy use other than electricity	Not discussed - not included in levy	Not internalised – included in levy	Not internalised – should be included in the levy **(ESRI would need to change)**
GHGs from process electricity use	Internalised by EU-ETS - not included in levy	Not internalised – included in levy	If the EU-ETS is deemed to function as an internalisation mechanisms for the electricity sector, then the damages are partially internalised (to the extent to which allowance values reflect the damages associated with GHGs). The extent to which this really occurs is likely limited by the grandfathering of allowances **Eunomia need to change (ESRI would also)**

Externality	ESRI view	Eunomia view	Correct approach
Non-GHG emissions from process energy use	Not discussed – not included in levy	Not internalised – included in levy	Not internalised – should be included in the levy **(ESRI would need to revise)**
GHG emissions from the process itself (i.e. not from input energy use)	Internalised because of the supposed inclusion of waste under the EU-ETS - not included in levy except for methane. ESRI applies a different 'rule' for landfill (and other) methane emissions which are assumed not to be internalised despite their own views on licenses, and their view regarding the inclusion of waste under the EU-ETS	Not internalised – included in levy	Not internalised – **(ESRI would need to revise)**
Non-GHG air emissions from the process itself (i.e. not from input energy use)	Internalised through licenses - not included in levy. In the Main Text, it is argued that the damages are zero as licenses supposedly eliminate any pollution. In the Annex, the externalities are calculated and are significant (far more significant than disamenity, which is included) but the assumption is that air quality damages are internalised by the license	Not internalised – included in levy	Not internalised **(ESRI would need to revise)**
Benefits from recycling	Not included - not included in levy. The main text argues that the working of the EU-ETS makes it difficult to understand this. The Annex makes no reference to the	Not internalised – included in levy	Not currently internalised – should be included in the levy (this situation might change for the GHG element if a) allowances are auctioned under the EU ETS and b)

Externality	ESRI view	Eunomia view	Correct approach
	benefits of recycling and how these should be dealt with other than through referencing work by AEA technology, which clearly demonstrates the very important contribution from material recycling to the net GHG balance of MBT (and, it so happens, incineration) plants)		depending upon the principle location of the sources of primary materials and the destination for secondary ones). In practice, much of the recyclable material is sent to UK, but this is certainly not always its final reprocessing destination **(ESRI would need to revise)**
Avoided GHG from energy recovery	Assumed internalised through ETS - not included in levy	Not internalised – included in levy	The electricity generating sector is included in the EU-ETS. If the EU-ETS is deemed to function as an internalisation mechanism for the electricity sector, then the avoided damages from electricity generation are partially internalised. The extent to which this really occurs is likely limited by the grandfathering of allowances **Eunomia need to revise (ESRI would also)**
Avoided non-GHGs from energy recovery	Not mentioned - not included in levy	Not internalised – included in levy	Not internalised **(ESRI would need to revise)**
Avoided GHG from SRF utilisation cement kilns	Assumed covered by ETS - not included in levy	Not internalised – included in levy	The cement production sector is included in the EU-ETS. If the EU-ETS is deemed to function as an internalisation mechanism for the sector, then the avoided damages from electricity generation are partially internalised and the levy rate should be reduced by the level of this partial internalisation **Eunomia need to revise**

Externality	ESRI view	Eunomia view	Correct approach
			(ESRI has no figures for this)
Avoided non-GHG emissions from SRF utilisation in cement kilns	Assumed internalised by license – not included in levy	Not internalised – included in levy	Not internalised **(ESRI has no figures for this)**
Disamenity	Included though with caveats, but drawing upon study delivering lowest figure for incineration	Reviewed, but omitted on basis that suitable studies for all facilities are not available	Would ideally be included, but basis for assessment across all facilities does not exist **A judgement call as to whether to include or not**