



**BRIEFING - February 2025**

# **UK Shipping ETS: Last chance saloon to make polluters pay**

The UK must seize the chance to make shipping polluters pay by expanding the ETS to cover all of the UK's share of shipping emissions

# Summary

The Government recently closed its [second consultation on expanding the United Kingdom Emissions Trading Scheme \(UK ETS\) to the shipping sector](#). The consultation shows some welcome policy shifts that would include a greater proportion of UK maritime greenhouse gas (GHG) emissions.

However, these positive indications - including port emissions and seeking views on including emissions from international voyages between the UK and the European Economic Area (EEA) - cannot disguise the significant risk that the core proposal might potentially remain very weak and unfit for purpose.

The Government is yet to decide whether to include UK-EEA voyages. If it does not, the ETS would apply only to emissions from larger (above 5000 gross tonnage, GT) vessels in ports and those undertaking domestic-only voyages (to, from and between UK-only ports). **This would exclude ~85% of UK shipping emissions from the ETS, meaning that only ~15% - ~£250m/year - of the revenues available to the Exchequer from shipping would be collected.**

Critically, in the consultation the Government stated that emissions from UK international shipping beyond the European Economic Area (EEA) - nearly 40% of total UK shipping emissions - will be excluded from the ETS. The Government would only take action on these emissions in the event of the “possibility” of multilateral action at the International Maritime Organization (IMO) being “delayed or insufficient”.

Yet new analysis by T&E shows action under way at the IMO is already insufficient. [To reach climate targets, UK shipping emissions must be reduced by ~10 million tonnes of carbon dioxide equivalent \(MtCO<sub>2</sub>e\) by 2030](#). Measures currently under negotiation at the IMO are expected to reduce UK shipping emissions by, at most, half of what is needed (~5 MtCO<sub>2</sub>e).

With this large shortfall, the UK government needs to take urgent action to reduce all UK shipping emissions. It cannot continue to rely on insufficient action at the IMO. At present, according to the [Climate Change Committee](#), the UK has “no credible policies” to reduce shipping emissions in line with the carbon budgets.

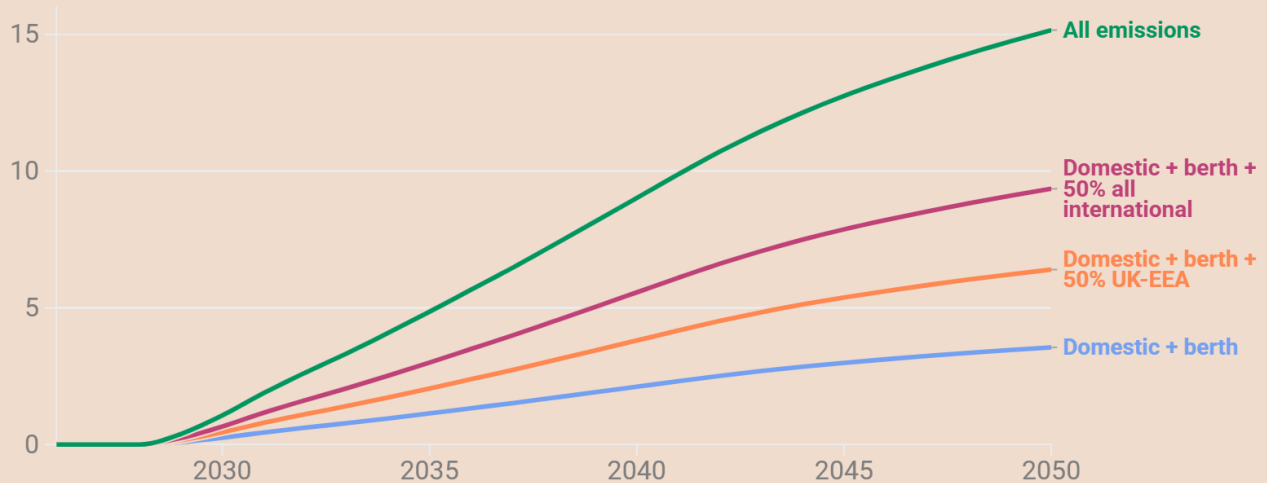
As a first step, the UK must include its fair share of shipping emissions in the UK ETS, helping to narrow the cost-gap between fossil fuels and cleaner, alternative forms of energy. But doing this effectively means going beyond the current plans for a proposal and including 100% of domestic and port emissions, and 50% of UK inbound and outbound international emissions from all commercial vessels above 400GT. Lowering the threshold

to 400GT is particularly important for UK domestic shipping, where around half of domestic emissions come from vessels below 5000GT.

This could generate over £1bn/year for the Exchequer, either supporting general government spending (ETS revenues could pay for an additional 24,000 nurses or 22,000 teachers), or driving maritime decarbonisation. For example, investing these revenues, or an equivalent sum, through the National Wealth Fund could result in enough UK production capacity of zero-emission, hydrogen-based marine e-fuels (the only scalable and sustainable fuel options to decarbonise the shipping sector) to meet most UK demand for these fuels in the mid-2030s. This would bring climate, economic and energy security benefits.

## ETS revenues can support home-grown e-fuel capacity

E-fuel production capacity (million tonnes)



Source: T&E 2025. Includes potential e-fuel production capacity planned, under construction and operating. Capacity is cumulative. Cost calculations specific to e-ammonia. Investment assumed to commence 3 years after ETS becomes operational in 2026. Includes feedback loop where emissions and ETS revenues are assumed to reduce as fuel starts being used. ETS revenues are projected based on DESNZ 2024 market carbon value scenario and phased in at 70% in 2026. Assumes NWF investment leverage of £3 private to £1 public. Assumes vessel size threshold of 400GT.



### T&E therefore recommends that the Government:

- Immediately end outsourcing to the IMO responsibility for eliminating UK international shipping emissions (including UK-EEA emissions) and include the UK's share of these emissions in the ETS from 2026. This should cover 100% of domestic and port emissions, and 50% of inbound and outbound international emissions from commercial vessels;

- Lower the vessel size threshold for inclusion in the ETS from 5000GT to 400GT;
- Support the scale up of UK-produced, zero-emission marine fuels via the National Wealth Fund with support from ETS maritime revenues or an equivalent quantity of funding; and
- Announce plans for a comprehensive regulatory framework to support the maritime sector to decarbonise. This should limit emissions from ships and drive the uptake of zero-emission marine fuels. This should include, but not be limited to, the ETS.

## 1. UK Shipping is off-track to meet climate targets

This briefing summarises T&E's main views in response to the Government's recent consultation on the [UK Emissions Trading Scheme Scope Expansion: Maritime](#).

T&E analysis shows that UK shipping produced nearly 21 megatonnes of carbon dioxide equivalent (MtCO<sub>2</sub>e) in 2023<sup>1</sup>, totalling around one-fifth of total UK transport greenhouse gas (GHG) emissions. According to the [Climate Change Committee](#)<sup>2</sup> (CCC), the UK has “no credible policies” to eliminate those emissions in line with the carbon budgets.

Although the CCC's assessment was published in 2023, nothing significant has changed since. Presently, the Government has still not published its long-awaited and greatly-delayed maritime decarbonisation and low-carbon fuels strategies. Furthermore, in its [recent response](#)<sup>3</sup> to the [2024 Environmental Audit Committee \(EAC\) report on Net Zero and UK shipping](#)<sup>4</sup>, the Government indicated only a partial acceptance of, or simply that it “notes”, a number of key EAC recommendations. These include the need to set milestones for UK production of zero-emission marine fuels and consulting on the introduction of a revenue support mechanism for commercial production of such fuels in the UK.

[T&E analysis shows that GHG emissions reductions of more than one-third on 2020 levels are needed by 2030](#)<sup>5</sup> for compliance with the UK's legally-binding climate treaty obligations. Emissions must be all but eliminated by 2040. UK shipping is therefore facing a

---

<sup>1</sup> T&E's UK shipping emissions inventory is calculated using T&E's 2023 SEA model, which uses global Automatic Information System (AIS) data. For vessel types excluded from the SEA model, 2021 Marine Benchmark AIS-based data is used and then scaled for 2023. The inventory includes 100% domestic and port emissions, and 100% inbound / outbound international emissions from all commercial vessels making UK port calls, reflecting the full geographical scope of the UK Monitoring, Reporting and Verification (MRV) regulations.

<sup>2</sup> Climate Change Committee (June 2023). *2023 Progress Report to Parliament*. Retrieved from <https://www.theccc.org.uk/publication/2023-progress-report-to-parliament/#downloads>

<sup>3</sup> Environmental Audit Committee (January 2025). *Net Zero and UK Shipping: Government Response*. Retrieved from <https://committees.parliament.uk/publications/46642/documents/238547/default/>

<sup>4</sup> Environmental Audit Committee (29 May 2024). *Net Zero and UK Shipping*. Retrieved from <https://publications.parliament.uk/pa/cm5804/cmselect/cmenvaud/509/report.html>

<sup>5</sup> T&E (January 2024). *Long, Loud and Legal: the case for zero-emission UK shipping*. Retrieved from <https://www.transportenvironment.org/te-united-kingdom/articles/the-case-for-zero-emission-uk-shipping-maritime-energy-policy-recommendations>

decarbonisation challenge the scale and pace of which are unprecedented. [A visionary policy and regulatory framework for decarbonising the UK's maritime sector is required](#)<sup>6</sup>. The framework must include, but not be limited to, comprehensive emissions pricing.

## 2. Why the UK ETS must be expanded to include all UK shipping emissions

### How the UK Emission Trading Scheme works

Emissions trading schemes, also known as cap-and-trade schemes, are economic instruments imposed by governments around the world. They apply the polluter pays principle by capping total GHG emissions across a number of economic sectors and requiring companies to purchase allowances for their emissions.

To date, UK government policy has been to exempt the shipping sector from emissions pricing. This has resulted in a market failure that has helped to keep shipping and the fossil fuels on which it depends artificially cheap, whilst also failing to direct and support the sector to decarbonise.

Pricing shipping emissions through the ETS would begin to correct that market failure. It encourages lower-emission behaviours and technologies by helping to reduce the cost-gap between fossil fuels and cleaner but more expensive alternatives. Including shipping in the ETS is a critical first step towards the framework needed to decarbonise the UK's maritime sector.

Zero-emission shipping fuels and energy sources such as renewable, hydrogen-based e-fuels and onshore power supply (OPS) - the only scalable and sustainable options for decarbonising the sector - are considerably more expensive than traditional marine bunker fuels such as marine gas oil (MGO) and heavy fuel oil (HFO). This is in part because no charge is made for the pollution resulting from burning fossil fuels. This creates a market distortion meaning fossil fuels are artificially cheap and renewable alternatives cannot compete. By putting a price on fossil fuel emissions, the ETS applies a market correction and begins to close the cost-gap between fossil and zero-emissions forms of energy.

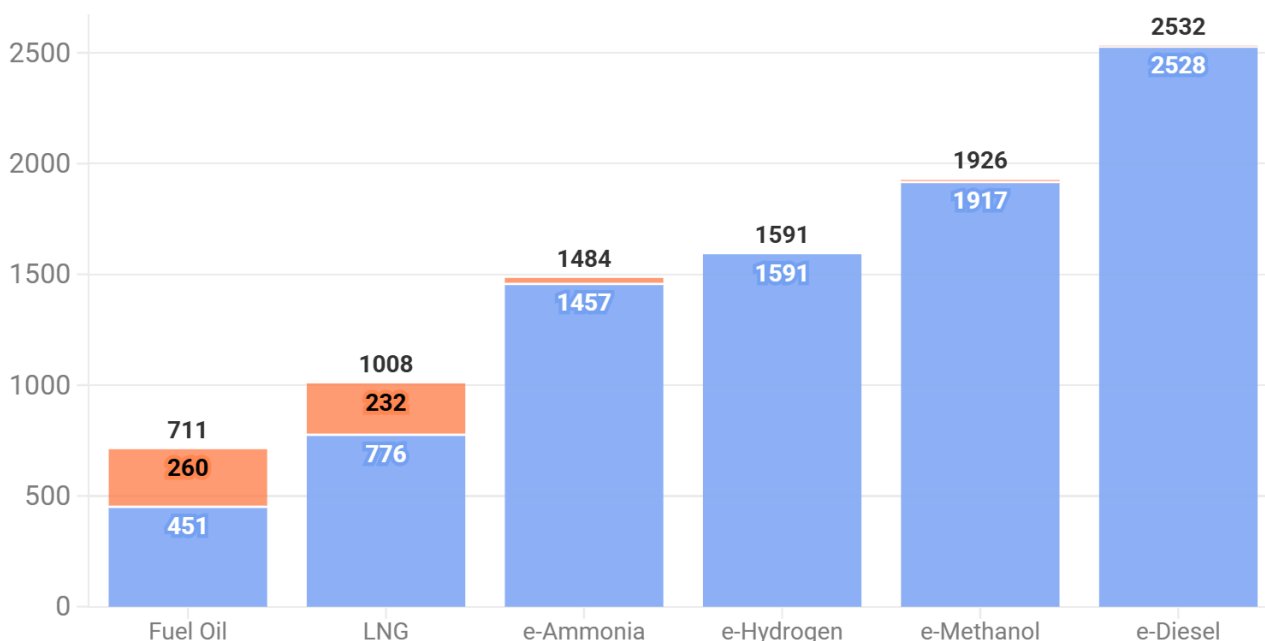
---

<sup>6</sup> See footnote 5.

## ETS will help reduce the cost-gap between fossil and e-fuels

Fuel price ETS costs

Fuel costs (£/tonne VLSFOeq)



Source: T&E (2025). Assumes carbon price of £80/tonne. E-fuel costs based on T&E price modelling for 2030.



### 2.1 Government climate ambition is unmatched by actions on shipping to date

In the consultation, the Government stated that “The UK ETS is our principal mechanism for pricing the ‘carbon externality’ that greenhouse gas emissions represent, in line with the polluter pays principle” (page 26). Also stated is the Government’s awareness 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”. These are described as 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” (page 27).

T&E agrees that the ETS applies the polluter pays principle and is a necessary component of any comprehensive framework to reduce maritime emissions. However, there is currently scant evidence in support of either of the Government’s above claims, for two reasons:

1. The ETS proposal as it stands would apply only to emissions from domestic voyages - vessels travelling from, to or between UK-only ports - and from shipping activity within ports, from vessels above 5000 gross tonnage (GT). This would mean that 85% of UK

shipping emissions would be excluded from the ETS<sup>7</sup>. As a means to price the carbon externality of shipping emissions, this is largely ineffective.

2. At the time of writing, concrete policies either in place or announced to effectively drive zero-emission marine fuels and efficiency measures are nonexistent. The support offered for [marine renewable fuels of non-biological origin \(RFNBOs\) in the Renewable Transport Fuel Obligation \(RTFO\)](#) does not drive the use of these fuels in the maritime sector because it creates no demand<sup>8</sup>. Grant-funding awarded to clean maritime research, development and deployment (RD&D) under the £236 million UK Shipping Office for Reducing Emissions (UKSHORE) programme is welcome, but insufficient.

## 2.2 IMO measures are not enough to meet UK climate ambition

The Government has long avoided responsibility for reducing UK international shipping emissions, preferring instead to look to the International Maritime Organization (IMO) for their regulation and elimination. This is despite the Government having included these emissions in the 6th Carbon Budget from 2033.

T&E has analysed the probable impact on UK shipping emissions of the regulatory measures currently under discussion at the IMO. Reflecting current proposals, we find that in 2030, UK international shipping within scope of the IMO measures<sup>9</sup> could theoretically be required to achieve emissions reductions of between 1.4Mt and 4.9Mt, compared to business-as-usual<sup>10</sup>. We would expect any agreement to result in emissions reductions somewhere within this range. In contrast, under the Science-Based Targets initiative (SBTi) emissions reduction pathway [T&E recommends for the UK](#)<sup>11</sup> and endorsed by the UK government in many international fora (including at the IMO), emissions reductions of 10Mt<sup>12</sup> are required by 2030. Even recognising that IMO measures cover only around ¾ of these emissions, in this scenario the IMO measures are insufficient. The reduction required by the IMO would need to be at least 9.9Mt to be on track.

The message is stark: the maximum impact of the IMO measures is less than half the abatement the UK needs to meet its climate targets in 2030. Ending reliance on the IMO for the

---

<sup>7</sup> Total UK maritime emissions in 2023 were 20.85 MtCO<sub>2</sub>e. Combined UK domestic and port emissions from vessels >5000GT were 3.04Mt CO<sub>2</sub>e, or ~15%.

<sup>8</sup> Zero-emission, hydrogen-based marine e-fuels such as e-methanol are not drop-in replacements for traditional marine fossil fuels and vessels must be extensively retrofitted or replaced to use them. A demand-generating regulation such as an e-fuel mandate is therefore required. As a mechanism that obligates only fuel suppliers and not fuel users, the RTFO is inappropriate to drive the uptake of these fuels in the maritime sector.

<sup>9</sup> Producing 76% of UK shipping emissions.

<sup>10</sup> Base case pathways are based on applying EU/Japan 'z factors' from IMO submission ISWG-GHG 17/2/2 and China/S.Africa/UAE 'z factors' from IMO submission ISWG-GHG 18/2/11 to BAU pathway. Missing values are interpolated. Analysis assumes no changes to shipping activity or efficiency as a result of IMO measures. China et. al factors are applied to 'tank-to-wake (TTW) value 2' so well-to-wake (WTW) emissions reductions may be even lower. UK BAU emissions are estimated using historical UK port trade data. We assume that IMO supersedes EU regulatory requirements.

<sup>11</sup> See footnote 5.

<sup>12</sup> Emissions abatement from BAU required under SBTi 1.5C pathway are 9.9MtCO<sub>2</sub>e. Based on T&E's [2021 UK emissions inventory of 26.3 MtCO<sub>2</sub>e](#).

regulation of UK international shipping emissions in favour of complementary national action on all UK shipping emissions, including through the ETS, is therefore essential. It should be noted that the EU has included its share of international shipping emissions in its ETS since 2024.

### 3. Progress towards pricing shipping emissions

In 2022, the Government consulted on expanding the UK ETS to include maritime. Whilst a positive first step, the core proposals set out in the consultation - [and subsequently confirmed in the Authority's response](#)<sup>13</sup> - were weak, covering only emissions from larger, domestic vessels from 2026. This would have [exempted 90% of the UK shipping emissions from the ETS](#)<sup>14</sup>.

The most recent consultation, which closed in January 2025, contains some welcome developments. If implemented, a larger proportion of the shipping sector's emissions than proposed in 2022 would be included in the ETS.

However, these developments are incremental rather than transformative. Much greater ambition is needed.

#### 3.1 What's good about the latest ETS proposal

- **It includes emissions from UK international vessels** (from vessels in ports - see next point). The consultation also seeks views on including international emissions from voyages between the UK and the European Economic Area (EEA) (37% of total UK maritime emissions in 2023<sup>15</sup>). Options to include UK international emissions represent a step-change in government thinking in comparison to the first consultation. The significance of this is explained in more detail at Section 3.2 below.
- **Including port emissions is itself also a step forward.** T&E analysis shows that the combined activity from vessels in UK ports produced 13% of UK shipping emissions in 2023<sup>16</sup>. Pricing some of these emissions (even if only from larger vessels) means that the cost of vessels burning marine gas oil (MGO) in on-board generators to meet these vessels' at-berth electricity requirements moves closer to the (currently much higher) cost of plugging into clean onshore power supply (OPS) at berth. This provides an incentive for ports to install much-needed OPS and for vessels to use it. OPS also helps to tackle the [very significant air pollutant emissions](#)<sup>17</sup> that are produced alongside GHG emissions by vessels in UK ports.

---

<sup>13</sup> Developing the UK Emissions Trading Scheme: Main response. HM Government (June 2023). Retrieved from <https://assets.publishing.service.gov.uk/media/649eb7aa06179b000c3f7608/uk-emissions-trading-scheme-consultation-government-response.pdf>

<sup>14</sup> T&E (February 2023). *A Pricey Omission: not charging ships for their pollution costs the UK dearly*. Retrieved from <https://www.transportenvironment.org/te-united-kingdom/articles/a-pricey-omission-not-charging-ships-for-their-pollution-costs-the-uk-dearly>

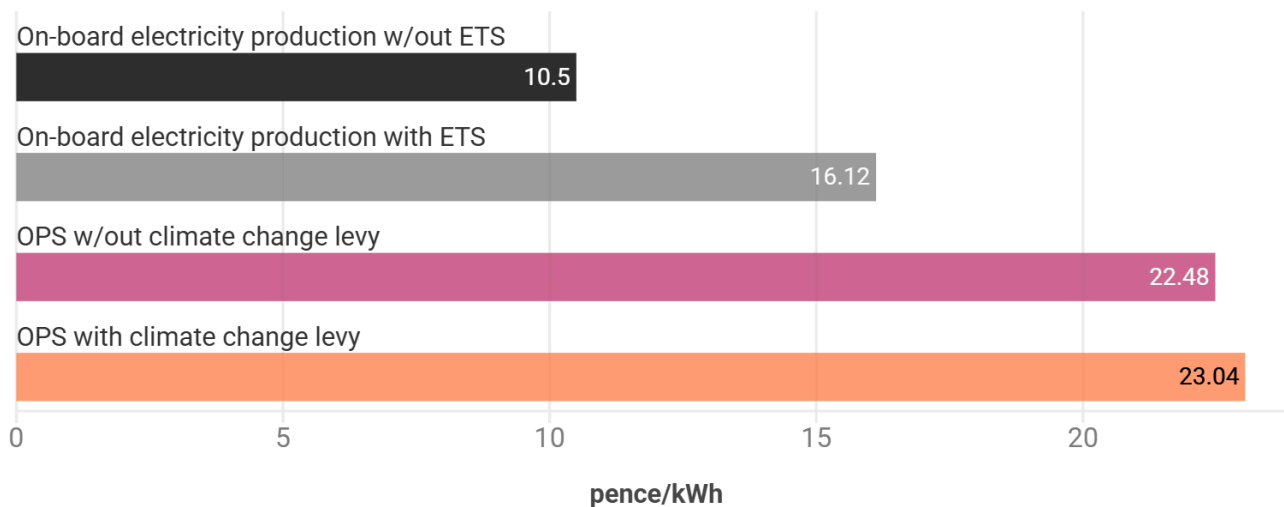
<sup>15</sup> Total UK-EEA voyage emissions from all commercial vessels in 2023 were 7.73MtCO<sub>2</sub>e

<sup>16</sup> Total UK port emissions from all commercial vessels in 2023 were 2.7MtCO<sub>2</sub>e

<sup>17</sup> T&E (May 2024). *The UK's most polluted ports, ranked in order*. Retrieved from <https://www.transportenvironment.org/te-united-kingdom/articles/the-uks-most-polluted-ports-ranks>



# Impact of UK ETS on the competitiveness of OPS



Source: T&E (2025) • Analysis assumes MGO use by auxiliary engines to produce on-board electricity. Assumed MGO price: USD 606.5/tonne with USD-GBP exchange rate of 0.8189.



- **Using an amended UK monitoring, reporting and verification (MRV) regime as the basis for reporting emissions under the ETS.** This would align the UK ETS with the approach of the EU ETS, meaning that additional administrative requirements for ship operating companies would be kept to a minimum. Critically, the MRV regime measures emissions according to vessel movement (activity), so is accurate.

## 3.2 What's not

Despite these positive elements however, the core ETS proposal as set out in the consultation contains serious flaws. If carried through to implementation, these flaws would render the ETS more or less ineffective as an instrument to support the decarbonisation of the UK maritime sector as a whole. Given the perilous state of current UK maritime decarbonisation policy when faced with the challenge of decarbonisation, the risks cannot be overstated. Flaws include:

- **Ruling out any immediate inclusion of UK international voyage emissions beyond those from voyages between the UK and the European Economic Area (EEA).** T&E analysis shows that non-UK-EEA international emissions represent 37% of total UK maritime emissions and are worth ~£620m/year to the Exchequer at a carbon price of £80/tonne<sup>18</sup>. As explained at Section 2.2, the IMO measures currently under negotiation will be insufficient to abate these emissions in line with the UK's international treaty obligations.

<sup>18</sup> £80/tonne CO<sub>2</sub>e is used as the reference value throughout our ETS analysis. [DESNZ Traded Carbon Value](#) market scenario indicates a carbon price of £75-£88/tonne for the years 2027-8, which is when we anticipate the ETS will be fully operational if a phase-in similar to that used by the EU ETS is observed. We therefore consider that £80/tonne is a reasonable value, and is also consistent with other T&E modelling to date.



As T&E has previously set out<sup>19</sup> and as has been confirmed by independent legal analysis<sup>20</sup>, the UK's climate treaty obligations mean that it cannot delegate responsibility for regulating these emissions to the IMO. Seeking views only on “how potential future inclusion... [of these emissions] could work” and citing the “possibility” of multilateral action at the IMO being “delayed or proving insufficient” is an outdated view inconsistent with evidence. To persist with this policy is an abdication of responsibility on the part of the Government.

- **Setting a minimum vessel size threshold for inclusion in the ETS of 5000 gross tonnage (GT).** This is particularly problematic for domestic shipping, where more than half of emissions are produced from vessels below 5000GT. It should also be noted that offshore vessels - an ideal vessel class for early decarbonisation due to their relatively small size and predictable duty cycles - produce nearly one-third of all UK domestic maritime emissions. Exempting sub-5000GT vessels from the ETS therefore denies one of the most suitable sub-sectors for decarbonisation a primary incentive to do so.

## UK shipping emissions by type, size and geographical scope

Domestic At berth Inbound international Outbound international



Source: T&E (2025) • Based on T&E's 2023 AIS-based SEA model and Marine Benchmark (2021) for yachts, offshore, service, fishing, miscellaneous vessels. Geographic scope follows UK shipping MRV. 

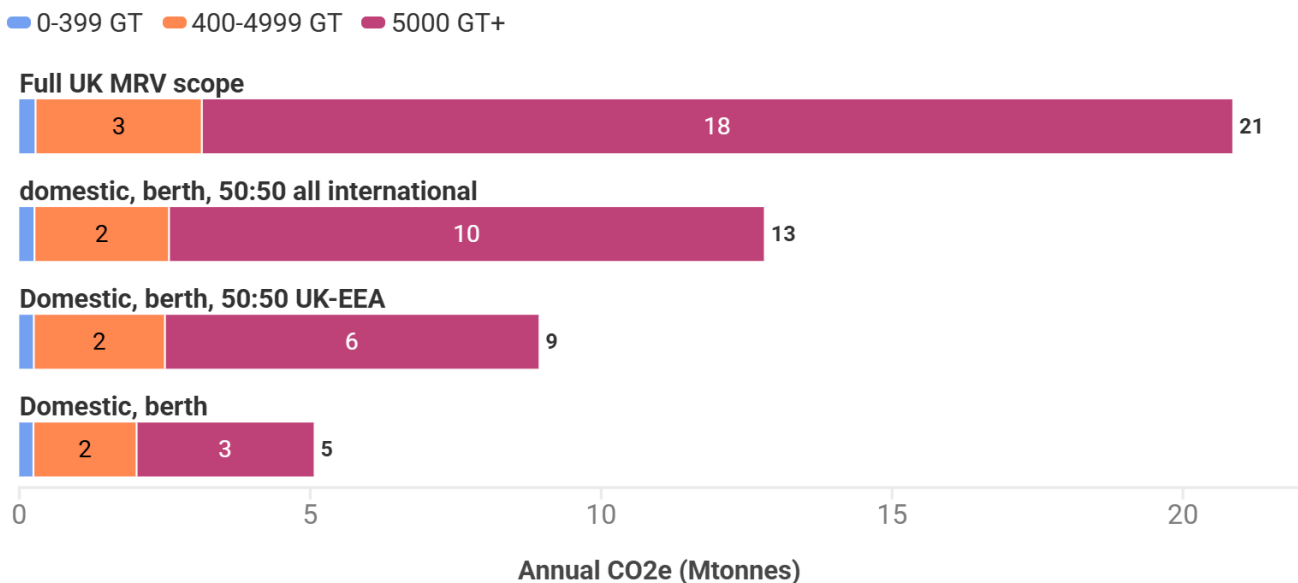
<sup>19</sup> See footnote 5.

<sup>20</sup> Estelle Dehon KC (October 2023). Legislative powers for a UK regulatory framework for the introduction and scale-up of zero-emission shipping fuels and technologies. Accessed at <https://www.transportenvironment.org/wp-content/uploads/2023/12/Re-Shipping-Decarbonisation-OPEN-ADVICE-3-10-23-FINAL.pdf>

- **Being undecided on including emissions from UK-EEA voyages.** Excluding these emissions would mean an ETS that exempts 85% of UK shipping emissions. Most of the 85% are from UK international vessels - those travelling to or from UK ports from other jurisdictions - which are primarily large (over 5000GT) vessels operated by [highly profitable companies](#)<sup>21</sup>. Such vessels benefit from economies of scale, meaning that the ETS costs per tonne of cargo transported are lower than for smaller vessels. The core ETS proposal as it stands does not include any UK international voyage emissions. This approach would therefore place compliance costs disproportionately on small, domestic ship operators whilst exempting the large, international operators most able to absorb the costs. The distribution of emissions according to different ETS scopes is shown below.

It should also be noted that, according to T&E analysis, including 50% of UK international emissions in the ETS would not disproportionately impact the cost of goods shipped to and from the UK. For example, we find that the ETS would add £0.06 to the cost of a television and £0.45 to the cost of a refrigerator imported from the Far East<sup>22</sup>. We consider these costs to be negligible.

## Distribution of UK shipping emissions per geographical scope



Source: T&E (2025) • Based on T&E's 2023 AIS-based SEA model and Marine Benchmark (2021).  
Geographic scope follows UK shipping MRV.



- **Proposing to use the Carbon Budget Delivery Plan (CBDP) emissions assumptions as the basis to calculate how many additional UK ETS allowances (UKAs) should be added to the overall ETS cap to accommodate maritime emissions.** The CBDP appears to

<sup>21</sup> Maersk expects operating profit of up to USD 9bn for 2025. (6 February 2025). Retrieved 19 February 2025 from [https://shippingwatch.com/carriers/Container/article17878189.ece?utm\\_campaign=ShippingWatch%20Top%20News&utm\\_content=2025-02-06&utm\\_medium=email&utm\\_source=shippingwatch\\_com](https://shippingwatch.com/carriers/Container/article17878189.ece?utm_campaign=ShippingWatch%20Top%20News&utm_content=2025-02-06&utm_medium=email&utm_source=shippingwatch_com)

<sup>22</sup> T&E analysis (2025). Assumes 50% inbound emissions Singapore - Felixstowe from ~200,000GT containership.

calculate UK international shipping emissions based on fuel sold to these vessels in the UK. As most UK international vessels bunker fuel elsewhere, this method skews the emissions inventory from international vessels downwards, [by around two thirds according to T&E analysis](#)<sup>23</sup>. If international voyage emissions are included in the ETS and calculated according to the MRV methodology as proposed, emissions will be far greater than the number of UKAs available if the cap is set according to CBDP assumptions.

### 3.3 The size of the prize

A comprehensive expansion of the UK ETS to maritime including the UK's fair share of international emissions offers opportunities the Government cannot afford to waste. These include:

- **The value of emissions.** If all UK shipping emissions - 20.85 MtCO<sub>2</sub>e in 2023 - were priced under the UK ETS they would generate ~£1.7bn/year for the Exchequer. Pricing the UK's fair share of these emissions - 100% domestic and port emissions, and 50% inbound / outbound international emissions from all commercial vessels above 400GT - would cover 60% (12.53Mt) of emissions and generate revenues of ~£1bn/year.

These revenues could simply be a useful source of income for the Exchequer. For example, £1bn/year could fund 24,000 additional nurses or 22,000 additional teachers. Alternatively, they could be used to support the decarbonisation of the maritime sector. [Industry have called for the UK to become a global hub for green shipping fuels](#)<sup>24</sup>, and as shown in [T&E's October 2024 letter to the Chancellor](#)<sup>25</sup>, ETS revenues from comprehensive shipping emissions pricing offer a chance to support both the UK maritime sector's decarbonisation and wider UK economic development.

For example, capitalising the National Wealth Fund with £1bn/year could leverage private sector investment resulting in enough UK capacity to produce most of the zero-emission, hydrogen-based marine e-fuels UK shipping will need by the mid-2030s to meet climate targets. The potential UK-based e-fuel production capacity from investing revenues in this way resulting from different ETS scopes, would contribute to the UK's energy security by reducing the shipping sector's current reliance on imported fossil fuels.

---

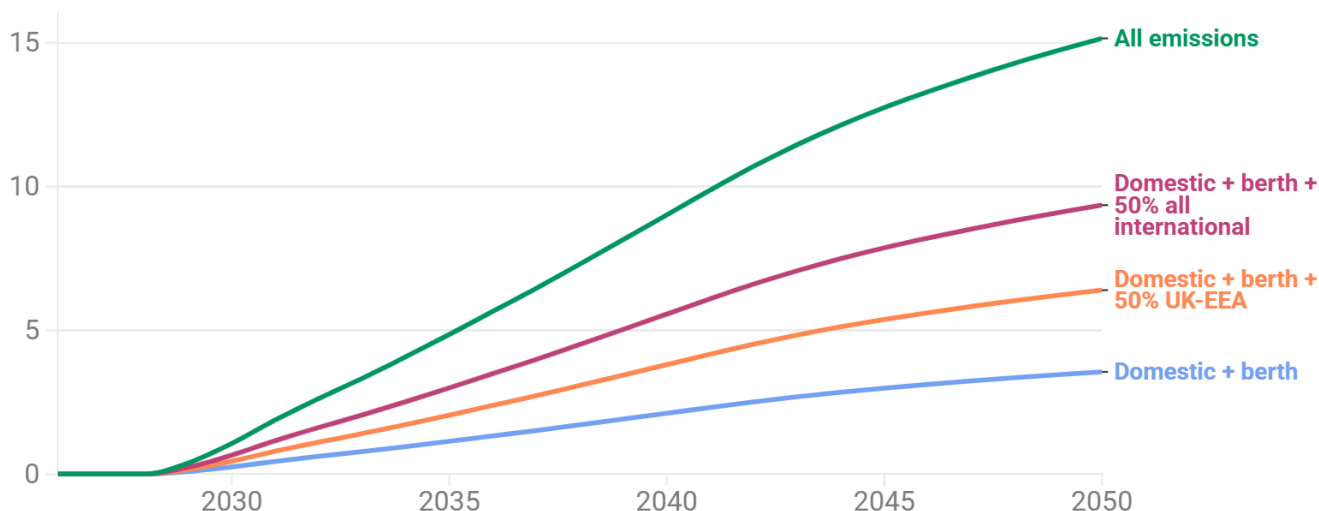
<sup>23</sup> See footnote 14.

<sup>24</sup> UK Chamber of Shipping. (9 October 2024). *UK Shipping's Route to Decarbonisation*. Retrieved 20 February 2025 from <https://www.ukchamberofshipping.com/sites/default/files/2024-11/UKCoS%20DecarbTimeline%20AW2%20DIGITAL%20150dpi.pdf>

<sup>25</sup> T&E (October 2024). Economists, thinktanks, and NGOs call on Rachel Reeves to charge shipping industry for emissions. Retrieved from <https://www.transportenvironment.org/te-united-kingdom/articles/economists-thinktanks-and-ngos-call-on-rachel-reeves-to-charge-shipping-industry-for-emissions#:~:text=Transport%20%26%20Environment%20UK%20along%20with,of%20shipping%20greenhouse%20gas%20emissions>

# ETS revenues can support home-grown e-fuel capacity

E-fuel production capacity (million tonnes)



Source: T&E 2025. Includes potential e-fuel production capacity planned, under construction and operating. Capacity is cumulative. Cost calculations specific to e-ammonia. Investment assumed to commence 3 years after ETS becomes operational in 2026. Includes feedback loop where emissions and ETS revenues are assumed to reduce as fuel starts being used. ETS revenues are projected based on DESNZ 2024 market carbon value scenario and phased in at 70% in 2026. Assumes NWF investment leverage of £3 private to £1 public. Assumes vessel size threshold of 400GT.



An alternative version of the above chart, which excludes the impact of fuel use on revenues and subsequent investment, is included at Annex 1.

- **Improving port air quality and driving onshore power supply (OPS).** As shown above, the price signal created by the ETS closes the cost-gap between burning MGO for electricity and plugging into OPS. If combined with a measure such as a Norwegian-style fund to price ship-produced air pollutant emissions such as oxides of nitrogen (NO<sub>x</sub>), a much stronger incentive for OPS installation and usage would be created.
- **Climate leadership.** The environmental benefits of decarbonising the maritime sector are both local (eg air quality) and global (eg reduced climate impact). If the UK includes its international maritime emissions in the ETS it will form part of an international domino effect, where increasing numbers of countries and jurisdictions are either already regulating their international shipping emissions, or planning to do so (eg the EU, Turkey, [Gabon](#)<sup>26</sup> and California). This is important for the UK's role as a climate leader, where it would demonstrate action on [Article 4.4 of the Paris Agreement](#), which requires

<sup>26</sup> Gabon introduces carbon levy for airlines and shipping. (22 January 2025). Retrieved 19 February 2025 from <https://www.green.earth/news/gabon-introduces-carbon-levy-for-airlines-and-shipping#:~:text=Gabon%20is%20set%20to%20implement,which%20helped%20design%20the%20mechanism.>

developed countries to implement “economy-wide” Nationally Determined Contributions, consistent with the principle of Common But Differentiated Responsibilities (CBDR).

It should be noted that the EU already includes international emissions within its ETS scheme and is expected to collect £6 billion annually. The EU Innovation Fund directs some of the EU ETS revenues into decarbonising its own maritime sector, including the production of zero-emission fuels.

## 4. Conclusions and recommendations

The ETS proposal set out in the consultation offers important and welcome progress towards an appropriate application of the polluter pays principle. These include measuring emissions based on vessel activity, pricing port emissions and seeking views on pricing UK-EEA voyage emissions.

However, the ETS proposal remains fundamentally weak. Unless comprehensive emissions pricing is adopted immediately, the ETS will not fulfil its potential as the Government’s principal mechanism for “pricing the carbon externality” of shipping emissions. Very considerable revenues will be lost, revenues that could be used to help fund much-needed maritime decarbonisation efforts in the UK or simply provide a useful income for the Exchequer.

The Government must not waste the opportunity offered by expanding the ETS to maritime emissions. The need for policy certainty is acute and the ETS must be used to fulfil its potential as the Government’s principal mechanism for pricing the carbon externality of shipping emissions.

T&E therefore recommends that the Government:

- Immediately end its reliance on the IMO for regulating UK international shipping emissions (including UK-EEA emissions) and include the UK’s share of these emissions in the ETS from 2026. This should cover 100% of domestic and port emissions, and 50% of inbound and outbound international emissions from commercial vessels;
- Lower the vessel size threshold from 5000 to 400GT by amending the UK monitoring, reporting and verification (UK MRV) regulations accordingly;
- Support the scale up of UK-produced, zero-emission marine fuels via the National Wealth Fund with support from ETS maritime revenues or an equivalent quantity of funding; and
- Announce plans for a comprehensive regulatory framework to support the maritime sector to decarbonise. This should limit emissions from ships and drive the uptake of zero-emission marine fuels. This should include, but not be limited to, the ETS.

## Further information

**Jonathan Hood**

Sustainable Shipping Manager

[jon.hood@transportenvironment.org](mailto:jon.hood@transportenvironment.org)

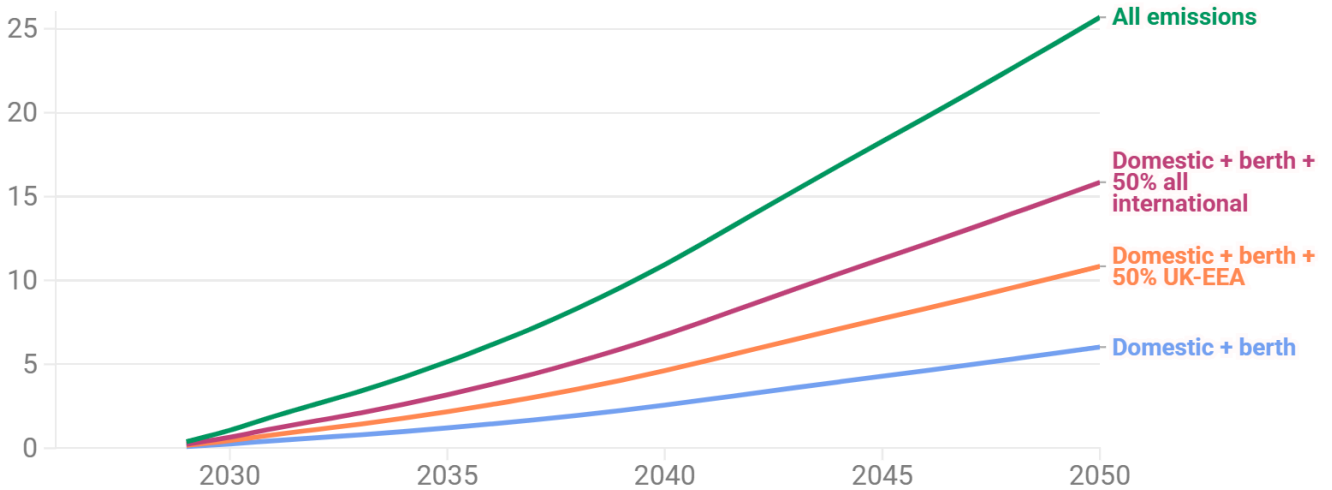
Mobile: +44 (0)7903 555 378

# Annex 1: Alternative e-fuel investment scenario excluding the impact of fuel use on emissions, revenues and subsequent investment.

## ETS revenues can support home-grown e-fuel capacity

■ Domestic + berth 
 ■ Domestic + berth + 50% UK-EEA 
 ■ Domestic + berth + 50% all international 
 ■ All emissions

E-fuel production capacity (million tonnes)



Source: T&E 2025. Includes potential e-fuel production capacity planned, under construction and operating. Capacity is cumulative. Investment assumed to commence 3 years after ETS becomes operational in 2026. ETS revenues are projected based on DESNZ 2024 market carbon value scenario and phased in at 70% in 2026. Assumes NWF investment leverage of £3 private to £1 public. Assumes vessel size threshold of 400GT.



The above scenario shows potential e-fuel production capacity based on different maritime ETS scopes assuming that ETS revenues are not impacted by e-fuel uptake, for example where e-fuels are not used in the maritime sector.