

## **Draft Response by the Ness Energy Project to UK ETS Consultation – Inclusion of EfW in ETS**

1. The UK Government Department for Business, Energy and Industrial Strategy is undertaking a consultation on the UK Emissions Trading Scheme (UK ETS), essentially a UK only version of the existing EU Emissions Trading Scheme.
2. The consultation addresses a number of areas of proposed change with one area of direct impact to Local Authorities in particular. The consultation includes the intention to expand the scope of ETS to include fossil carbon emissions from Energy from Waste (EfW) facilities, which have hitherto been exempt.
3. The UK ETS is a 'cap and trade' scheme, where in scope facilities/activities that emit carbon dioxide have to make a payment for each tonne emitted beyond its allowance. The trading element means that the value of this payment varies according to market conditions.
4. The key impact for the Council is that the gate fee for delivering waste to the Ness EfW facility being developed under the Inter-Authority Agreement between Aberdeen City, Aberdeenshire and the Moray Councils is likely to increase significantly.
5. The consultation proposes that the inclusion of EfW into the UK ETS will occur in the mid-late 2020s. Accordingly, there is no direct financial impact until that point and estimating the cost to the Authority would be speculation at this point.
6. Draft Consultation responses have been developed as outlined below. The key points can be summarised as:
  - The response agrees that the inclusion of EfW into the UK ETS is compatible with the objectives of achieving Net Zero.
  - That there is currently no viable and affordable carbon sequestration supply chain and it is uncertain when this will develop.
  - Introducing UK ETS without viable mitigation options for the industry simply results in a tax income for UK government at the expense of increased costs for Local Authorities.
  - Introduction of UK ETS should be phased alongside the development of carbon sequestration outlets and that no date should be fixed at this stage.
  - Local Authorities should be compensated for their increased costs.

- A mechanism for rewarding facilities that achieve negative emissions (such as EfW with carbon capture) should be developed immediately in order to make investment viable.

7. The consultation document can be found here:

<https://www.gov.uk/government/consultations/developing-the-uk-emissions-trading-scheme-uk-ets>

Question	Draft Response
<p>Question 93. Do you agree with the Proposal that the UK ETS be expanded to allow for the transportation of CO2 through other forms of non-pipeline transport (i.e. shipping, rail and road)? (Y/N) Please explain your answer.</p>	<p>Yes, achieving Net Zero will require more than connecting those facilities conveniently close to a pipeline, as a result all facilities across the UK should have as equal treatment under the Scheme as possible in order to maximise CO2 emissions reduction.</p>
<p>Question 94. Do you have any evidence to suggest how expanding the UK ETS to include other forms of CO2 transport may impact the wider UK ETS or other policy areas of the Governments of the UK, either positively or adversely? For example considering the impacts of emissions produced by chosen means of transport. (Y/N) Please explain your answer.</p>	<p>No specific evidence to offer, however, there is logic in considering the net impact for all delivery methods including pipelines, which require significant energy inputs in themselves. Such a measure should encourage the development and utilisation of non-carbon emitting means of shipping (e.g. using hydrogen or electricity derived from renewable sources).</p>
<p>Question 95. What mitigation strategies, if any, do you believe should be applied in relation to CO2 emissions associated with all forms of CO2 transport for CCUS (eg. emissions produced by a cargo ship or those associated with the operation of pipelines)? For example, a mitigation strategy might include the requirement for</p>	<p>Net carbon delivered to sequestration should be adopted as the key measure. Mitigation in transport should be achieved by decarbonising the electricity and hydrogen production sectors, which can then be used to power transport modes.</p>

<p>a chosen means of transport to adhere to emissions standards, net proportion of emissions delivered criteria (after deduction of emissions from transportation) or similar sustainability criteria.</p>	
<p>Question 124. Do you agree with the proposed timing for when waste incineration and EfW could be introduced into the UK ETS? (Y/N)</p>	<p>No.</p>
<p>Question 125. For operators of waste incinerators, EfW plants, and local authorities (LAs), please outline the steps that you will need to take, and the time required to prepare for the expansion of the UK ETS to waste incineration and EfW.</p>	<p>No date should be fixed for the introduction of EfW into UK ETS until there is more clarity on the implications for the sector, the waste industry and the development of suitable carbon capture utilisation and storage opportunities as an alternative to what otherwise can be characterised as a simple tax raising exercise. Furthermore, UK ETS should not be introduced until a clear mechanism is established for valuing carbon negative solutions in EfW - this issue has not been addressed in this consultation and that is considered a significant lost opportunity. The right time to introduce UK ETS is when outlets that permanently sequester carbon dioxide and reward investment in carbon negative solutions are clearly established. It may be that this can be achieved by the late-2020s, however existing facilities and contracts will require significant modification and investment to achieve carbon negative performance and this should be factored into the timing of implementation. Local Authorities are a significant tonnage contributor to UK EfW with government policy, especially in Scotland, driving local authorities to invest in EfW in recent years. UK ETS introduces a new fiscal burden they are poorly positioned to be able to absorb and therefore are likely to face very significant financial hardship from UK ETS</p>



	<p>introduction. The consultation provides no explanation of how local authorities will be compensated for the imposition of an additional central government tax and therefore steps will be required to resolve this net reduction in local authority funding. The clear, obvious and fair solution is for the UK and devolved Governments to amend local authority fiscal settlement. Without such a step it is impossible to identify what steps local authorities would have to take to achieve their statutory requirement to achieve balanced budgets, however it is inevitable that an increase in spending in one area requires a reduction in another, as a result, other areas of local government spending, for example education and social care may need to be reduced.</p>
<p>Question 126. Do you agree that the UK ETS should be expanded to include waste incineration and EfW? (Y/N) Please outline your reasoning, including alternative options for decarbonisation of the sector outside of the UK ETS.</p>	<p>Yes. Local Authorities are committed to achieving Net Zero and therefore it is recognised that steps must be taken to reduce and eliminate carbon emissions from EfW. Indeed, the sector has the rare opportunity to be carbon negative. There are currently irreconcilable financial challenges in achieving decarbonisation not to mention the lack of viable outlets for carbon captured. Applying a cost to the release of CO<sub>2</sub> to atmosphere from EfW can be argued to be a logical extension from the current scope, however, certain conditions must be in place to achieve a fair and successful transition to Net Zero. Firstly, realistic and financially comparable decarbonisation solutions must be available, secondly, as EfW is only a small element of the resource management sector, the impact of introduction of UK ETS for EfW must be fully understood for all other residual waste treatment alternatives, especially landfill and export of waste to jurisdictions where the costs arising from UK ETS do not apply, for example the EU and thirdly the financial impact on local</p>



	<p>authorities must be mitigated to avoid unintended consequences, such as other services local authority services being degraded in order to pay the tax. Achieving these requirements will take time and careful policy making from UK and Devolved Governments, accordingly, the timing of the introduction of UK ETS should not be arbitrarily set at this time.</p>
<p>Question 127. Do you agree that all types of waste incinerators should be included in the UK ETS? (Y/N) If you believe certain incineration activities should be exempt, e.g. incineration of hazardous or certain healthcare waste, please provide details and specify which waste stream.</p>	<p>Yes. If the scheme is to be introduced then it should apply to all areas. The climate impact is the same irrespective of where carbon is emitted. There is a case to argue that the impact of UK ETS on high-value waste streams such as hazardous and health care waste is proportionally less than for household waste and therefore the sector will be better placed to absorb the impact.</p>
<p>Question 128. Do you believe ATT should be included in the UK ETS? (Y/N) What challenges could arise as a result of including ATT, if any, that are different to conventional waste incineration plants?</p>	<p>Yes. Any facility treating residual waste and emitting fossil carbon should be included in the UK ETS if it is to be introduced. There is no evidence that so-called Advanced Thermal Treatment (ATTs) deliver significant carbon reduction performance compared to proven technologies. Indeed, despite significant subsidy and favourable market conditions these technologies have, on the whole, actually resulted in adverse outcomes through low availability and requirement to divert wastes to higher carbon emitting outlets such as landfill.</p>
<p>Question 129. Do you agree that the point of MRV obligation for the UK ETS should be placed on the operators of waste incinerators and EfW plants? (Y/N) Please outline your reasoning in as much detail as possible and provide evidence to support your views.</p>	<p>Yes. The operator is the only body that has access to all the information required to undertake monitoring, reporting and verification. The operator controls the inputs, processing and emissions and has data capture capability. The operator will, of course, require to be regulated in this regard and this role should be undertaken by SEPA or the relevant regulators in other jurisdictions.</p>



<p>Question 130. If the point of MRV obligation is placed on operators of waste plants, should waste companies/operators or customers (either LAs or commercial and industrial customers) be responsible for meeting compliance obligations? (Y/N) Please outline your reasoning in as much detail as possible and provide evidence to support your views.</p>	<p>No. The Polluter Pays Principle should apply as this is the best way to influence the behaviour of the producer to reduce the carbon impact of its waste, however, at this early stage, there is not an obvious mechanism for how such obligations could be applied when there may be dozens of suppliers of waste to an EfW Facility - whilst tonnage of inputs is identifiable, fossil carbon content is not and would require significant costs and complication in measuring this prior to combustion. For this reason, the obligation should sit with the facility operator initially. The operator has the opportunity to reflect the financial impact of UK ETS in its gate fee and thereby recover its costs.</p>
<p>Question 131. Do you believe that the Small and Ultra Small Emitter schemes that are currently available to eligible UK ETS participants should also be available to waste incinerators and EfW plants? (Y/N) Please provide details including, where relevant, whether your organisation is likely to be eligible for these schemes based on current rules.</p>	<p>Yes. Simply for consistency. EfW carbon is not different to any other carbon.</p>
<p>Question 132. Which MRV proposal do you believe should be implemented to determine the UK ETS obligation for waste incinerators and EfW plants?</p> <p>i) If Option A, please provide your views on which methods could be used, along with any information on the practicality of their implementation and likely costs.</p>	<p>Option A is preferred as it more clearly reflects the actual emissions of each facility. Given that waste composition and the mix of waste types accepted at EfW facilities are highly variable the use of emissions factors is considered to be too crude an instrument. The respondent is not sufficiently qualified to comment on how Option A would be implemented.</p>





<p>ii) If Option B, please provide your views on how these emissions factors should be calculated, along with any information on the practicality of implementation and likely costs. In your answer, please outline how frequently fossil emissions should be monitored under both options and consider whether there are other suitable MRV options that we have not identified.</p>	
<p>133) Do you believe that one of the MRV options proposed is more likely to lead to perverse incentives (e.g. more waste diverted to landfill) or to unintended consequences as a result of applying the UK ETS to waste incineration and EfW? Please consider different scenarios and provide evidence to support your views where possible.</p>	<p>No comment.</p>
<p>134) Do you believe any additional greenhouse gases, other than CO<sub>2</sub>, that are emitted by EfW plants or incinerators, should be covered by the UK ETS? (Y/N) If so, please provide details on which gases and how it could work in practice.</p>	<p>No. The EfW UK ETS should, at least initially, mirror the established UK ETS approach. Any change should be applied across sectors.</p>
<p>135) How would the application of an ETS to waste incineration and EfW impact stakeholders (including operators of waste incinerators, operators of EfW plants, LAs, consumers, customers)?</p>	<p>Local Authorities are a significant tonnage contributor to UK EfW with government policy, especially in Scotland, driving local authorities to invest in EfW in recent years. UK ETS introduces a new fiscal burden they are poorly positioned to be able to absorb and therefore are likely to face very significant financial hardship from UK ETS introduction. The</p>



consultation provides no explanation of how local authorities will be compensated for the imposition of an additional central government tax and therefore steps will be required to resolve this net reduction in local authority funding. The clear, obvious and fair solution is for the UK and devolved Governments to amend the local authority fiscal settlement. Without such a step it is impossible to identify what steps local authorities would have to take to achieve their statutory requirement to achieve balanced budgets, however it is inevitable that an increase in spending in one area requires a reduction in another, as a result, other areas of local government spending, for example education and social care may need to be reduced. Ultimately, the introduction of carbon pricing into waste management should contribute to the implementation of carbon reduction measures. These measures would include seeking to reduce the fossil carbon content of incoming waste streams, which in turn will change the operating capacities of EfW facilities with uncertain impacts on operation and profitability. At this stage it is difficult to see how the introduction of additional financial burden on the industry will directly lead to carbon reductions when there is no established treatment or sequestration network in place and so the negative impact of increased cost will not be balanced by environmental improvements. Many local authorities, taking their lead from national policy and regulation have invested in EfW solutions and will have to enter into contractual negotiations with operators of EfW facilities to manage the change in cost base and, should the Carbon Capture Usage and Storage (CCUS) industry develop sufficiently, potentially modify facilities to incorporate carbon capture. Such contract change will require very significant resource to



	<p>negotiate and finance additional infrastructure, such resources not being available at a time of severe financial constraint.</p>
<p>136) Could the introduction of a carbon price incentivise waste operators and/or LAs to improve their operations or processes to reduce fossil waste being incinerated? (Y/N) Please outline your reasoning in as much detail as possible and provide evidence to support your views.</p>	<p>Yes, depending on the price set and the availability of reliable and affordable techniques to decarbonise waste inputs and emissions. It is recognised that more can be done to remove more fossil carbon from input wastes, however, the fate of such fossil carbon (mostly poor quality and currently unrecyclable plastic) must be considered. Shifting the plastic into a sector which potentially leads to carbon emissions not covered by the ETS (for example, 'chemical recycling' or landfill of mixed wastes) is a real risk. However successful upstream actions to reduce fossil carbon content in mixed waste are, they are unlikely to result in the complete removal of fossil carbon from the mixed waste stream. As a result, EfW - an essential part of the resource management system - will continue to be required. Decarbonising these emissions can only be achieved if the downstream sequestration/utilisation sector is mature. EfW facilities are typically small to medium scale producers and therefore are reliant on these sectors, so operators and local authorities can only be 'second-movers' in this scenario.</p>
<p>137) Could the introduction of a carbon price incentivise LAs to support households to improve recycling practices? (Y/N) Please outline your reasoning in as much detail as possible and provide evidence to support your views.</p>	<p>Yes, depending on the price set and the availability of reliable and affordable techniques to remove more fossil carbon from input wastes, however, the fate of such fossil carbon (mostly poor quality and currently unrecyclable plastic) must be considered. Shifting the plastic into a sector which potentially leads to carbon emissions not covered by the UK ETS (for example, 'chemical recycling' or landfill of mixed wastes) is a real risk.</p>



<p>138) Is there opportunity (in the medium-long term) for the carbon price to incentivise waste operators and/or LAs to invest in carbon capture and storage infrastructure, to reduce fossil carbon emissions? (Y/N) Please outline your reasoning in as much detail as possible and provide evidence to support your views.</p>	<p>Yes. Local Authorities are committed to achieving Net Zero and therefore will be inclined to implement affordable measures that contribute to that goal. Key issues are timing and funding. The absence of a viable downstream carbon sequestration sector for most EfW facilities means that such investment is certainly not viable without significant financial and risk underwriting by national governments. Should such a sector develop, the cost of carbon capture and shipping is considered to be significantly higher than the current carbon price. This situation may change over time but it is not currently possible to envisage a business case that recommends investment. A major opportunity to shift the financial balance is available if the UK ETS recognised that value of carbon negative 'emissions'. EfW is one of few sectors where actions to remove fossil carbon from emissions also delivers sequestration of biogenic carbon. UK and devolved governments recognise that carbon negative activities will be essential to achieving Net Zero and should therefore develop as quickly as possible a mechanism to reward negative emissions. This development would significantly close the gap between the cost of compliance with UK ETS and the cost of implementing carbon capture.</p>
<p>139) In the event of the carbon price being applied to waste operators, will waste operators be able to pass through their costs to customers (including LAs)? (Y/N) Please explain in as much detail as possible why, how, and to what extent this may or may not occur.</p>	<p>There is no Yes/No answer to this question as it will depend on the nature of the contracts held between operators and customers, including Local Authorities. Many larger, longer-term contracts are believed to include Change of Law provisions and that this may enable cost recovery by the operator.</p>
<p>140) For LA owned plants, would unitary authorities and waste disposal authorities be the only authorities exposed to the carbon</p>	<p>Yes, although part of the municipal waste stream comprises business waste and therefore the Authority would be expected to</p>



<p>price – in the event of waste operators passing through costs? (Y/N) Please explain in as much detail as possible and provide evidence to support your views.</p>	<p>recover the cost associated with this waste from business</p>
<p>141) Do you believe that government should consider phasing in ETS obligations to the sector over time? (Y/N) If yes, please outline why, how, and to what extent phasing options could be provided</p>	<p>Yes. UK ETS implementation should be mirrored to the availability of mitigation measures. For local authorities, unless and until viable carbon sequestration outlets are available (for fossil carbon produced both pre- and post- EfW), the UK ETS simply becomes a means to increase UK government tax revenues and reduce local authority incomes. Consequently, as access to sequestration options develop, the obligations should increase.</p>
<p>142) Would operators of incineration/EfW plants be exposed to competitiveness impacts abroad and carbon leakage risk, in the event of being exposed to the carbon price? (Y/N) Please explain in as much detail as possible and provide evidence to support your views.</p>	<p>Yes. This issue is not just a case of leakage abroad but also within the UK. Whilst landfill remains an option for household waste outwith Scotland, waste produced in Scotland that should be managed in EfWs may leak to England where landfill is allowable. Leakage is dependent on a combination of EfW costs in the UK and capacity availability and price abroad. Timing introduction of UK ETS for EfW through a coordinated, harmonised approach to match similar measures in likely destinations for RDF/SRF export (largely European countries) would obviate this risk.</p>
<p>143) Have you identified any other distributional impacts (including wider environmental or social impacts) arising from this proposal? (Y/N) Do you have views on how government could address these concerns?</p>	<p>Increasing cost of EfW is likely to have adverse impact on existing District Heating schemes, which currently struggle to compete with the gas market and would likely face an increase in heat supply costs. In addition, UK ETS is likely to degrade the ability of public bodies to invest in new or expanded District Heat schemes. Furthermore, leakage of tonnage abroad (or in Scotland's case to English landfills) could also jeopardise the viability of</p>



	EfW facilities that support District Heat schemes.
144) What additional policies would be needed to support the UK ETS in decarbonising waste incineration and EfW? How would this change over time?	Policies/mechanisms that recognise the value of negative emissions to achieving Net Zero should be introduced as soon as possible in order to assist in closing the financial gap between paying the carbon price and installing carbon capture systems. If leakage is considered a significant issue, the Trans-frontier Shipment of Waste Regulations would also need to be reviewed to dissuade this activity.
145) How would the expansion of the UK ETS to waste incineration and EfW interact with existing and planned policies in waste incineration, EfW, and waste management more broadly, as well as any other relevant non-decarbonisation policies?	Increasing the cost base of EfW either through UK ETS costs or through installation and operation of carbon capture increases the incentive to divert more material from EfW. This is double-edged as it reduces waste input security which is essential to underpin a business case to install carbon capture capacity whilst increasing the ability to spend more on pre-treating waste to capture more recyclables, especially plastics.
146) Are there other parts of the waste management system that should be included in the scope of the UK ETS? For example, landfill or wastewater. (Y/N) Please explain in as much detail as possible and provide evidence to support your views.	Yes. Landfill should be included as it is a significant carbon emitter within the Resource Management sector. It is recognised that to do so would be complex, so an alternative would be to use other regulatory and fiscal tools to minimise the competitiveness of landfill. A UK-wide adoption of the Scottish landfill ban is one option and increases in landfill tax is another.

