ITEM No ...3......

REPORT TO: CLIMATE, ENVIRONMENT & BIODIVERSITY COMMITTEE – 23 SEPTEMBER 2024

REPORT ON: EXTENSION OF EMISSIONS TRADING SCHEME TO INCLUDE ENERGY FROM WASTE

REPORT BY: EXECUTIVE DIRECTOR NEIGHBOURHOOD SERVICES

REPORT NO: 251-2024

1.0 PURPOSE OF REPORT

1.1 This report provides information to the committee on Dundee City Council's response to the UK Governments recent consultation on Expanding the Emissions Trading Scheme (ETS) to include Energy from Waste (EfW) and Waste Incineration by 2028.

2.0 **RECOMMENDATIONS**

- 2.1 It is recommended that the committee:
 - notes the content of this report; and
 - notes that further reports will be provided to the committee as more information is published.

3.0 FINANCIAL IMPLICATIONS

3.1 None.

4.0 BACKGROUND

- 4.1 The UK Emissions Trading Scheme (ETS) came into operation on 1st January 2021. The scheme is a key part of UK Government's approach to addressing climate change by setting a limit on emissions from the sectors covered and ensuring an appropriate price is applied to them.
- 4.2 The scheme is jointly run by the UK ETS Authority and is comprised of the UK Government, Scottish Government, Welsh Government and the Department of Agriculture, Environment and Rural Affairs for Northern Ireland.
- 4.3 The scheme works on a 'cap & trade' principle whereby the amount of greenhouse gas emitted by operators covered by the scheme is capped and allowances can be traded. Operators require to surrender an allowance for each unit of emissions which they produce. Allowances are limited and can be purchased giving rise to a "carbon price" which is determined by the market.
- 4.4 In March 2022, the UK ETS Authority consulted on a wide range of changes to the scheme, with the aim of ensuring that it can play a key role in reaching net zero targets, while supporting businesses in the transition. This included a call for evidence on expanding the scope of the UK ETS to include Waste Incineration and Energy from Waste (EfW).
- 4.5 In July 2023, the UK ETS Authority confirmed its intention to include Waste Incineration and EfW in the scheme from 2028, proposing the following timeline for implementation:
 - From 2026 a 2-year transitional phasing period will begin. During this time, emissions from operators will be monitored, reported on and verified only.

- From 2028, EfW will be included within the ETS and industry will be obliged to purchase and surrender allowances.
- 4.6 The Department for Energy Security & Net Zero (DESNZ) published a consultation proposal on Expanding the ETS to include EfW & Waste Incineration. The Waste Partnership submitted an Officer response on behalf of Dundee City and Angus Councils ahead of the deadline closing on 2nd August 2024. Please see Appendix 1 below.
- 4.7 The expansion of the ETS to include EfW has potential impacts for both local authorities and the existing Dundee & Angus Residual Waste Contract.

5.0 POTENTIAL IMPACT FOR LOCAL AUTHORITIES

5.1 The inclusion of EfW in the ETS will incur additional costs to EfW operators in the form of a carbon price. Only emissions from the incineration of fossil derived materials such as plastics and textiles will incur a price.

There has been no detail on what this carbon price will be and how it will be calculated in respect of the application for EfW and subsequent reports will be made to the committee as further details are published.

- 5.2 As with other contracts of a similar nature, the Dundee & Angus Residual waste contract contains a Qualifying Change in Law (QCiL) clause which allows the contractor to pass through any additional costs resulting from a future change in legislation and it is anticipated that the ETS will fall into this category.
- 5.3 Due to the significant reliance on EfW by most Local Authorities as a waste treatment solution, COSLA are working with Scottish Local Authorities and both the Scottish and UK Governments to better estimate the cost burden and potential methods of mitigation.
- 5.4 Local Authorities and other customers will be able to reduce associated costs of the ETS by participating in decarbonisation activities which reduce the amount of fossil derived materials entering the non-recyclable waste stream.

These activities include increasing the collection of any currently recyclable materials, maximising participation in the forthcoming Deposit Return Scheme (DRS) and the packaging Extended Producer Responsibility scheme (pEPR).

6.0 THE ETS CONSULTATION

- 6.1 The consultation seeks views on the scope, participation, monitoring and impacts of the scheme. Decarbonisation pathways and incentivising heat networks as a means to offsetting carbon costs are also considered.
- 6.2 There were a number of technical questions contained within the consultation for which 'no response' has been given as these are not considered appropriate for the Partner Councils to comment on but rather for the waste operator.

7.0 POLICY IMPLICATIONS

7.1 This report provides detail of the Council's formal response to UK Governments consultation on Expanding the Emissions Trading Scheme (ETS) to include Energy from Waste (EfW). The report does not relate to the development of a policy, strategy, procedure or service and, as such, has therefore not been subject to an integrated assessment of any impacts on Equality and Diversity, Fairness and Poverty, Environment and Corporate Risk.

8.0 CONSULTATIONS

8.1 The Council Leadership Team have been consulted in the preparation of this report and agree with its contents.

9.0 BACKGROUND PAPERS

9.1 None.

Tony Boyle Executive Director of Neighbourhood Services

Date: 26 August 2024

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Appendix1 - Response ID ANON-WPPZ-XT3U-5

The consultation questions

1. Do you agree that our proposals should apply to facilities that conduct the following activities: incineration and combustion of waste, and other energy recovery from waste (including the production of fuels)?

Yes

Please give further details to support your answer:

Yes, from an environmental protection perspective all facilities which produce emissions should be included. However, consideration should be given to the financial burden this will create for Local Authorities who have very little control over feedstocks and those who are tied to long term contracts that were not designed with this type of legislation in mind.

2. Are there any technologies which we have not referenced in this section, and which would not be covered by the activities we have set out, which you think should be covered by our proposals?

Not Answered

Please give further details to support your answer:

No Response

3 Do you agree that facilities that produce monomers and polymers from waste that can be used as raw materials (non-mechanical or 'chemical' recycling) for materials to remain in the circular economy, should not be included in the scope of our proposals?

Not Answered

4. If yes, how should we treat facilities that produce both fuels and polymers and monomers to be used as raw materials?:

No Response

5. Do you have any concerns with our position not to use the 20MW thermal input threshold for inclusion in the UK ETS?

Not Answered

Please give further details to support your answer:

No Response

6. Should an alternative threshold for inclusion in the UK ETS be explored (e.g. waste throughput capacities) or will Hospital & Small Emitter (HSE) and Ultra Small Emitter (USE) status eligibility sufficiently protect smaller facilities?

Not Answered

Please give further details to support your answer:

No Response

7.Do you agree that the proposed thresholds for Hospital & Small Emitter (HSE) and Ultra Small Emitter (USE) status are suitable for waste incineration facilities?

Not Answered

Please give further details to support your answer:

No response

8. Do you agree that it is unlikely that smaller facilities will be developed to gain eligibility for Hospital & Small Emitter (HSE) and Ultra Small Emitter (USE) status?

Not Answered

Please give further details to support your answer .:

No Response

9. If you disagree with the proposed thresholds for Hospital & Small Emitter (HSE) and Ultra Small Emitter (USE) status, what alternatives would be suitable?

No Response

10. Do you agree with our position to include the incineration of hazardous and clinical waste in the UK ETS?

Not Answered

Please give further details to support your answer and set out any concerns that you may have:

No Response

11. What decarbonisation options will be available to hazardous and clinical waste incinerators and in what timescale (e.g. immediately or long-term)?

No Response

12. Would the emissions monitoring methods outlined in the 'Monitoring and reporting' section be available to non-specialist incinerators also be available to hazardous and clinical waste incinerators of the same size?

Not Answered

Please give further details to support your answer.:

No Response

13. If hazardous or clinical waste incineration was ever to be exempted from the UK ETS, is there a risk of other waste types being mislabelled as either to avoid the UK ETS?

Not Answered

Please give further details to support your answer .:

No Response

14. Do you agree that Hospital & Small Emitter (HSE) emission targets will incentivise clinical waste incinerators to decarbonise?

Not Answered

Please give further details to support your answer .:

No Response

15. Do you agree that the customers of clinical waste incinerators will be able to take action to reduce the fossil content in the waste they generate and achieve their waste reduction targets?

Not Answered

Please give further details to support your answer .:

No Response

16. Do you agree that the proposed approach, of adding allowances equivalent to emissions in scope per emissions trajectories aligned to the Carbon Budget Delivery Plan (CBDP), is the appropriate approach to adjusting the cap, to ensure the emissions reductions required to deliver climate targets?

Not Answered

Please explain your reasoning, including by proposing an alternative approach if appropriate:

No Response

17.Do you agree with the proposed approach to adjusting the cap to account for the inclusion in the scheme of emissions from the waste incineration sector?

Not Answered

Please explain your reasoning, with reference to any alternative approaches or sources of evidence, such as on the impact of policies on the fossil proportion of emissions:

No Response

18. What would you expect to be the impact of the proposed approach to cap adjustment on participants in the sector and/or the wider UK ETS market? Please explain your reasoning.

No Response

19. Do you agree that it is practicable for existing regulatory requirements under the scheme, such as the compliance cycle, permit requirements, monitoring plan requirements and penalties, to apply to the waste sector?

Yes

Please give further details to support your answer.:

Yes, everything should be measured under the same regulatory regime.

20. Do you agree that a Monitor Report Verification (MRV)-only period is the best way to meet the objectives of a phasing period for this sector?

Yes

Please give further details to support your answer:

Yes. This will allow everyone affected to assess the impact of the tax and any contractual liabilities. A monitor only period will also allow for a more accurate calculation of waste composition & carbon emissions which will aid forecasting for future years.

Collecting data at this stage will also help to measure the impacts of forthcoming change such as Deposit Return Scheme, Extended Producer Responsibility and any other future initiatives contained within the Waste Routemap for Scotland.

21. How will operators and customers use any data from the Monitor Report Verification (MRV) -only period?:

Operators & customers can use the data to assess impact and plan for/make claims through the Extended Producer Responsibility system. It should also be considered how Deposit Return Scheme implementation timescales will impact on ETS.

On a regional and national level, conclusions and comparisons can be drawn as to the effectiveness of strategic policies for recycling, behavioural change and decarbonisation practices.

Local Authority customers will also be able to liaise with EfW contractors to plan for pass through costs.

22. For customers and operators, will knowing expected costs earlier than full implementation provide an early incentive to reduce your exposure to the carbon price?

Yes

Please give further details to support your answer:

Early cost indications will be useful for Local Authorities to plan and budget for this burden accordingly. However, any meaningful action to mitigate against this tax will likely take some time and depend on the impacts of other legislation, governance, finance & procurement availability.

23. If the Monitor Report Verification (MRV) period is mandatory (Option 1): Do you agree that waste incineration facilities should be subject to the same Monitor Report Verification requirements for 2026-28 that they will be subject to from 2028 onwards (e.g. report emissions for all combustion units onsite)?

Yes

24. If the Monitor Report Verification (MRV) period is mandatory (Option 1): Do you have any concerns with the requirement for all waste incineration facilities to meet Monitor Report Verification requirements, before applying for Hospital & Small Emitter (HSE) and Ultra Small Emitter (USE) status?

Not Answered

Please give further details to support your answer:

No Response

25. If the Monitor Report Verification period is voluntary (Option 2): How likely do you think it is that operators would monitor their fossil emissions?

Likely

26.a) If the Monitor Report Verification period is voluntary (Option 2): How likely do you think it is that operators would share their emissions with customers so they are better informed about potential future costs?

Likely

26.b) If the Monitor Report Verification period is voluntary (Option 2): How likely do you think it is that operators would share their emissions with the UK ETS Authority to inform cap decisions and evidence Hospital & Small Emitter (HSE) and Ultra Small Emitter (USE) status eligibility?

Likely

27. Do you have any other comments on the Monitor Report Verification-only transitional period, and either of the options identified?:

No Response

28. Do you agree that a tiered approach should be taken to monitoring and reporting requirements under the UK ETS?

Not Answered

Please give further details to support your answer .:

No Response

29. Do you think that Option 1 would be suitable for waste incineration facilities?

Not Answered

Please give further details to support your answer.:

No Response

30. Do you agree with our estimations in Figure 4 on how the available emissions monitoring methods for the sector could correlate with the uncertainty ranges for each tier in Option 1?

Not Answered

Please give further details to support your answer.:

No Response

31. Do you think that Option 2 would be suitable for waste incineration facilities?

Not Answered

Please give further details to support your answer:

No Response

32. What approach (e.g. national, regional or installation specific) should be taken to the development of default calculation factors for smaller installations? Please give details to support your answer.

Not Answered

Please give details to support your answer .:

No Response

33. On which aspects of the policy should we produce guidance, either for operators, their customers, or both? Please explain your reasoning:

Guidance should be produced for both operators and customers as all parties are impacted & should be aware. Guidance should be clear, concise and all parties should be able to determine their role.

Guidance should be given on how the fossil carbon emissions should be calculated and passed through given that EfW's process waste from a portfolio of both Local Authority clients and commercial customers. This will ensure that everyone is treated fairly across the UK.

34. How should we seek to test any guidance either for operators, their customers, or both? Please explain your reasoning:

The guidance should be shared with working groups consisting of all parties and incorporate feedback. A series of seminars would be useful, and a Local Authority focussed session arranged through the Scottish Waste Managers Group would be welcomed.

35. To what timescale should guidance on different aspects of the policy, and for different audiences, be produced? Please explain your reasoning:

As soon as practicably feasible to allow all parties to become familiar and consult on the guidance. We would propose that initial draft guidance be published for consultation in early 2025 to allow for any changes prior to the Monitor Report Verification period.

36. Do you expect waste incineration gate fees to become more expensive than landfill or export as a result of UK ETS expansion? Is this expectation the same for all material types and regions?

Yes - I expect waste incineration gate fees to become more expensive than landfill

No - this expectation is not the same for all material types and regions

Please provide evidence to support both your answers.:

Yes. It is likely that EFW will become more expensive than Landfill, which may open up Refuse Derived Fuel /Solid Recovered Fuel export as a route if the price differential is too wide. This will depend on the development and inclusion of EfW within the EU ETS.

37. If waste incineration gate fees were to become relatively more expensive, with consideration of non-price factors when taking waste disposal and management decisions, how significant is the risk that waste is, in practice, diverted back down the hierarchy to landfill or export?

Certain

Please give further details to support your answer.:

It is likely that waste would be diverted to landfill/export, however the risk may be lower in Scotland due to the forthcoming landfill ban. It is expected that most waste companies will choose the disposal route with lowest cost, therefore diverting waste back down the hierarchy. The risk of increased waste crime should also be considered.

Contractors will likely pass all additional costs to the customer. Several Local Authorities are tied into long term EfW contracts and with ever constricting budget, it should be considered what help in the form of funding and support, can be provided to help them get recycling out of the residual waste stream, decarbonise and reduce the fossil content.

38. Considering possible benefits and challenges that could arise, do you think that further UK ETS expansion to landfill should be explored as a mechanism to protect against the diversion of waste from waste incineration to landfill?

Yes

Please give further details to support your answer .:

From an environmental perspective, landfill should not be the easy option. In Scotland, the landfill ban on biodegradable municipal waste goes some way to addressing this. The cost of landfill should be comparative, if not more than EfW in order to drive the sector in the correct direction.

39. Do you think alternative options to manage the landfill risk should be explored? If so, please give further details on which options and why.

Yes

If yes, please give further details on which options and why .:

All options to remove landfill as a waste disposal option/ route should be explored including extending the landfill ban to the rest of the UK.

40. Do you think that either of the approaches outlined above to address landfill risk would give rise to unintended consequences?

Yes

Please give further details to support your answer.:

This may open up Refuse Derived Fuel as an export route if the price differential is too wide. ETS expansion may also cause unintended consequences for Local Authority contracts which depend on 3rd Party waste input to maintain capacity and efficiency of facilities.

41. What would be the most effective approach to mitigate the risk of waste being diverted from waste incineration to Refuse Derived Fuel/Solid Recovered Fuel export? Please give details to support your answer.:

To ensure that a level marketplace exists for carbon trading and that Refuse Derived Fuel/Solid Recovered Fuel be subject to the same carbon trading system as waste incineration.

42. Do you think that limiting the number of Refuse Derived Fuel/Solid Recovered Fuel export permits/licenses issued would be an effective mechanism to reduce the risk of waste diversion from waste incineration to export abroad?

Yes

43. Please give further details to support your answer.:

Any measure which limits the amount of waste exported abroad is welcomed, although how permits are granted/prioritised would require some thought and be designed to avoid unintended consequences.

44. Would a fixed or variable charge be most effective at managing this risk? Please give further details to support your answer.

Variable

44. Please give further details to support your answer.:

Variable charging would assist in mitigating the risk of cross-boundary differences.

45. If we were to proceed with the development of a variable charge rate:

a) Would it be sufficient for the charge rate to reflect the UK ETS carbon price?

b) Will consideration need to be given in the charge rate calculation to the carbon price (if any) in the destination country to which Refuse Derived Fuel/Solid Recovered Fuel exports are bound?

c) How frequently will variable charge rates need to be updated?

Yes - it would be sufficient for the charge rate to reflect the UK ETS carbon price

a) Please give further details to support your answer .:

Yes - consideration will need to be given to the charge rate calculation to the carbon price (if any) in the destination country to which Refuse Derived Fuel/Solid Recovered Fuel exports are bound

b) Please give further details to support your answer .:

Waste should not be displaced to cheaper, less efficient or environmentally damaging facilities.

c) How frequently will variable charge rates need to be updated? Please explain your answer.:

Variable charge rates should be in line with frequency of the carbon trading scheme.

46. Do you think that alternative options to manage the Refuse Derived Fuel /Solid Recovered Fuel export risk should be explored?

Yes

If yes, please give further details on which options and why .:

All options that may lead to price disparity, fraud or unfair advantage should be explored.

47. Do you think that any option to address Refuse Derived Fuel /Solid Recovered Fuel export mitigation risk could give rise to unintended consequences?

Yes

Please give further details to support your answer:

It could create unfair or unrealistic trading conditions.

48. Do you agree with the decarbonisation pathways for waste incineration facilities detailed above?

Yes

Please give further details to support your answer, including information on the ability of local authorities and/or waste incineration operators to undertake the decarbonisation pathways detailed.:

The decarbonisation pathways are varied. For Local Authorities, this includes a more intense front-end recovery of materials through pre-sort and increased recycling collections which would depend on more investment into infrastructure and availability of suitable offtake markets of materials recovered.

Please provide any information on additional decarbonisation activities or pathways that are available to local authorities and/or waste incineration operators.:

The use of local heat networks should be explored and incentivised to encourage the development of heat offtake as well the decarbonisation of feedstocks.

Local authorities are largely at the mercy of what producers place on the market, the availability of end markets for certain materials and how householders decide to dispose of high carbon fossil based items such packaging and textiles in the waste system.

49. Do you have any evidence on the costs, savings and potential profits that could be generated from decarbonisation technologies such as Carbon Capture Storage (CCS) and heat networks?

No

If yes, please provide further details. We would particularly welcome evidence for the whole contractual period and/or lifetime of the facility:

Not Applicable

50. Please provide any comments on cost savings from decarbonisation technologies such as Carbon Capture Storage and heat networks and whether these will be passed back to customers, including local authorities:

No Response

51. Do you agree there is a need for guidance on decarbonisation for local authorities and waste incineration operators?

Yes

Please give further details to support your answer, including any information on the type, form and content of guidance needed.:

There needs to be comprehensive guidance that applies to both operators and local authorities.

52. Beyond the mechanisms listed above, are there any other mechanism(s) you would recommend to support local authorities to decarbonise?

No

Please give further details to support your answer, including any information on the type of support mechanism(s) recommended and details on the type of materials that may fall outside the scope of the proposed support mechanisms detailed above:

Reducing the fossil carbon content through the extraction of specific materials such as plastic products, textiles and packaging remains key and is an area where further support is welcomed.

53. Do you think that sampling (e.g. Material Recovery Facility requirements) would be an effective approach for supporting accurate cost pass through from EfW operators to customers?

Yes

Please give further details to support your answer:

Regular sampling and compositional analysis would help to provide accurate calculations for individual customers at the input stage. Carbon 14 measurements from flue gases is an appropriate method for gauging the effectiveness of this method.

54. Do you think that the outlined sample analysis techniques (e.g. manual sorting, selective dissolution, and carbon-14) would effectively support accurate cost pass through?

No

Please give further details to support your answer:

These analysis techniques would be effective but require to be presented in a more straightforward and cost-effective way, for example default carbon calculations that can be regularly reviewed could be built into the various waste codes this would enable a more effective measurement of input materials.

55. Do you think that alternatives to sampling, including default calculation factors, should be explored?

Yes

Please give further details to support your answer:

As described in the response to question 54 a range of sampling techniques should be used to build a robust data set for the different waste types and in the case of a local authority these should be specific to the authority to reflect the pass-through costs for the authority.

56. Do you think that a phased approach to the development of a cost pass through mechanism would be a practical way to proceed?

Yes

Please give further details to support your answer.:

Given the contractual requirements for our current residual waste treatment contact, a clear, concise and binding set of regulations will be required that is not open to interpretation should be in place.

57. Do you consider that the application of the UK ETS to waste incineration will lead to any impacts for any groups with protected characteristics under the Equality Act 2010? Do you consider there to be any further equality considerations? Do you consider any elements of the UK ETS expansion to waste incineration could be designed to advance equality of opportunity and/or foster good relations? Please explain your response, providing evidence where possible:

We do not believe the UK ETS would have any direct impacts under the Equality Act 2010, however increased costs for Local Authorities following several years of budget cuts will exacerbate the current financial strain on Local Authorities which can only lead to further service cuts.

58. Do you agree that the UK ETS should be used to support heat offtake through the ETS?

Yes

Please outline your reasoning and provide evidence to support your views:

Incentivising heat offtake could assist decarbonisation and developing a heat network has a range of positive outcomes for Local Authorities however more information is required as to how this would work. Considerations should be given to current facilities and their geographical location.

Infrastructure costs, in particular where district heating schemes are considered, are the biggest barrier to successful heat offtake projects. Therefore, in addition to incentivising via ETS, funding and support packages should be available to assist Local Authorities with the development of district heating projects.

59. Do you have a view on what incentive mechanism (e.g. free allowances, subtraction of a number of allowances from the UK ETS obligation etc.) would work best to encourage the export and utilisation of heat?

No

Please provide as much detail as possible to support your answer.:

No view, however, costs for a heat scheme would require to be completely offset by the incentive. As the waste operator can pass the costs of an ETS scheme through to their customer there would also require to be a direct benefit for the waste operator.

60. Do you think that policies to incentivise heat offtake should apply to surplus or waste heat, as well as heat produced for the purpose of export?

Yes

Please provide as much detail as possible to support your answer:

Essentially, any initiatives require to be linked to emissions saved or offset by replacing existing heat sources with the alternative offered through a system like a district heating network.

61. If an incentive is provided, how should the level of incentive be determined e.g. should it be linked to emissions that are offset by exporting heat, the volume of emissions associated with the production of heat, etc.? (Y/N) Please provide as much detail as possible to support your answer:

We believe that any incentives should be linked to reducing emissions and if exporting or buying heat from large heat producers such as other industrial process or server farms helps reduce overall emissions these should be considered.

62. Do you have a view as to whether incentivising heat offtake through the UK ETS could have any perverse consequences? Please provide as much detail as possible to support your answer.

We are not aware of any perverse consequences as the offset of carbon emissions will remain the priority of any incentive scheme in place although the priority should be to manage the incentive scheme to ensure there is no abuse or profiteering that has been the issue with other similar trading schemes such as Extended Producer Responsibility.