

Energy UK Response to DESNZ UK Emissions Trading Scheme Scope Expansion

02.08.2024

Executive Summary

Energy UK is the trade association for the energy industry with over 100 members - from established FTSE 100 companies right through to new, growing suppliers, generators and service providers across energy, transport, heat and technology.

Our members deliver nearly 80% of the UK's power generation and over 95% of the energy supply for 28 million UK homes as well as businesses.

The sector invests £13bn annually and delivers nearly £30bn in gross value - on top of the nearly £100bn in economic activity through its supply chain and interaction with other sectors. The energy industry is key to delivering growth and plans to invest £100bn over the course of this decade in new energy sources.

The energy sector supports 700,000 jobs in every corner of the country. Energy UK plays a key role in ensuring we attract and retain a diverse workforce. In addition to our Young Energy Professionals Forum, which has over 2,000 members representing over 350 organisations, we are a founding member of TIDE, an industry-wide taskforce to tackle Inclusion and Diversity across energy.

Energy UK would note the following key positions:

Scope Of The Scheme

- Energy UK supports a robust carbon price that provides an effective signal for industry and consumers to invest in decarbonisation.
- The UK ETS should be extended to sectors with no barriers to a carbon price being an effective decarbonisation tool.
- Extending the scope of the UK ETS to include waste will improve market liquidity, with associated benefits for market participants.
- Any expansion of UK ETS must be approached in full consideration of any potential for unintended consequences, such as, in the case of inclusion of waste, increased use of landfill or the export of waste, or, in the case of inclusion of heat networks, market distortions across the heating market. The Authority must consider how these potential consequences can be mitigated.
- Questions remain regarding the integration of this policy change with other frameworks developing for Heat Network Zoning, Industrial Clusters, and wider reforms to ensure appropriate and aligned signals to investors and consumers.

Adjusting The Cap For Waste Incineration Facilities

- Careful consideration needs to be given to how the allowance cap in the UK ETS is changed, given the expansion of scheme scope, to maintain a robust UK carbon price.

UK ETS & Heat Networks

- Energy UK agrees that UK ETS should be used to support heat offtake, though serious thought needs to be given to the potential impacts on both the waste heat offtake and wider heating markets to ensure significant distortions are avoided.
- Industry is conscious that many policy decisions regarding routes to market for heat networks and heat network zoning are yet to be finalised by the Government. It is vital that decisions regarding the introduction of heat network zoning and the application of ETS are implemented with aligned timelines to enable and/or guide prudent investment decisions by heat network developers.
- Industry takes the view that the Government must clarify its positions on heat network policy and the role of ETS within same, including clarification of which heat network technologies will qualify for ETS linkage.
- Heat network developers should be allowed to choose the ETS incentive mechanism that most closely matches their projected output.
- Policies to incentivise heat offtake should apply to surplus or waste heat, as well as heat produced for the purpose of export.

Energy UK would also take this opportunity to reiterate its continued support for linking the UK and EU ETS.

If you have any questions about this response or wish to engage with Energy UK and its members, we would welcome further engagement.

Kind regards,

Robert Birch
Policy Manager
robert.birch@energy-uk.org.uk

Oisín Joyce
Policy Manager
oisin.joyce@energy-uk.org.uk

Consultation Questions:

Scope Of The Scheme:

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)? (Y/N) Please give further details to support your answer.

Energy UK supports a robust carbon price that provides an effective signal to decarbonise, and believes that the UK ETS should be extended to sectors with no barriers to a carbon price being an effective decarbonisation tool.

Extending the UK ETS to include waste will also enhance market liquidity by broadening participation and increasing the cap, with positive ramifications for existing market participants.

However, the Authority should bear in mind that:

- The inclusion of Energy-from-Waste (EfW) within the UK ETS could have unintended consequences for the treatment of waste (i.e. more waste sent to landfill or exported) and/or costs to local authorities or commercial/industrial users as carbon costs would likely be passed through to the waste producer who may not be sensitive to prices.
- If carbon pricing was applied to EfW, the additional revenues received by HMT would need to be returned to Local Authorities.
- Until there is CCUS infrastructure available the merit of a carbon price signal for EfW is limited, and even then it may not be cost- or carbon-efficient for waste to be transported to these locations within the UK. There are concerns that this could encourage greater waste export or use of landfill rather than increased recycling or reduced resource consumption.
 - This is of particular concern given that transport emissions are not currently captured in the scope of the consultation document. The Authority may wish to consider whether it would be appropriate to include emissions created as a result of the transportation of waste in the scope of the ETS.
- Some members believe that regulated approaches may be more appropriate than price signals. The trading of negative emissions could also be a more effective way to incentivise the capture of emissions compared to a carbon price signal.

Energy UK strongly supports the linkage of the UK ETS with the EU ETS. As a principle, the Authority must ensure that any scope changes do not create issues for linking the UK ETS and EU ETS. The Authority should take into account the EU's aim to extend the scope of the EU ETS to waste by 2028 in any decision-making.

Adjusting the cap for waste incineration facilities

16. Do you agree that the proposed approach, of adding allowances equivalent to emissions in scope per emissions trajectories aligned to the CBDP, is the appropriate approach to adjusting the cap, to ensure the emissions reductions required to deliver climate targets? (Y/N). Please explain your reasoning, including by proposing an alternative approach if appropriate.

Energy UK strongly supports a Net Zero cap trajectory for the UK ETS.

Any changes to the cap should follow the principles outlined in the consultation document of:

- Ensuring that all changes to the composition of the traded sector are captured in adjustments to maintain an appropriate balance of supply and demand.
- Maintaining net zero-consistency by ensuring that all cap adjustments are in line with government decarbonisation pathways for the relevant sectors.
- Providing certainty for market participants by minimising the frequency of such adjustments and consolidating cap adjustments where possible.

Caution must be used when making any adjustments to the cap to ensure that a robust carbon price is maintained.

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? (Y/N). 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.

In principle, Energy UK agrees with the proposed approach to adjusting the cap.

The MRV-only period could be used as an alternative mechanism to accurately calculate the required cap adjustment. Any cap adjustments could be based on reporting from the proposed MRV period, with a view to understanding exactly how many additional UKAs need to be added to the cap. This could also include sampling the proportion of biogenic waste, which can be factored into emissions calculations.

As stated in response to Q.1, the trading of negative emissions could be a more effective way to incentivise the capture of emissions rather than a carbon price signal, and so the treatment of biogenic content within EfW plants could be considered as negative emissions in the same way as BECCS.

It is unclear what, if any, grandfathering arrangements there will be for existing EfW plants. This must be clarified and built into how the cap is adjusted. Some Energy UK members believe that arrangements for existing EfW plants could be 'grandfathered', and careful consideration of market implications of this approach will be important to avoiding market distortions and maintaining progress toward Net Zero.

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.

There is a need to ensure an adequate balance of new allowances, relative to the size of emissions from the sector, to maintain a robust and stable carbon price which incentivises investment in decarbonisation. Any changes to cap size must be based on accurate data and projections; members have suggested some ways in which this could be achieved, as set out in response to Q.17.

Adding new sectors to the UK ETS, with additional allowances and market participants, will lead to greater market liquidity, which brings with it associated benefits to existing market participants. The approach must be managed carefully to ensure the UK ETS is stable and consistent, and where possible is aligned with the EU ETS.

Participating In The Scheme:

20. Do you agree that an MRV-only period is the best way to meet the objectives of a phasing period for this sector? (Y/N). Please give further details to support your answer.

Energy UK agrees that an MRV-only period is the best way to meet the objectives of a phasing period for this sector.

As in response to Q.17, details how the MRV-only period could be used to ensure that cap changes are accurately calculated.

Impacts Of The Scheme And Reducing Adverse Risks:

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? Please provide evidence to support your answer.

See response to Q.1.

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? (Y/N) Please give further details to support your answer.

Further expansion of the UK ETS to landfill could be explored as a mechanism to protect against the diversion of waste from waste incineration to landfill. Most members are supportive of ETS being applied to landfill to create a level playing field between waste disposal technologies.

This will help reduce the potential risk of unintended consequences by avoiding situations where landfill becomes less expensive in some circumstances than incineration.

This would also further improve market liquidity by increasing the number of participants in the UK ETS.

At the same time, some members do not consider the extension of the ETS to landfill to be a priority when considering the need to implement other proposed reforms and the resource available to the Authority.

48. Do you agree with the decarbonisation pathways for waste incineration facilities detailed above? (Y/N) 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. Please also provide any information on additional decarbonisation activities or pathways that are available to local authorities and/or waste incineration operators.

Energy UK is broadly supportive of the decarbonisation pathways for waste incineration facilities outlined in the consultation document.

51. Do you agree there is a need for guidance on decarbonisation for local authorities and waste incineration operators? (Y/N) Please give further details to support your answer, including any information on the type, form and content of guidance needed.

Energy UK agrees that there is a need for guidance on decarbonisation for local authorities and waste incineration operators.

However, Local Authorities should be permitted to develop decarbonisation solutions outside the scope of any applicable guidance if this can be delivered at a lower cost, with a lower emissions load and/or is more suitable to local circumstances.

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

There are a number of potential additional decarbonisation pathways for waste incineration facilities including, but not limited to, private wire renewables and power purchase agreements. The pathway to decarbonisation is of lesser importance than the eventual outcome of delivering a decarbonised sector.

The Government should also consider the role of community energy projects in facilitating the decarbonisation of waste incineration facilities while simultaneously acting as a means of anchoring demand, and thus as a route to market for community energy projects.

To make such decarbonisation pathways viable, we urge the government to provide adequate resourcing to LAs to enable them to conduct feasibility studies for different decarbonisation mechanisms and to fund the execution of power purchase agreements.

UK ETS & Heat Networks – Call For Evidence:

58. Do you agree that the UK ETS should be used to support heat offtake through the ETS? (Y/N). Please outline your reasoning and provide evidence to support your views.

The majority of Energy UK members agree that UK ETS should be used to support heat offtake through the ETS to accelerate decarbonisation and encourage use of all available heat sources in heat networks.

Energy UK members have cited a number of points of consideration in support of the proposal. These include:

- EfW provides a lower carbon heating alternative to natural gas and eliminates households and businesses exposure to fluctuations in the natural gas price.
- This could provide one of very few options an EfW has to directly offset the cost of the UK ETS without relying on waste suppliers to remove the fossil content of residual waste. The other obvious option is CCS technology, but at present this is very expensive, not fully proven at scale and deemed locationally unviable for most EfWs in the UK.
- Encouraging heat networks coordinated with EfWs will improve the overall efficiency of these plants, which means the UK is able to extract more useful energy held within residual waste. It will also directly benefit the local communities where these EfW plants exist, as heat networks will be developed in close proximity to the heat source.
- Given that heat networks will increase the overall efficiency of EfW plants and the need for urgent action to decarbonise UK heat demand, heat networks linked to any available source of low carbon or waste heat should be supported.
- Securing waste heat from various sources, including EfW & data centres, is critical to delivering sufficient low carbon heat to new and existing buildings in the most cost-efficient manner for consumers. With the projected growth of the UK District Heating industry and the introduction of zoning, government and industry must incentivise all waste heat sources to provide heat at a fair and reasonable price. Cost savings can then feed through to lower heating bills for customers.
- By opening up funding to other heat sources, such as data centres and industrial processes, multiple sources of waste heat become available, while also giving those sectors additional revenue streams. Some of this heat will require lower capital investment for the installation of infrastructure due to its closer proximity to heat customers, which is critical in delivering fair and reasonably priced heat and keeping the overall cost of decarbonisation as efficient as possible.
- A dual approach which both lowers the cost of UK ETS compliance (for newly captured sectors such as EfW installations) alongside access to grant funding for necessary infrastructure would be highly effective.

However, a minority of Energy UK members take the view that the UK ETS is not an appropriate mechanism to support heat offtake, noting the following concerns:

- There is already a clear economic and environmental case for supporting heat networks.
- Encouraging the use of surplus heat, or new sources of low-carbon heat, for use in heat networks is positive, however, making exceptions or discounts for emitters in the waste sector in the UK ETS would simply increase the complexity of the approach, instead of addressing the route barriers to heat network deployment and waste heat utilisation.
- Implementing ETS exemptions to promote heat offtake would encourage market inefficiencies. Protecting certain emissions from the carbon price is a market distortion, which is not desirable on long-term basis.

- ETS exemptions to promote heat offtake worsens the issue of carbon pricing being applied to some heat sources and not others.
- There is no clear need to create ETS exemptions to promote heat networks, given proposed heat network zoning policy incentives by DESNZ.

There are a range of market barriers that could be at least in part mitigated by the availability of a meaningful financial incentive for heat sources to engage with heat network developers. Equally, industry is conscious that many policy decisions regarding routes to market for heat networks and heat network zoning are yet to be made by the Government.

Industry would therefore take the view that the Government should clarify their positions on heat network policy and the role of ETS in the wider heating sector before further comments can be made.

For example, a core policy objective for the heat network zoning regime is to recycle a greater amount of waste heat within heat networks. However, a known omission from the recent heat network zoning impact assessment was the access costs for the owners of heat sources who will be required to supply a heat network with their waste heat.

It would be helpful to understand which heat network technologies the government intends to make eligible for ETS linkage. Net Zero 2050 requires a technology-neutral approach to ensure all applicable technologies are able to contribute toward that shared goal.

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? (Y/N). Please provide as much detail as possible to support your answer.

Heat networks can include a wide range of technologies and, as such, heat sources and zones (under current proposals) can vary considerably.

Free allowances or the subtraction of a number of allowances from the UK ETS would be suitable to offset the cost of the UK ETS for utilising heat from an EfW.

In light of the significant variations between technologies in terms of their project economics and our commitment to a technology-agnostic approach, Energy UK takes the view that heat network developers should be allowed to choose the ETS incentive mechanism that most closely matches their projected output.

Such a system would allow competition between heat network proposals to be reflected in their ETS calculations and align with current heat network zoning proposals wherein developers will be invited by the Central Authority to submit proposals for heat networks in pre-designated zones in competition with one another based on cost and technology.

The ETS Authority will need to ensure that the new sectors are introduced with care and should err on the side of caution when considering how allowances are added, as introducing new sectors to the ETS will inevitably have an impact on market functioning.

The Authority must consider how the use of free allowances for heat networks interacts with its ongoing Free Allocation Review. Energy UK looks forward to the Authority's response to this consultation in due course.

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 (Y/N). Please provide as much detail as possible to support your answer.

In line with a technology-agnostic approach, policies to incentivise heat offtake should apply to surplus heat or waste heat, as well as heat produced for the purpose of export.

Heat networks are uniquely able to utilise surplus and waste heat as a low-cost energy source. Incentivising these energy sources to connect to heat networks is critically important for ensuring delivery of the low-cost low-carbon networks envisaged by the new market framework.

This will enable a more widespread deployment of heat networks through the utilisation of larger portfolio of technologies and incentivise the owners of heat sources to engage with heat network developers as part of their corporate sustainability strategies.

Equally, this will facilitate more efficient land use as surplus/waste heat sources typically require less construction compared to other types of heat networks.

Heat sources such as industrial waste heat and EFW plants have a significant role to play in the development of heat networks in Heat Network Zones as identified in the impact assessment published with DESNZ's recent consultation on heat network zoning.

Significant growth opportunities can be unlocked by enabling new infrastructure to connect existing waste heat sources to customers which will create employment and social value, lower energy bills and help to meet the UK's net zero objectives.

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.

As per the above response to Q.59, the incentive mechanism in use should be that which best suits the project economics of the project in question.

Multi-dimensional metrics that take into account all of the relevant variables for waste heat are needed in order to apply effective and appropriate incentives.

It would be unwise to consider the incentive purely in terms of offset emissions via heat networks without factoring in the volume of emissions generated as a result of that production of heat (either directly or indirectly).

For this reason, both the emissions offset by exporting heat and the volume of emissions associated with the production of heat should be considered in how the incentive is determined.

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

Energy UK is supportive of incentivising heat offtake via the UK ETS.

While the department is correct to identify the risk of 'perverse consequences', industry would stress that such developments are most likely to occur in the event that the finalised heat network policy frameworks are not designed appropriately.

It should be noted that there is an inherent risk to the viability of heat network policy in the event that policy decisions are made without all of the relevant considerations in mind.

It is important to ensure that policy decisions are made with an aligned timeline to ensure that industry can respond appropriately. For example, it is vital that decisions regarding the introduction of heat network zoning and use of ETS to support heat networks are implemented with aligned timelines to enable and/or guide prudent investment decisions by heat network developers.

Several heat network developers have questioned if ETS is the most appropriate means of funding heat networks, given that there are a number of priorities within ETS policy that DESNZ does not appear to have considered.

I. Competition

In considering government proposals for the integration of ETS within heat networks, industry is obliged to consider its impacts on competition in the market.

For example, how will a heat network that is eligible for ETS be considered by the Central Authority in comparison to a heat network that is ineligible?

This is particularly relevant as a heat network project that is ineligible for ETS could conceivably have a lower carbon impact than a comparable project in the same heat network zone due to technology type or size.

Furthermore, it is important to understand how heat network linkage with ETS frameworks will impact upon investment in heat network zones where as a result of factors including (but not limited to) zone designations made by government and/or available heat sources in a given zone, certain heat network projects may be rendered ineligible for ETS?

In addition to creating a workable definition of 'useable heat' and formulating a robust mechanism for determining the volume of emissions to be excluded from compliance requirements, there must be a careful consideration of how existing heat provision arrangements may be impacted.

It is important that a two-tier system of legacy/existing and new heat networks is not created. DESNZ should ensure that existing waste installations benefit from the reduced UKETS compliance requirement associated with existing heat provision to heat networks.

II. Linkage With EU ETS

As noted in response to Q.1, Energy UK strongly supports the linking of the UK and EU ETSs and reiterates that this is a key priority for members.

Given the potential for changes in the scope of the UK and EU ETS to affect the prospects for linkage, consideration needs to be given to how any changes to the UK ETS as regards heat networks would impact this.