





UK Emissions Trading Scheme Scope Expansion: Maritime

A joint consultation of the UK Government, the Scottish Government, the Welsh Government and the Department of Agriculture, Environment and Rural Affairs for Northern Ireland

Closing date: 23 January 2025

Introduction

The UK Emissions Trading Scheme (ETS) came into operation on 1 January 2021. The scheme is a key part of our approach to addressing climate change, setting a limit on emissions from the sectors covered and ensuring an appropriate price is applied to them. The scheme is jointly run by the UK ETS Authority (or 'the Authority'), and is comprised of the UK Government, Scottish Government, Welsh Government and the Department of Agriculture, Environment and Rural Affairs for Northern Ireland.

In March 2022, the 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 consultation on expanding the UK ETS to domestic maritime. In the July 2023 Response, the Authority confirmed its intention to proceed with its proposal and will expand to include domestic maritime in the scheme from 2026. This follows the UK Government's commitment in the Net Zero Strategy to explore expanding the UK ETS to the two-thirds of uncovered emissions. Commitment to further exploring expansion of the UK ETS was also restated by the Authority in the long-term pathway for the UK Emissions Trading Scheme, published in December 2023¹.

We envisage that the inclusion of maritime within the UK ETS could help to overcome a key barrier to decarbonising the sector, which is that the prices of maritime fuels currently do not reflect their environmental costs. Its inclusion within the scheme could also help to strengthen the incentive to adopt low-carbon fuels, and support deployment of fuel-efficient technologies and the introduction of fuel-efficient operating practices.

The purpose of this consultation is:

- To provide more detail and consult on the implementation of how maritime will be incorporated into the UK ETS from 2026.
- To propose and consult on potential future expansion of the UK ETS to additional maritime emissions.

Respondents need only reply to the questions that interest them or that they have views on. There is no requirement nor expectation to respond to every question in this consultation.

¹ <u>https://www.gov.uk/government/publications/uk-emissions-trading-scheme-long-term-pathway/the-long-term-pathway-for-the-uk-emissions-trading-scheme</u>

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General information

Why we are consulting

The UK ETS Authority is seeking input on proposals for expanding the UK ETS to the maritime sector.

We have previously announced our intention to expand the scope of the UK ETS to the maritime sector from 2026. This consultation seeks views on our proposals to inform implementation details. In particular, it seeks views on:

- The scope of the scheme, including: the definition of a domestic voyage; thresholds for inclusion; the inclusion of methane and nitrous oxide emissions and exemptions from the scheme
- Adjusting the cap for maritime
- Participating in the scheme, including: regulatory regime and operator requirements, monitoring, reporting and verification, point of obligation and guidance
- Impacts of the scheme, including: decarbonisation impacts, potential distributional impacts and carbon leakage risk; equality considerations
- Potential future expansion of the UK ETS to additional maritime emissions, including: future review of the threshold and coverage of international routes.

Consultation details

Issued: 28 November 2024

Respond by: 23 January 2025

Enquiries to:

Emissions Trading, Department for Energy Security and Net Zero 3rd Floor 3-8 Whitehall Place London SW1A 2EG

Email: ukets.consultationresponses@energysecurity.gov.uk

Consultation reference: UK Emissions Trading Scheme Scope Expansion: Maritime

Audiences:

This consultation is expected to be of greatest interest to the shipping industry, non-governmental organisations (NGOs), academics and thinktanks.

We also welcome the views of any individual or organisation that has an interest, directly or indirectly in the expansion of the UK ETS and/or the adjustment to the cap of the scheme.

We would like to hear your views on the proposed approach to expanding the scope of the UK ETS. We would like to know whether you think that the proposed policy changes are feasible in practice and will achieve our objectives.

Territorial extent:

This consultation relates to proposals to develop the UK ETS, which operates across England, Scotland, Wales and Northern Ireland. This is a joint consultation, published by the UK Government, Scottish Government, Welsh Government and the Department of Agriculture, Environment and Rural Affairs for Northern Ireland.

How to respond

Respond online at: https://energygovuk.citizenspace.com/energy-markets/expanding-ets-to-domestic-maritime-sector

or

Email to: ukets.consultationresponses@energysecurity.gov.uk

Write to:

Emissions Trading,
Department for Energy Security and Net Zero 3rd Floor
3-8 Whitehall Place
London
SW1A 2EG

When responding, please state whether you are responding as an individual or representing the views of an organisation.

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

Confidentiality and data protection

Information you provide in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

Consultation responses will be shared across the UK ETS Authority.

If you want the information that you provide to be treated as confidential, please tell us, but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable data protection laws. See our <u>privacy policy</u>.

We will summarise all responses and publish this summary on <u>GOV.UK</u>. The summary will include a list of names or organisations that responded, but not people's personal names, addresses or other contact details.

Quality assurance

This consultation has been carried out in accordance with the government's <u>consultation</u> <u>principles</u>.

If you have any complaints about the way this consultation has been conducted, please email: bru@energysecurity.gov.uk.

Introduction

In the Developing the UK ETS consultation², published in March 2022, we consulted on expanding the existing UK ETS scheme to include emissions from domestic maritime. In the Authority Response to the consultation³, published in July 2023, the Authority confirmed that:

- The UK ETS will be expanded to include emissions from domestic maritime based on ship activity.
- This expansion will be from 2026.
- It is minded to apply the scheme to ships over 5000 gross tonnage (GT).
- It intends to exempt Government non-commercial maritime activity from the scheme.
- The scheme will apply to the entity responsible for a ship's compliance with the International Safety Management (ISM) Code.
- UK Monitoring, Reporting and Verification (MRV) of CO₂ emissions from ships requirements will generally continue per existing processes to ensure continuity where possible for those already experienced in complying with the UK MRV regime.

The Authority also stated that we would set out additional detail and consult again on key aspects of the scheme, including implementation, decarbonisation impacts, distributional impacts, and MRV requirements and processes. As we are expanding the UK ETS to the sector, the broad principles and policy design of the scheme will apply (e.g. a cap that limits total emissions across the whole scheme, frequent auctions of allowances etc). The following chapter goes into further detail on how we intend to apply the UK ETS to the maritime sector.

The chapter is split into two sections:

Section A: Implementing the UK ETS for Maritime

Section B: Potential further expansion of the UK ETS to additional maritime emissions

Within Section A, we are consulting in more detail on the specific implementation of the scheme and providing more detail on the changes we have already announced through the Developing the UK ETS Authority Response.

Within Section B, we are consulting on any potential further expansion to the scheme with regards to maritime.

² https://www.gov.uk/government/consultations/developing-the-uk-emissions-trading-scheme-uk-ets

³ https://www.gov.uk/government/consultations/developing-the-uk-emissions-trading-scheme-uk-ets

Section A: Implementing the UK ETS for maritime

This section outlines:

- The proposed definition of a domestic voyage and in-scope emissions at berth
- The disparity in carbon pricing obligation on routes between the island of Ireland and GB and two proposed options to mitigate this
- That we are minded to apply a threshold of 5000GT from 2026
- Proposals to include methane and nitrous oxide emissions from the maritime sector in the UK ETS
- Proposed exemptions from the scheme
- The proposed approach to adjusting the cap to account for expansion to maritime
- Further details on the MRV requirements to support the expansion of the UK ETS to maritime
- The point of obligation for compliance with the scheme

Scope of the Scheme

Definition of a domestic voyage

In the Authority's response to the previous "Developing the UK Emissions Trading Scheme" consultation, we confirmed that the definition of domestic voyage for the purpose of the UK ETS would include voyages travelling from one UK port to another UK port. The Authority also confirmed coverage would include voyages which start and end at the same port in the UK. Voyages between the UK and Crown Dependencies or British Overseas Territories, as well as voyages between Crown Dependencies and British Overseas Territories, are not included as a domestic voyage.

We expand on this further in this consultation. We also intend that the emissions in scope from those voyages will include emissions while at anchor and while moored, both at sea and at offshore structures.

We deem this to be an appropriate approach because we consider that it is compatible with stakeholder views from the first consultation that 'one port voyages', or those to offshore structure returning to the same port, or another UK port, should be included. It also aligns with the definition of domestic maritime used in the UK's National Atmospheric Emissions Inventory (NAEI).

Inclusion of emissions at berth

We outlined in the Authority's response to the previous consultation that we were minded to also include emissions at berth. In this consultation, we propose to include all emissions at

berth at UK ports, and all emissions from movements within UK ports. This will include emissions at berth in UK ports from ships travelling domestically, internationally, and to or from Crown Dependencies and British Overseas Territories, regardless of the location of the next or previous port of call.

This will cover, and therefore limit, significant emissions that would otherwise not be covered by the UK ETS and incentivise investment in and planning for emissions reductions at port. It also aligns with both the definition of domestic emissions as used in the UK's NAEI, and the coverage of emissions at berth within the EU ETS, which we understand from stakeholders will reduce complexity for operators who may be complying with multiple schemes.

We are keen to understand stakeholder views on both the definition of a domestic voyage, and the proposed inclusion of emissions at berth through this consultation. We also recognise the importance of achieving internationally agreed policy measures to reduce emissions from shipping. We will therefore continue to monitor developments of international schemes, including those from the International Maritime Organization (IMO), and will consider how these interact with our own policy, to avoid any double charging of emissions.

Questions

- 1. Do you agree with the proposed definition of a domestic voyage? (Y/N) Please explain your response, providing evidence where possible.
- 2. Do you agree that the proposed definition will capture all relevant domestic emissions? (Y/N) Please explain your response, providing evidence where possible.
- 3. Do you envisage this definition leading to any loopholes or perverse incentives? (Y/N) Please explain your response, providing evidence where possible.
- 4. Do you agree with the inclusion of emissions at berth in a UK port from ships performing both domestic and international voyages? (Y/N) Please explain your response, providing evidence where possible.

Disparity in carbon pricing obligation through differing emissions coverage on routes between Northern Ireland and Great Britain, and Republic of Ireland and Great Britain

The EU has expanded the EU ETS to include maritime emissions, including coverage of 50% of emissions from voyages **both arriving in or departing from** a port under the jurisdiction of an EU Member State, to or from a port outside of the jurisdiction of an EU member state from 2024.

We understand their proposal may mean that in-scope ships at 5000GT and above travelling between the Republic of Ireland and the United Kingdom would be subject to **50% emissions coverage** under the EU ETS. UK ETS expansion to domestic maritime could create a potential discrepancy in emissions coverage on routes between the Republic of Ireland and Great Britain, and Northern Ireland and Great Britain, as in-scope ships will be subject to **100%**

emissions coverage on routes between Great Britain and Northern Ireland under the UK ETS, compared to 50% emissions coverage for Republic of Ireland and Great Britain routes under the EU ETS (see Figure 1).

This could result in potential re-routing via Republic of Ireland or other gaming behaviour to avoid or reduce exposure to the higher carbon pricing obligation on routes between Great Britain and Northern Ireland. This discrepancy was highlighted through the consultation process and is detailed in the Authority Response to the Developing the UK ETS Consultation (Question 123).

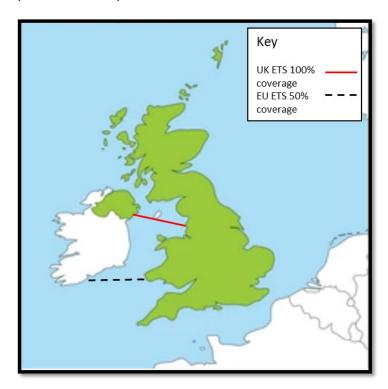


Figure 1- Potential discrepancy on NI-GB routes

- On GB-NI routes, 100% emissions coverage under the UK ETS.
- On GB-ROI routes, 50% emissions coverage under EU ETS.
- This would result in a lower emissions coverage on GB-ROI routes than GB-NI routes.

In the Authority Response to the Developing the UK ETS Consultation, the Authority stated that we intend to reduce the UK ETS obligations to which ships travelling between Northern Ireland and Great Britain are subject. This would mean that an in-scope ship's emissions are only subject to 50% of their carbon pricing obligation under the UK ETS on voyages between Northern Ireland and Great Britain, to deliver equivalent emissions coverage to ships travelling between the Republic of Ireland and Great Britain. For this approach, we expect participants to monitor and report all emissions, but only 50% of emissions will have a surrender obligation. This would result in equivalence of carbon pricing obligation on these routes, which the Authority considers to be of primary importance. This is illustrated in Figure 2 below. We welcome further views on this approach.

Alternatively, the Authority is also interested in stakeholder views on increasing the scope of the UK ETS to also include 50% of emissions from in-scope ships **both arriving in or departing from** the UK to the European Economic Area (EEA). This is a similar approach taken to that of the EU, who have included within the EU ETS 50% of emissions from all international voyages arriving in or departing from an EU port.

Including UK-EEA voyages in scope of the UK ETS would support the Authority's objectives of further exploring expansion of the UK ETS as set out in the in the long-term pathway for the UK Emissions Trading Scheme, published in December 2023⁴. Increasing the coverage beyond domestic maritime emissions will further encourage the sector to decarbonise and help to drive the development and deployment of efficient technologies. This in turn could further reduce harmful emissions and their negative effects and have positive impacts for the environment and human health. It also recognises the stakeholder support for inclusion of international voyages provided through the last consultation. Inclusion of 50% of UK-EEA emissions could also have the benefit of ensuring emissions coverage equivalence on routes between the island of Ireland and Great Britain, by increasing the obligation on routes between the Republic of Ireland and Great Britain. This is illustrated in Figure 3 below.

Under this approach, we would expect participants from all in-scope ships to monitor and report 100% of emissions between the UK and EEA, but only 50% of emissions will have a surrender obligation under the UK ETS. The UK is committed to free and open trade, our international climate change commitments and the needs of industry and consumers. Therefore, we will ensure that any measures taken forward would be in compliance with our international obligations, including World Trade Organisation (WTO) commitments and trade agreements. We are interested in exploring this further through this consultation.

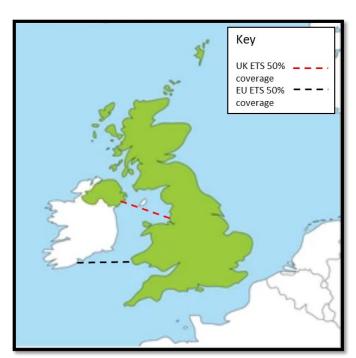


Figure 2: In-scope ships are subject to 50% of their carbon pricing obligation under the UK ETS on routes between the Northern Ireland and Great Britain, ensuring equivalence with routes between Republic of Ireland and Great Britain, which are covered under the EU ETS.

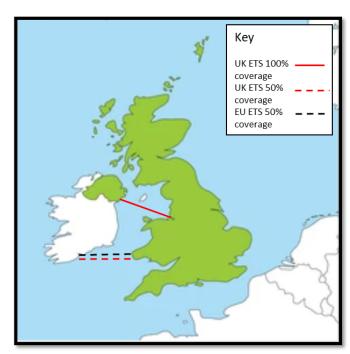


Figure 3: 50% of emissions from in-scope ships both arriving in or departing from the UK to the EEA are included within the UK ETS, ensuring equivalence on routes between Northern Ireland and Great Britain, and Republic of Ireland and Great Britain.

The Authority recognises the importance of achieving internationally agreed policy measures to reduce emissions from shipping. We will therefore continue to monitor developments of international schemes, including those from the International Maritime Organization (IMO) and

⁴ https://www.gov.uk/government/publications/uk-emissions-trading-scheme-long-term-pathway/the-long-term-pathway-for-the-uk-emissions-trading-scheme

other jurisdictions, and will consider how these interact with our own policy, preventing double charging of emissions. In Section B of this Chapter, international emissions beyond that of UK-EEA routes are discussed.

Questions

- 5. Do you agree with our position that routes between Northern Ireland and Great Britain should face equivalent carbon pricing obligations to that between the Republic of Ireland and Great Britain? (Y/N) Please explain your response, providing evidence where possible.
- 6. Do you agree that subjecting in-scope ships on voyages between Northern Ireland and Great Britain to 50% (as opposed to 100%) of their carbon pricing obligation under the UK ETS would be suitable for ensuring carbon pricing obligation equivalence and emissions coverage equivalence between Northern Ireland and Republic of Ireland? (Y/N)
 - a. Should this option be time limited or exist for as long as there remains a disparity in the carbon pricing obligation on these routes?
- 7. Do you believe expanding the scope of the UK ETS to include 50% emissions coverage on UK-EEA routes could a) lead to better decarbonisation outcomes for the sector and b) be a suitable alternative approach to ensuing equivalence in carbon pricing obligations to that outlined in Question 6 above? (Y/N) Please explain your response, providing evidence where possible.
- 8. Are there any other alternative approaches we should consider? Please explain your response, providing evidence where possible.
- 9. Do you consider that there are differing impacts of these two approaches which we should consider when making a final decision? (Y/N) Please explain your response, providing evidence where possible.
- 10. Do you foresee any additional consequences of this policy intervention that we should be aware of? (Y/N) Please explain your response, providing evidence where possible.

Threshold for the Scheme

The Authority is minded to apply the UK ETS to ships at 5000GT and above undertaking an eligible voyage from 2026. This is the threshold used for existing UK MRV regime of CO₂ emissions from ships regulations as well as the threshold for other reporting schemes internationally⁵. Many ships over this threshold are already equipped for collecting and reporting emissions data, which should result in a simpler transition to the scheme for many operators. A threshold of 5000GT and above also has the benefit of avoiding administrative burden for smaller ships and craft, which was a key theme within consultation responses.

⁵ For example, the International Maritime Organization's Data Collection System (DCS), which applies to ships of 5000GT and above.

However, we are proposing to review this threshold by the end of 2028. This is discussed in Section B on the future expansion of the scheme.

We are also aware that there may be some operating ships with very low emissions in scope of the UK ETS for whom the UK ETS requirements may be burdensome. One mechanism to avoid this would be the application of a de minimis threshold. For operating ships with emissions under this de minimis threshold, a simplified process could apply, or the requirements of the UK ETS could not apply at all. We are keen to gather views in this consultation about whether a de minimis threshold is required for operating ships with very low emissions in scope of the UK ETS, and views on the treatment of emissions under this threshold.

Questions

- 11. Should we consider a de minimis threshold for operators with very low emissions to avoid a compliance burden? (Y/N) If so, what should this de minimis threshold be? Please explain your response, providing evidence where possible.
- 12. If you support a de minimis threshold, should a simplified process apply or should the requirements of the UK ETS not apply at all? (Y/N) Please explain your response, providing evidence where possible.

Inclusion of methane and nitrous oxide emissions

We see merit in the inclusion of additional greenhouse gases (GHGs) from maritime within the scheme, specifically methane and nitrous oxide. This will increase the GHG emissions coverage of the scheme and avoid perverse incentives for fuels which may have lower CO₂ emissions, but higher emissions from other gases which have higher global warming potential (GWP). We propose to include emissions from both the combustion and slippage⁶ of these gases.

We propose that an operator's greenhouse gas emissions are calculated on a carbon dioxide equivalent (CO₂e) basis. In accordance with international reporting protocols, we propose that the emissions of each gas are weighted by its GWP and that the GWPs used in this calculation are as follows: a GWP of 1 per tonne of CO₂, a GWP of 28 per tonne of methane and a GWP of 265 per tonne of nitrous oxide⁷. For example, if an operator had 10 tonnes of nitrous oxide emissions, this would add 2650 tonnes to the operators CO₂e emissions (i.e. 10 times 265). The section on Monitoring, Reporting and Verification (MRV) requirements below asks for views on which GHG emissions factors for each fuel and energy source would be most appropriate to use under the scheme to calculate an operator's emissions of CO₂, methane, and nitrous oxide.

⁶ Slipped and fugitive emissions are emissions caused by the amount of fuel that does not reach the combustion chamber of the emission source or that is not consumed by the emission source because they are uncombusted, vented or leaked from the system.

 $^{^7}$ The GWP for each gas is defined as its warming influence in relation to that of CO_2 over a 100-year period and is from table 8.A.1 (without climate-carbon feedback) of Working Group 1 of the IPCC Fifth Assessment Report: Climate Change 2013 (AR5).

Questions

- 13. Do you agree with the inclusion of emissions from the combustion or slippage of methane and nitrous oxide emissions from maritime activity within the scheme? (Y/N) Please explain your response, providing evidence where possible.
- 14. Do you agree with our proposal for how to calculate an operator's greenhouse gas emissions on a carbon dioxide equivalent (CO₂e) basis? (Y/N) Please explain your response, providing evidence where possible.

Exemptions

Government non-commercial maritime activity

In the Authority's response to the Developing the UK ETS consultation, we confirmed that we intend to exempt government non-commercial maritime activity (GNCMA) from the UK ETS, following the approach often taken under the Merchant Shipping Act 1995. These ships are also exempted from the UK MRV regime. However, these ships are still expected to decarbonise their operations in line with the UK's net zero commitments. For example, the Ministry of Defence has recently published a Climate Change and Sustainability Strategic Approach that sets out the ambition, the principles and the methods needed for UK Defence to meet the challenge of climate change, in line with our commitment to reaching net zero by 2050. The following is a non-exhaustive list of GNCMA that we propose to exempt from the UK ETS under this category:

- Military activities
- Customs / Border Force activities
- Police activities
- Coastguard and other Government search & rescue activity
- Emergency/medical ships, such as activities in service of the NHS/ambulances
- Government research activities
- General Lighthouse Authority activity (used for non-commercial purposes)

Question

15. Do you have any views on the exemption of Government non-commercial maritime activity, or the activity covered by this term? (Y/N) Please explain your response, providing evidence where possible.

Further possible exemptions

The Authority received useful feedback to a previous consultation question that sought views on the possible distributional impacts of expanding UK ETS coverage to domestic maritime. A diverse set of views were put forward, often opposing in nature, and ranging from possible effects on business competitiveness to impacts on ships undertaking certain critical activities.

The Authority committed to monitor the impacts, the consultation is an opportunity for these to be aired including responses and evidence from potentially affected operators on NI-GB and GB-NI routes.

Scottish Island Ferry Services

In general, the Authority is not minded to introduce exemptions to the scheme, given the need to protect the integrity of the UK ETS. The Authority considers that to support our ambitious decarbonisation objectives, there must be a very high bar set for the introduction of any exemptions into the scheme. However, we recognise that there are a small number of situations where it is appropriate for the Authority to consider if an exemption may be proportionate. An example is the case for ferry services in Scotland that serve island and isolated peninsular communities. The Scottish Government has specific duties regarding island communities under the Islands (Scotland) Act 2018.

Though island populations exist across the UK, there are a particularly large number of small communities in Scotland that rely on these services, with around 93 inhabited offshore islands in Scotland, the vast majority of which are not connected to mainland Great Britain by road. These islands often have small populations and ferry routes provide a crucial service for these smaller communities. This is recognised by all four governments represented in the ETS, and they are supportive of work that aims to improve outcomes for these communities. The UK and Scotlish Government have particular responsibilities to improve outcomes for these island communities.

The Scottish Government's objectives are set out in its National Islands Plan 2019 and include increasing population levels and improving transport services, and ensuring they are affordable and accessible to island communities. All Scottish Ministers have a statutory responsibility and duty to implement and deliver on the strategic objectives set out in this Plan. Regular, affordable and reliable transport connections are of great importance to these island communities in Scotland and they are a key factor in the ability of individual residents to, for example, access essential services such as education and healthcare. Regular transport also supports the viability of these island communities themselves. This is crucial given the threat of depopulation in some of these communities.

The Islands (Scotland) Act 2018 also introduced measures to support and help meet the unique needs of Scotland's islands now and in the future. The Scottish Government has obligations under this Act to have regard to island communities in carrying out its functions, conduct an island communities impact assessment, and consult island communities when making policy changes amongst other specific duties.

The UK Government has similarly made commitments to island communities, and has also taken steps to support island communities, including through establishing the UK wide Islands Forum to ensure island communities are reflected in central policy development.

The Authority is supportive of this work and recognises these considerations and wishes to better understand the possible impact of the UK ETS on these ferry services. As part of this consultation, we encourage interested stakeholders to share their views and provide evidence around the potential impact on island communities. We will assess this evidence in depth, and undertake impact assessments, ahead of making a final decision giving due consideration to all relevant statutory requirements including those under the Islands (Scotland) Act 2018.

Given this context, the Authority is minded to exempt ferry services serving Scottish islands from the UK ETS, reflecting the importance of these services to the governments in the ETS

Authority and the particular importance of the Islands (Scotland) Act 2018 in Scottish Government policy making. We are also interested in views through this consultation on whether an exemption would also apply to isolated peninsular communities. Any eventual exemption will be subject to review in future, as viable, lower-emissions alternatives for these ferry services become commercially available. The proposed 2028 review on the threshold would be the first opportunity to review any exemption.

Emissions from ferries are subject to our ambitious net zero targets. In the example above, the Scottish Government will be bringing forward a plan for decarbonisation of these ships, which will set out long terms goals to reduce and ideally eliminate carbon emission from ferries by 2045.

Questions

- 16. Do you think an exemption is necessary for specific ferry services serving island communities in Scotland? (Y/N) Please explain your response, providing evidence where possible.
- 17. Do you think an exemption is necessary for specific ferry services serving peninsular communities in Scotland? (Y/N) If so, what would be a suitable definition of remote peninsular communities? Please explain your response, providing evidence where possible.
- 18. If these services are exempted, do you think they should be subject to UK ETS MRV regulations 8? (Y/N) Please explain your response, providing evidence where possible.
- 19. Do you have any further comments to make on an exemption for ferry services serving island and/or peninsula communities in Scotland?

Other sectors

The largest response to questions on exemptions in the 2022 Developing the UK ETS consultation was that there should be no further exemptions beyond GNCMA. The minority of responses that did call for the consideration of exemptions referenced ferries to island communities, as well as other activities, such as fishing and dredging. The Authority is interested in exploring evidence for any further exemptions, whilst maintaining the widest possible coverage. We would also be keen to understand whether any such subsectors should be subject to UK ETS MRV requirements.

Questions

20.Do you consider that there are any further subsectors which might be unduly impacted by the policy and require exemption? (Y/N) Please explain your answer, including on whether UK ETS MRV regulations should apply, and provide evidence where possible.

⁸ For more details on UK ETS MRV requirements for maritime, please see section below *Monitoring, Reporting* and Verification of CO2 emissions from ships (MRV) regime and the UK ETS MRV requirements.

Adjusting the Cap for Maritime

This section will outline the proposals to adjust the UK ETS cap to account for coverage of emissions from maritime from 2026. It will detail the proposed approach, including to maintain the consistency of the UK ETS cap with the delivery of climate targets, as well as resultant figures for UK Allowances (UKAs) to be added to the cap according to this approach.

Background: The UK ETS Net Zero Cap

As outlined in the UK ETS Authority Response of July 2023, the Authority has decided to significantly increase the ambition of the scheme by aligning the cap for Phase I (2021-2030) to a net zero-consistent trajectory. This will equate to a reduction of total allowances of more than 30%, from 1365 million to 936 million allowances. The resetting of the cap provides a clear signal to decarbonise at the pace and scale required to achieve net zero.

The Authority Response also outlined that the net zero-consistent cap would be amended to account for the expansion of the scheme to cover new sectors. We signalled that we would adjust the cap to account for the greater coverage, while retaining the requirement for emissions reductions consistent with delivering net zero, Carbon Budgets and the Nationally Determined Contribution (NDC) in 2030. The figure below illustrates the inclusion of the requisite emissions trajectories in the traded sector.

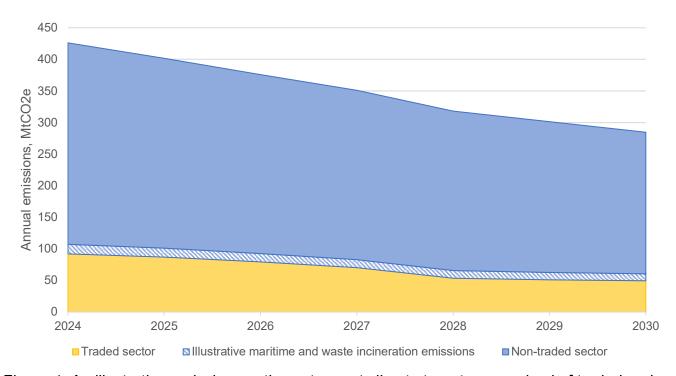


Figure 4: An illustrative emissions pathway to meet climate targets, comprised of traded and non-traded sector emissions. Figures are not representative of true or necessary emissions and are solely for explanatory purposes. The figure shows that the overall pathway remains unchanged. The cap adjustment accounts for the movement of emissions from the new sectors from the non-traded to traded sector upon inclusion in the UK ETS.

General Policy Approach to Cap Adjustment for New Sectors

We propose that the cap adjustment approach outlined should apply to the remainder of Phase I (2021-2030) only. The Authority has committed in "The long-term pathway for the UK

Emissions Trading Scheme" to maintaining a net zero-consistent cap to 2050, 9 and it will outline in due course detail on its intended approach to setting the cap in the next phase.

We propose that cap adjustments throughout Phase I of the UK ETS will account for all substantive changes to the composition of the traded sector.

Key priorities for adjustments to the UK ETS cap during Phase I are:

- 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.

To produce the proposals for maritime, we have considered the UK Government's most recent decarbonisation pathways, which are aligned to the Carbon Budget Delivery Plan (CBDP). ¹⁰ As these trajectories provide the best assessment of emissions reductions required in each sector to deliver climate targets (including net zero by 2050, our Carbon Budgets and the NDC), this approach will ensure that the cap remains aligned with the delivery of these targets.

These proposals are for an approach to cap adjustment, with the resultant figures based on the policy design as proposed in this consultation, and on the evidence held and the analysis conducted to date. The approach will be confirmed in the Authority Response, with the exact cap adjustment figures subject to adjustments to account for the emissions coverage of the final policy design, the views of consultees, advice from the Climate Change Committee (CCC), and the results of further analysis to ensure consistency with the climate targets of the UK and Devolved Governments.

The adjustment will add allowances to the net zero-consistent UK ETS cap. There will be no ringfencing of allowances for participants in newly covered sectors. It is the intended design of the UK ETS as a cap-and-trade scheme that the cap sets a limit on total emissions from the covered sectors, and that trading allows the market to determine the sectors in which emissions occur or are abated. We recognise that different industries will decarbonise to different trajectories.

Cap Adjustment – Maritime

In the Authority Response of July 2023, we advised that our estimates for in-scope emissions from domestic maritime in the first year of inclusion in the UK ETS (2026) would be equivalent to around two million UK allowances, decreasing each year for the remainder of the phase.

We intend to adjust the UK ETS cap informed by emissions in scope per the most up-to-date decarbonisation pathway for the domestic maritime sector consistent with the delivery of climate targets. This is currently the CBDP trajectory for the sector. If an updated maritime

⁹ For more information, see https://www.gov.uk/government/publications/uk-emissions-trading-scheme-long-term-pathway/the-long-term-pathway-for-the-uk-emissions-trading-scheme

¹⁰ The Carbon Budget Delivery Plan is the UK Government's plan that details the proposals and policies required to reduce emissions and meet climate commitments, including Carbon Budgets. For more information, see Carbon Budget Delivery Plan, GOV.UK [https://www.gov.uk/government/publications/carbon-budget-delivery-plan]

decarbonisation strategy were to be produced ahead of the Authority Response, we would seek to adjust instead per its more recent emissions pathway.

The table below accounts for the proposed general approach to cap adjustment and our understanding of emissions coverage based on the scope as proposed in this consultation. It accounts for coverage of emissions of carbon dioxide, nitrous oxide, and methane, both at sea (when conducting UK domestic voyages) and at berth (whether travelling domestically or internationally), from ships of 5000GT and above. It does not account for emissions from government non-commercial maritime activity¹¹, the proposed exemption for ferry services to Scottish islands¹², any reduced surrender requirement for Great Britain-Northern Ireland voyages, nor any coverage of UK-EEA voyages. The figures are based on the trajectory from the CBDP, which remains the most recently published sectoral decarbonisation pathway, and which assumes limited abatement in the 2020s, with significant emissions savings beginning in the early 2030s.

	2026	2027	2028	2029	2030	Total
Indicative cap adjustment (millions of UKAs)	2.4	2.4	2.4	2.4	2.4	12

Table 1: Indicative cap adjustment pathway based on the proposed approach and the CBDP trajectory for sectoral emissions.¹⁴

If an updated maritime decarbonisation strategy is published ahead of the Authority Response, its analytical annexe will include updated indicative cap adjustment figures to supersede those in the table above. In this scenario, the Authority would intend to notify stakeholders upon publication and seek their views on these updated figures.¹⁵

The adjustment figures will be confirmed in the Authority Response, subject to consideration of any updated maritime decarbonisation pathway, adjustments to account for the emissions coverage of the final policy design, as well as our consideration of the abovementioned analysis, advice from the CCC, and the views of consultees.

Questions:

- 21. Do you agree that the proposed approach, of adding allowances equivalent to emissions in scope per emissions trajectories aligned to the CBDP, is the most appropriate approach to adjusting the cap and to ensure the emissions reductions required to deliver climate targets? (Y/N). Please explain your response, including by proposing an alternative approach if appropriate.
- 22. Do you agree with the proposed approach to adjusting the cap to account for the inclusion in the scheme of emissions from the maritime sector? (Y/N).

¹¹ Emissions from non-military ships of 5000GT and above conducting government non-commercial maritime activity are understood to be so small as not to alter the rounded adjustment figures. Emissions from military ships are not included here as these are accounted for separately to other maritime emissions.

¹² We have not deducted emissions from ferry services to Scottish islands, but an illustrative range of emissions associated with these ships is in the analytical annex accompanying this document. We will refine this ahead of the Authority Response and deduct emissions from cap adjustment pathway accordingly.

¹³ The final cap adjustment figures will account by the same approach for whichever is adopted of the two options presented in the "Disparity in carbon pricing obligation through differing emissions coverage on routes between Northern Ireland and Great Britain, and Republic of Ireland and Great Britain" section of the consultation.

¹⁴ See the "Details of cap adjustment" section of the analytical annex to this consultation.

¹⁵ The Authority aims to notify stakeholders upon publication if in time to inform consultation responses, or else to conduct additional stakeholder engagement to ensure that views on these figures inform policy development.

Please explain your response with reference to any alternative approaches or sources of evidence, or consideration of how to account for emissions from GB-NI and/or UK-EEA voyages.

- 23. Do you have views on whether allowances from cap adjustments in Phase I should all flow directly to auctions, or whether a proportion should flow to reserve pots? Please explain your response, providing evidence where possible.
- 24. 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 response, providing evidence where possible.

Participating in the scheme

Regulatory regime and operator requirements

In general, we anticipate that the regulatory provisions which exist for sectors covered by the UK ETS currently will also apply when expanding to maritime emissions. The scheme year will run from 1st January to 31st December and the existing reporting and surrender deadlines of 31st March and 30th April respectively will be applicable for the sector. Maritime operators will also need to apply for approval of a greenhouse gas emissions monitoring plan ahead of participation in the scheme. They will then need to comply with the conditions of this plan. We envisage that the content of the emissions monitoring report will be in line with requirements for these plans elsewhere in the scheme. Maritime operators will also need to appoint an independent verifier to verify their annual emissions report. The provider must be appropriately accredited by the UK Accreditation Service (UKAS).

We propose that the means of monitoring and enforcing compliance that apply to aviation operators under the UK ETS, including those related to monitoring, reporting and verifying emissions, should also apply to the maritime sector. These include civil penalties which are at the discretion of the regulator in relation to failure to report emissions. For failing to meet the surrender deadline, or if the surrendered amount of allowances is insufficient to cover emissions, operators will face a mandatory penalty of £100/tonne of CO₂ (multiplied by the inflation factor) as well as needing to surrender the equivalent allowances to cover reported emissions.

We also propose that, like the approach taken for aviation operators, maritime operators will be assigned to a regulator based on the location of its place of residence or registered address. For those operators registered in one of the four nations of the UK, regulatory responsibility will fall to the regulator for that jurisdiction¹⁶. For operators which do not have a registered office or place of residence in the UK, regulatory responsibility will fall to the Environment Agency.

Questions

25. Do you agree with the proposed regulatory provisions, such as the scheme year, compliance dates, content of the emissions monitoring plan and penalties

¹⁶ For England, this is the Environment Agency. For Northern Ireland, this is the Northern Ireland Environment Agency. For Scotland, this is the Scottish Environment Protection Agency. For Wales, this is Natural Resources Wales

regime, operator requirements, or applicable regulator? (Y/N) Please explain your response, providing evidence where possible.

Monitoring, Reporting and Verification of CO2 emissions from ships (MRV) regime and the UK ETS MRV requirements

The UK MRV¹⁷ regime, which is separate to the UK ETS, applies to ships undertaking certain activities and operating on certain routes if they are over 5000GT. Under the UK MRV regime there are requirements to monitor, report and verify emissions data from ships calling at UK ports. The UK MRV regime requires operators to have in place an assessed monitoring plan for each ship before collecting data. It then requires that an annual emissions report is prepared for each ship and then verified by an accredited verifier. The UK MRV regime requires the following data to be monitored: amount and emission factor for each type of fuel consumed, total distance travelled, total time spent at sea, total transport work, average energy efficiency. In addition, total aggregated CO₂ emissions should be collected on all voyages between ports in the UK, from voyages which either departed from or arrived at ports in the UK (except those going to or from a port in the EEA) and which occurred within ports in the UK at berth. Operators need to have collected and verified the data from 2022 onwards, but there is currently no reporting expectation until further guidance is issued.

While we intend to use the UK MRV regime as the basis for the MRV requirement for the UK ETS, in providing for the UK ETS MRV requirements, we intend to deviate in five general areas from the existing UK MRV regime. We also intend that the UK ETS MRV requirements will match the final proposed scope of the scheme, some of which is still subject to the outcome of this consultation.

The first of these is that the scope of the UK ETS MRV requirements would be wider than the UK MRV regime to include relevant voyages and ships in scope of the UK ETS, which are not included in the UK MRV regime as currently operated. We therefore plan to include emissions at berth from voyages starting or ending in a UK port from all international destinations within the UK ETS MRV requirements as these emissions are proposed to be in scope of the UK ETS MRV. We also intend to clarify that the UK ETS MRV requirements apply to ships at 5000GT and above.

We would also need to include ships and ship movements which do not serve the purpose of transporting cargo or passengers for commercial purposes. For example those providing support or services to offshore structures within the EEZ. These are currently exempt from the UK MRV regime, but given the proposed definition of a domestic voyage, outlined in the *Definition of a Domestic Voyage* section above, they will need to be included in the UK ETS MRV requirements.

¹⁷ Established by EU Regulation (Regulation (EU) 2015/757), retained in domestic law under the EU (Withdrawal) Act 2018, subject to amendments needed to make it operable in a UK-only context. For further details on the relevant legislation and current operation of the UK MRV see guidance note MIN 669 (M+F) Amendment 1 – Reporting emissions data into the UK MRV regime – https://www.gov.uk/government/publications/min-669-mf-amendment-1-reporting-emissions-data-into-the-uk-mrv-regime.

¹⁸ Voyages between the UK and non-EEA countries, including their emissions at berth, are already captured within the UK MRV scheme.

Second, we propose to include methane and nitrous oxide emissions from maritime activity within the UK ETS MRV requirements, both of which are currently not within scope of the UK MRV regime.

Third, we intend for the UK ETS MRV requirements to align with the planned point of obligation for the UK ETS¹⁹. We propose that the obligated entity should be the registered owner, except where responsibility has been delegated to the entity which has assumed responsibility for the operation of the ship and the duties imposed by the International Safety Management (ISM) Code.

Fourth, we will need to ensure that the regulatory regime of the UK ETS MRV requirements matches the UK ETS. Currently under the UK MRV regime, monitoring plans for emissions are not submitted to the regulator but to accredited verifiers, with the regulator having no direct sight, or approval of the monitoring plans. Given the potential cost implications of compliance with the UK ETS, we are minded to require emissions monitoring plans to be submitted to the regulator for approval, rather than being assessed by the verifier. Additionally, under the UK MRV regime currently, a Document of Compliance (DoC) is issued by the verifier to indicate compliance with the scheme. We are minded to remove this requirement from the UK ETS MRV requirements, subject to compliance with international law. We also intend that a monitoring plan and annual emissions report is required per operator, as opposed to per ship, to streamline requirements for the industry.

Finally, there is provision in the UK MRV regime for the use of biofuels, which sets the emissions of biofuels as zero. We are keen to understand how best to account for the use of biofuels or other sustainable fuels used in the maritime sector within the UK ETS, and also how we could consider lifecycle emissions from all maritime fuels within the UK ETS. On the latter, we know that there is considerable work being undertaken across the maritime industry to consider lifecycle emissions, and therefore wish to understand from consultees the best emission factors²⁰ for each fuel and energy source to use in the UK ETS MRV methodology, other than the UK Government greenhouse gas reporting conversion factors, and if these emission factors are fit for purpose for calculating lifecycle CO₂e emissions. Lifecycle emissions are also known as Well-to-Wake emissions. They are defined as the sum of:

- the GHG emissions that are generated by operating ships, which are also known as Tank-to-Wake emissions; and
- the GHG emissions from the production and distribution of the fuels and other energy sources (e.g. electricity) that are used by ships, which are also known as Well-to-Tank emissions.

DfT is minded to also make the above changes to the UK MRV regime itself. This is so there are not two similar but marginally different sets of MRV requirements which maritime operators need to comply with, to avoid burden on operators. We are keen to seek views on this through the consultation.

Questions

26. Do you agree that we should use the UK MRV regime as the basis for the UK ETS, with deviations for the purpose of the UK ETS MRV requirements as

¹⁹ Under current guidance, MIN 669 (M+F) Amendment 1 - Reporting emissions data into the UK MRV regime, ship operators are required to monitor emissions with a view to aggregating data into an annual emissions report. ²⁰ Emissions factors represent the emissions per unit of fuel or energy that is used.

outlined? (Y/N) Please explain your response, providing evidence where possible.

- 27. Do you agree that the approval of monitoring plans for maritime should be in line with existing UK ETS processes? (Y/N) Please explain your response, providing evidence where possible.
- 28. Do you agree that we should remove the requirement for a Document of Compliance from the UK ETS MRV requirements? (Y/N) Please explain your response, providing evidence where possible.
- 29. How best should we account for biofuels and other sustainable fuels used in the maritime sector in the scheme? How best can we consider lifecycle emissions for fuels used in the maritime sector in the scheme? Please explain your response, providing evidence where possible.
- 30. Which greenhouse gas emission factors for each maritime fuel and energy source would be most appropriate to use under the scheme? Are these emission factors fit for purpose for calculating lifecycle CO₂e emissions? Please explain your response, providing evidence where possible.
- 31.Do you agree that the changes outlined above should also be made to the existing UK MRV regime? (Y/N) Please explain your response, providing evidence where possible.

Point of Obligation

Further aspects of the policy on which we would value stakeholder views are on the assigning of responsibility for compliance, and on the potential for cost recovery in view of the polluter pays principle, in cases where the obligated entity is not the commercial operator.

Approach to Defining the Obligated Entity

The obligated entity is responsible for complying with the obligations of the UK ETS, including the application for the monitoring plan, the monitoring and reporting of emissions, and the surrender of the UK Allowances (UKAs).

In the Authority Response of July 2023, we outlined an intent to apply the UK ETS to the owner of the ship, or to whichever other entity has assumed responsibility for the operation of the ship from the owner and the duties imposed by the ISM Code, such as a technical manager or bareboat charterer.

We recognise that it may be preferable to deviate from the existing definition of the obligated entity for the UK MRV regime, to enable the UK ETS obligations to be addressed to whichever of the above entities is more apt to take the necessary measures.²¹ We therefore propose that the UK ETS should be applied to the registered owner, except where this responsibility is

²¹ The obligations for the UK MRV regime are currently applied to the shipowner or whichever other organisation or person has assumed responsibility for the operation of the ship from the shipowner. We intend for this to align with the proposed definition for the UK ETS above, by requiring that documentation be presented to the relevant regulator in the case of delegation of the UK ETS obligations. This alignment is explained in more detail in the "Monitoring, Reporting and Verification of CO22 emissions from ships (MRV) regime and the UK ETS MRV requirements" section.

delegated by contractual agreement to the entity as above which has assumed responsibility for the operation of the ship and the duties imposed by the ISM Code.

We further propose that, where responsibility for compliance has been contractually delegated as above, notification should be provided to the relevant regulator which clearly outlines that such an entity has been duly mandated by the registered owner to comply with the obligations of the UK ETS. Where a satisfactory notification is not received, we propose to default to a position of applying the obligations to the registered owner.

We understand that this approach will in many cases apply the scheme to the entity usually responsible for decisions affecting the greenhouse gas emissions of a ship (e.g., choice of cargo, route, and speed). We also believe this approach to be compatible with views expressed in response to the "Developing the UK ETS" consultation on mitigating administrative burden. As explained in the section above, we propose to align the definition of the obligated entity for the UK MRV regime and for the UK ETS and, in many cases, the entity with the existing responsibility for the obligations of the EU MRV/EU ETS, and/or the IMO's Fuel Oil Consumption Data Collection System (DCS) may also be responsible for the obligations of the UK ETS.

We would also be interested in stakeholder views on alternative approaches. This could include applying the obligations of the UK ETS to the entity which has assumed responsibility for the operation of the ship and the duties imposed by the ISM Code only, or on this entity unless the shipowner declares to the relevant regulator its retention of UK ETS responsibility.

Cost Recovery

In the Authority Response, we also noted the feedback that, depending on contractual arrangements, the obligated entity may not in all cases be responsible for decisions affecting the greenhouse gas emissions of a ship. We stated that we would explore, in view of the polluter pays principle, the potential for the obligated entity to recover the costs of compliance from the operator responsible for such decisions.

It is our understanding that contracting parties will be able to agree the entitlement of the obligated entity to recover costs, as well as the practicalities of recovering those costs, through the inclusion in contractual agreements of clauses on responsibilities for emissions trading. We do not therefore intend to mandate the recovery of costs. However, we remain keen to understand in the context of the polluter pays principle the extent to which relevant contractual agreements may be revised to account for the recovery of costs.

Based on this understanding of cost recovery, we believe that the proposed approach to defining the obligated entity should also facilitate greater information sharing between owners (and/or technical managers and bareboat charterers), and commercial operators. We believe it should incentivise those from whom costs will be recovered to operate more efficiently, and to seek to operate more efficient ships, which in turn should also incentivise owners to supply more efficient ships.

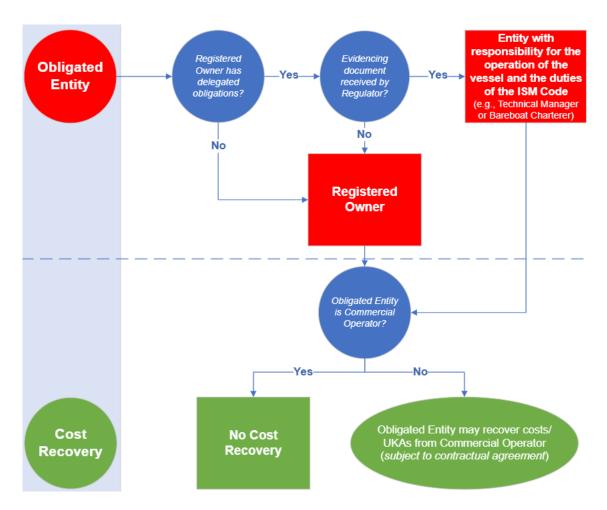


Figure 5: A diagram to illustrate the proposed approach to defining the obligated entity, and our understanding of the potential for cost recovery by that obligated entity.

Questions

- 32. Do you agree with the proposed approach to defining the obligated entity? (Y/N) Please explain your response, including your views on the requirements for the delegation of responsibility, and on the proposed default position where those requirements are not met. If you do not agree, please outline your preferred alternative approach.
- 33. Do you agree with our understanding of the ability for the obligated entity to seek entitlement to cost recovery? (Y/N) Please explain your response, including the extent to which you would expect revision to contractual arrangements.

Guidance

We recognise that, as maritime transport will be a newly covered sector, participants may require support to implement the measures discussed in this consultation.

We intend to provide guidance to address sector-specific requirements and support participants to meet their UK ETS obligations. For example, guidance may be helpful to support participants to comply with the MRV obligations, and to understand the notification requirements where responsibility for compliance is to be delegated as outlined above.

We would aim to provide this guidance ahead of implementation from 2026.

Questions

34.On which aspects of the policy proposals should we produce guidance, and to what timescale? Please explain your response, providing evidence where possible.

Impacts of the scheme

Decarbonisation impacts

The environmental principles, as set out in the Environment Act 2021, are embedded within the policy logic of UK Emissions Trading Scheme (ETS). The UK ETS is our principal mechanism for pricing the 'carbon externality' that greenhouse gas emissions represent, in line with the polluter pays principle. Expanding the scheme to new sectors and technologies will increase the coverage of the scheme and capture more emissions, and should lead to positive decarbonisation outcomes for the sector which is explored further in this section.

We anticipate that the expansion of the UK ETS will help to address the issue that the cost of maritime fuels does not currently reflect the environmental cost of emissions from these fuels. The application of a carbon price via the UK ETS will also help to strengthen the incentives to use zero or near-zero GHG emission fuels and technologies, which are typically more expensive than their conventional counterparts. This is supported by a recent report for the Maritime and Coastguard Authority which notes the important contribution carbon pricing could make in bridging the gap between conventional technologies and zero-emission alternatives (Marine Capital Ltd, UMAS & Lloyd's Register, 2022²²). Baresic, et al (2022)²³ also maintain that there is an "urgent need for policy to close the competitiveness gap" between fuel types and recommend the use of economic instruments and market-based measures (such as emissions trading) to do so. In the very short-term, we also expect that the UK ETS will help to incentivise operational efficiencies during voyages, such as slow-steaming. The signal sent by the UK ETS cap will also allow operators to plan on a longer time horizon, and will therefore help to incentivise the use of currently emerging technologies such as battery-powered ships or hydrogen and hydrogen-derived engines. The analytical annex to this consultation provides further details on the decarbonisation impacts of expanding the UK ETS to cover maritime.

Our minded to position of including emissions at berth in a UK port for all ships at 5000GT and above, regardless of whether they are making a domestic or international voyage will also further support decarbonisation in the sector. Doing so will help to encourage the uptake of

²² Marine Capital, Lloyd's Register, UMAS. (2022) UK Domestic Shipping Mobilising Investment in Net Zero. A study co-sponsored by the Maritime and Coastguard Authority, November 2022, London – Available at https://maritime.lr.org/l/941163/2022-11-

^{30/5}yv5t/941163/1669801621zvSdKYcO/UK Domestic Shipping Mobilising Investment in Net Zero.pdf

23 Baresic, D., Rojon, I., Shaw, A., Rehmatulla, N. (2022) Closing the Gap: An Overview of the Policy Options to Close the Competitiveness Gap and Enable an Equitable Zero-Emission Fuel Transition in Shipping. Prepared by UMAS, January 2022, London - Available at https://globalmaritimeforum.org/report/closing-the-gap/

shore power²⁴ as opposed to running engines whilst docked in port. Utilisation of shore power can lead to greenhouse gas emissions reductions, for example the government funded Portsmouth International Port SEA CHANGE project²⁵ (funded under the DfT's £80m Zero Emission Vessels & Infrastructure (ZEVI) competition) estimates that the shore power system will save over 20,000 tonnes of CO₂e each year.

Evidence also suggests that use of shore power can lead to significant reductions in air pollutant emissions from ships whilst at berth²⁶, given that air pollutants are released as well as greenhouse gas emissions.

However, we are aware that the UK ETS will not operate in isolation. As well as a carbon price, there are other policies to overcome various other barriers to decarbonisation in the sector. This will include measures to drive the uptake of future fuels and energy sources, increased energy efficiency and promoting innovation, research and development, and the key role of port-side infrastructure in enabling the decarbonisation of ships. On the latter, the UK Shipping Office for Reducing Emissions (UK SHORE) have £206million to boost scientific and technological advancement for maritime.

The Authority is also aware that many of the technologies which will support the sector to decarbonise are at a nascent state. However, there have been examples of zero or near zero emission propulsion systems in use or which are being trialled currently, some of which have been supported by the UK SHORE programme. For example, UK SHORE supported projects include hydrogen-electric hybrid propulsion systems²⁷, the development of ammonia/hydrogen combustion engines for ships²⁸, hydrogen combustion engines²⁹, wind propulsion technology³⁰ and networks of marine charging infrastructure³¹ amongst others. We are keen to understand from consultees how the UK ETS can further support the development of such technologies and whether the timelines we have outlined for expansion of the UK ETS to the maritime sector will support this, particularly in light of the relatively nascent level of technology development in some of the technologies. These technologies are also crucial, in that they are often 'zero or near-zero', sometimes called 'low-carbon', fuel powered ships, which are required for larger ships or those with longer operational cycles.

Questions

35. Does the section above capture all relevant short and long term decarbonisation impacts of the UK ETS? (Y/N) Please explain your response, providing evidence where possible.

²⁹ Carnot (2023), Carnot wins £2.3m grant to deploy Hydrogen Auxiliary Power unit for Marine. https://carnotengines.com/hydrogen-auxiliary-engine/

²⁴ Shore power is the provision of shoreside electrical power to a ship at berth while its main and auxiliary engines are shut down. This provides energy which is required when the ship is at port such as lighting, galleys and airconditioning.

²⁵ https://portsmouth-port.co.uk/about-us/sustainability/sea-change/

²⁶ For example, see https://www.epa.gov/ports-initiative/shore-power-technology-assessment-us-ports

²⁷ Centre for Future Clean Mobility (2023), £5.5M Transship II Project To See Major UK Research Vessel Powered By Hydrogen. https://futurecleanmobility.com/5-5m-transship-ii-project-to-see-major-uk-research-vessel-powered-by-hydrogen/

²⁸ UKRI (2023), Clean maritime: unlocking green fuel solutions. https://www.ukri.org/news-and-events/responding-to-climate-change/developing-new-behaviours-and-solutions/clean-maritime-unlocking-green-fuel-solutions/

³⁰ Offshore Energy (2023), Smart Green Shipping, NTS to collaborate on new wing sail designs. https://www.offshore-energy.biz/smart-green-shipping-nts-to-collaborate-on-new-wing-sail-designs/

³¹ University of Plymouth (2023). £3.2million project aims to enable south coast boat owners to transition to clean maritime. https://www.plymouth.ac.uk/news/project-aims-to-enable-south-coast-boat-owners-to-transition-to-clean-maritime

- 36. How else could the UK ETS support decarbonisation in the sector? Please explain your response, providing evidence where possible.
- 37. Do you consider that the application of the UK ETS will have any further environmental impacts, positive or negative? (Y/N) If negative, are there any mitigations that could be taken? Please explain your response, providing evidence where possible.

Potential distributional impacts and carbon leakage risk

The maritime sector in the UK provides a myriad of services and infrastructure across the UK. In 2019, it directly contributed 227,100 jobs and around £18.7 billion to UK GVA³². It is also a diverse sector with a range of ship types and sizes performing these functions. Therefore, the impacts of the policy will affect different services, sectors or parts of society differently.

We are committed to ensuring that this policy does not unduly impact certain sections of society or sub-sectors disproportionately. In the last consultation, many respondents outlined that judging impacts was challenging as the scope of the policy and application of the carbon price (ship activity, fuel supplied, or hybrid) was still to be decided. In providing more details on the scope and application of the UK ETS through this consultation, we are keen to further test stakeholder views on the specific potential impacts of the policy.

We have also considered potential carbon leakage risks and deem this to be relatively low, given the similarity of our proposals to those taken forward by the EU as many EU countries are our nearest neighbours.

For some short voyages, modal shift to other transport types – particularly to sectors which do not face a direct carbon price – was raised in the previous consultation as a potential risk. In 2022, the Department for Transport and the Department for Business, Energy and Industrial Strategy commissioned a research study conducted by Frontier Economics to gain a better understanding of the potential risks of carbon leakage, internal carbon displacement, and competitive disadvantage resulting from the expansion of the UK ETS to include domestic maritime, with a particular focus on routes between Great Britain and Northern Ireland. The report found that, for the three routes³³ between Great Britain and Northern Ireland that were focused on, the expansion of the UK ETS to domestic maritime is likely to provide a strong incentive to accelerate decarbonisation. It also found that the risk of carbon leakage, internal carbon displacement, and competitive disadvantage, resulting from the expansion of the UK ETS to domestic maritime, were all low. Importantly, the risk was low if the EU ETS domestic maritime proposals were in place. If the EU proposals were not in place, then the risk of carbon leakage, internal carbon displacement, and competitive disadvantage would all be higher.

We would welcome evidence from consultees on the level of risk of carbon leakage and modal shift to other transport types from applying the UK ETS to maritime.

Questions

38. Do you consider that application of the UK ETS will lead to any adverse impacts for any particular communities or regions, or sub-sectors of the maritime

³² Maritime UK (2022), State of the Maritime Nation 2022, https://www.maritimelondon.com/wp-content/uploads/2022/06/CEBR-report-2022pdf.pdf

³³ The three case study routes were Belfast-Liverpool, Heysham-Warrenpoint and Southampton-Belfast.

- economy. (Y/N) Please explain your response, providing evidence where possible.
- 39. Do you consider that application of the UK ETS will lead to any carbon leakage or modal shift to other transport types? (Y/N) Please explain your response, providing evidence where possible.

Equality Considerations

The public sector equality duty (PSED) (s.149 of the Equality Act 2010) requires public authorities to consider how policies or decisions affect people who are protected under the Equality Act 2010. Public Authorities have due regard to the need to achieve the objectives set out under s149 of the Equality Act 2010:

- (a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Equality Act 2010;
- (b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
- (c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

Questions

40. Do you consider that the application of the UK ETS to the maritime sector will lead to any impacts for any groups with protected characteristics under the Equality Act 2010? And do you consider any elements of the UK ETS expansion to the maritime sector could be designed to achieve the objectives set out under s149 of the Equality Act 2010? Please explain your response, providing evidence where possible.

Section B: Potential further expansion of the UK ETS to additional maritime emissions

This section seeks views on:

- A proposed review of the threshold by the end of 2028.
- Potential future inclusion of international emissions in the UK ETS, and how this could work.

Future review of the threshold for the scheme

The Authority is minded to apply the UK ETS to ships at 5000GT and above from implementation in 2026, due to the reasons outlined in the *Threshold* section above. However, the Authority is interested in exploring if a lower threshold could lead to cost-effective decarbonisation for smaller ships. We are also aware that half of respondents to the previous consultation called for a lower threshold than 5000GT to capture smaller ships. Some stakeholders explicitly sought a 400GT threshold, another recognised threshold within the industry, as preferable within their responses.

The Authority proposes to review the threshold by the end of 2028, to coincide with the 2028 whole system review of the operations of the UK ETS. This review will consider how the scheme is working for ships at 5000GT and above, the practicalities of undertaking MRV for ships between 400GT and 5000GT, as well as allowing us to better understand the impacts of lowering the threshold on operators and certain sub-sectors; like that of the fishing industry. Likewise, we are also keen to understand whether any emissions from inland waterways and leisure craft could be captured by a 400GT threshold. There is limited available evidence on the gross tonnage for these ships and while we anticipate that a large proportion of the ships would be under 400GT, we would welcome any data to improve these estimates.

Questions

- 41.Do you agree that a lower threshold could support the maritime sector to decarbonise? (Y/N) Please explain your response, providing evidence where possible.
- 42.Do you agree that if we were to lower the threshold, it should be to 400GT? (Y/N) Please explain your response, providing evidence where possible.
- 43.Is it practical for ships between 400GT and 5000GT to undertake monitoring, reporting and verification requirements? (Y/N) Should there be a simplified monitoring regime should the threshold be lowered? Please explain your response, providing evidence where possible.
- 44. Would any inland waterways or leisure craft be captured by a 400GT threshold? (Y/N) Please explain your response, providing data where possible.

- 45. When would be an appropriate date for lowering the threshold if we were to lower it in the future? Please explain your response, providing evidence where possible.
- 46. What will be the impacts of lowering the threshold? Would any sub-sectors be disproportionately impacted? Please explain your response giving evidence where possible.

Coverage of International Routes

The responses to our previous consultation made it clear that there was interest in expanding the UK ETS coverage to cover a share of international maritime emissions. Whilst we did not ask a direct question on international coverage, the issue was raised by many respondents that answered our question on domestic voyages.

The Authority recognises that the primary route to addressing international emissions remains multilateral action taken at the International Maritime Organization (IMO). We are not currently considering expanding in-scope emissions for all international voyages beyond potentially that of voyages between the UK and EEA for 2026. We do, however, see the merit in exploring how potential future inclusion of international emissions could work, should multilateral action through the IMO be delayed, or prove insufficient in reducing GHG emissions from international shipping. This would specifically include looking at what proportion of emissions should be in scope and when an expansion should take place, whilst taking any necessary steps to avoid double counting or double charging of emissions across multiple schemes or adverse impacts on UK operators.

Questions

In the event that the conditions highlighted above at the IMO were realised;

- 47. Should the UK ETS be expanded to include emissions from all international voyages starting or ending in the UK in future? (Y/N) Please explain your response, providing evidence where possible.
- 48.If you agree with the above, do you think 50% of emissions from voyages by inscope ships making an international voyage which starts or ends in the UK from overseas should be covered? (Y/N) Please explain your response, providing evidence where possible.
- 49. If you support the inclusion of international voyages, do you have a view on when this should be implemented? Please explain your response, providing evidence where possible.

Next steps

The responses to this consultation will be used to develop final policy decisions for implementation.

The consultation will be open for 8 weeks before closing. The Authority will then work through the responses and aim to publish the Authority Government Response in due course, with a view to announcing implementation details ahead of the commencement of the scheme in 2026.

This consultation is available from: www.gov.uk/government/consultations/uk-ets-scope-expansion-maritime-sector
If you need a version of this document in a more accessible format, please email alt.formats@energysecurity.gov.uk . Please tell us what format you need. It will help us if you say what assistive technology you use.