

**IN THE MATTER OF UN CONVENTION ON THE LAW OF THE SEA  
AND IN THE MATTERS THE UN FRAMEWORK CONVENTION ON CLIMATE CHANGE AND  
THE PARIS AGREEMENT**

**Re: Legislative powers for a UK regulatory framework for the introduction and scale-up of zero-emission shipping fuels and technologies**

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**LEGAL ADVICE**

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**SUMMARY**

1. The United Kingdom (“**UK**”) is subject to domestic and international obligations to reduce economy-wide greenhouse gas (“**GHG**”) emissions. It is additionally subject to international obligations to prevent, reduce and control of pollution of the marine environment. These obligations require rapid progress in reducing shipping emissions, particularly those referred to as “international shipping emissions”, i.e. maritime GHG emissions that occur on voyages between UK and non-UK ports, but for which the UK is nonetheless responsible. I am instructed by Transport & Environment UK (“**T&E**”) to examine the possibilities under existing primary powers in the UK for a regulatory framework, applicable to all ships, for the introduction and scale-up of zero-emission shipping fuels and technologies.
2. For the reasons given below, my view is that section 129 of the Merchant Shipping Act 1995 provides the relevant primary power. The power is sufficiently broad to allow the Government, acting via an Order or Orders, to impose a variety of regulatory obligations on all ships entering UK ports to prevent, reduce or control pollution from GHG emissions. These could include a fuel emissions standard, a fuel levy or emissions charge, or mandatory efficiency standards. Such regulation would be based on Articles 1(1)(4), 2(1); 25, 192, 194, 211(3), 212(1) and 222 of the UN Convention on the Law of the Sea (“**UNCLOS**”). It reflects the UK Government’s authoritative statement that anthropogenic GHG emissions constitute pollution of the marine environment and that the obligations on states to act under the Part XII regime in UNCLOS is engaged in respect of climate change and ocean acidification.

3. Additionally, it would be open to the Government to amend the Merchant Shipping (Monitoring, Reporting and Verification of Carbon Dioxide Emissions) and the Port State Control (Amendment) Regulations 2017 to impose the same sorts of regulatory requirements. However, this may not be the optimal approach, given the MRV Regulations are a self-contained monitoring and reporting system, setting out a particular mechanism for achieving GHG reduction.

## **REASONS**

### **FACTUAL BACKGROUND**

4. The UK is subject to domestic and international obligations to reduce economy-wide GHG emissions. Domestically, the Climate Change Act 2008 (“**CCA 2008**”) imposes an obligation to ensure that the net UK carbon account<sup>1</sup> for each five year budgetary period does not exceed the statutorily set carbon budget, and that the net UK carbon account for the year 2050 reaches “Net Zero”, defined as “at least 100% below the 1990 baseline”.
5. Internationally, the Paris Agreement requires State Parties, including the UK, to hold the increase in the global average temperature “to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels”. The Intergovernmental Panel on Climate Change (“**IPCC**”) has underscored that immediate and deep reductions are needed across all sectors to limit global warming to 1.5°C,<sup>2</sup> and the UN Secretary General has emphasised the need for global emissions to halve by 2030 to stay within that limit.<sup>3</sup>

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<sup>1</sup> In simple terms, the “net UK carbon account” refers to the total emissions that the UK produces from a basket of “targeted GHG emissions” (including carbon dioxide, methane and nitrous oxide), minus any removals of these gases (e.g., through afforestation or carbon capture technologies) and any carbon credits purchased from other countries.

<sup>2</sup> See e.g. UN Climate Change press release (4 April 2022) <https://unfccc.int/news/the-evidence-is-clear-the-time-for-action-is-now-we-can-halve-emissions-by-2030>. The detailed emissions pathway is provided in Chpt 2 of the IPCC’s Special Report on Global Warming of 1.5°C (8 October 2018) <https://www.ipcc.ch/sr15/>.

<sup>3</sup> See e.g. UN Press Release (2 May 2030) <https://press.un.org/en/2023/sgsm21784.doc.htm>.

6. The UK's Parliamentary Office of Science and Technology ("**POST**") advised in January 2022 that 80% of global trade by volume and 95% of UK trade is transported by ship, and that 97% of the global fleet of vessels are fuelled by heavy fuel oil or marine diesel.<sup>4</sup> Based on the Fourth International Maritime Organization ("**IMO**") Greenhouse Gas Study (2020),<sup>5</sup> POST recorded that the GHG emissions from shipping were projected to grow by up to 50% by 2050, compared to 2018, meaning that rapid action is required to align the sector with international climate targets and the UK's own Net Zero goal.
7. The UK Government has endorsed the Science Based Targets initiative ("**SBTi**")<sup>6</sup> at the IMO, an emissions reduction pathway compatible with the temperature goal of the Paris Agreement. SBTi requires a 36% emissions reduction on 2020 levels by 2030 and a 96% reduction by 2040.<sup>7</sup> The UK's share of international shipping emissions is included in the domestic Net Zero target and, from 2033, will be included within the UK's carbon budgets under the CCA 2008.<sup>8</sup>
8. Although the UK's current 2030 Nationally Determined Contribution<sup>9</sup> ("**NDC**") excludes international shipping emissions,<sup>10</sup> the 2035 NDC may take a different approach. The Climate Change Committee ("**CCC**"), the independent statutory advisor

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<sup>4</sup> "International shipping and emissions" POSTNOTE Number 655 (January 2022) <https://researchbriefings.files.parliament.uk/documents/POST-PN-0665/POST-PN-0665.pdf>.

<sup>5</sup> <https://wwwcdn.imo.org/localresources/en/OurWork/Environment/Documents/Fourth%20IMO%20GHG%20Study%202020%20Executive-Summary.pdf>

<sup>6</sup> The SBTi (IMO reference code *ISWG-GHG 13/INF.2, 21 October 2022, Science-based target setting for the maritime transport sector*) is aligned to the 1.5°C degree temperature goal of the 2015 Paris Agreement. It is supported by the United States, United Kingdom and Canada (IMO reference code *ISWG-GHG 14/2/9, 3 February 2023, Refining the levels of ambition in the Revised IMO Strategy on reduction of GHG emissions from ships*).

<sup>7</sup> As discussed at §12 below, this is more ambitious than the strategy agreed at the IMO in July 2023.

<sup>8</sup> UK Government press release: "UK enshrines new target in law to slash emissions by 76% by 2035", <https://www.gov.uk/government/news/uk-enshrines-new-target-in-law-to-slash-emissions-by-76-by-2035>.

<sup>9</sup> The UK's Nationally Determined Contribution, communicated to the UN Framework Convention on Climate Change in December 2020, in line with Article 4 of the Paris Agreement, and reviewed in September 2022 after the Glasgow Conference of the Parties. The UK commits to reducing economy-wide greenhouse gas emissions by at least 68% by 2030, compared to 1990 levels. <https://www.gov.uk/government/publications/the-uks-nationally-determined-contribution-communication-to-the-unfccc>

<sup>10</sup> The UK currently reports these emissions as a memo item in the UK's National GHG Inventory.

to the Government on climate science and policy,<sup>11</sup> tasked by the CCA 2008 with advising the Government and Parliament on meeting the UK's climate targets, will recommend the level of the 2035 NDC “and how international ... shipping emissions should feature” within that commitment.<sup>12</sup>

9. Zero-emission shipping fuels will be required to achieve the requisite reductions. The CCC calculated as part of the Sixth Carbon Budget<sup>13</sup> that shipping comprised 3% of total UK greenhouse gas emissions in 2018, and within this international shipping (as measured on a bunker fuel sales basis) has a majority share of emissions.<sup>14</sup> It should be noted that measuring emissions on bunker sales skews the maritime emissions inventory downwards because many ships undertaking UK international voyages bunker in other jurisdictions. The CCC has thus recommended that the UK Government explore measuring international emissions on an activity basis.<sup>15</sup> If this metric were used, the UK's international shipping emissions could be up to three times greater than those currently published by the UK Government.<sup>16</sup>
10. The CCC identified that rapid progress needed to be made in reducing shipping emissions, including by use of zero-carbon fuels to displace fossil marine fuels. It identified 33% uptake of zero-carbon fuels in domestic ships by 2035 as a key milestone.<sup>17</sup> Importantly, the CCC advised that international approaches are unlikely

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<sup>11</sup> The CCC is comprised of members who have experience and knowledge in (a) business competitiveness; (b) climate change policy at national and international level, and in particular the social impacts of such policy; (c) climate science; (d) the different situations across the four nations in the UK; (e) economic analysis and forecasting; (f) emissions trading; (g) energy production and supply; (h) financial investment; and (i) technology development and diffusion: Schedule 1 of the Climate Change Act 2008.

<sup>12</sup> CCC 2023 Progress Report to Parliament, pg 268 <https://www.theccc.org.uk/wp-content/uploads/2023/06/Progress-in-reducing-UK-emissions-2023-Report-to-Parliament-1.pdf>.

<sup>13</sup> <https://www.theccc.org.uk/publication/sixth-carbon-budget/#:~:text=The%20Sixth%20Carbon%20Budget%20can%20be%20met%20through...%204%20L%20and%20greenhouse%20gas%20removals.%20>

<sup>14</sup> CCC “The Sixth Carbon Budget: Shipping” pg 6 <https://www.theccc.org.uk/wp-content/uploads/2020/12/Sector-summary-Shipping.pdf>.

<sup>15</sup> CCC 2022 Progress Report to Parliament, pg 554. <https://www.theccc.org.uk/publication/2022-progress-report-to-parliament/>.

<sup>16</sup> <https://www.transportenvironment.org/wp-content/uploads/2023/02/A-pricey-omission-not-charging-ships-for-the-pollution-they-cause-costs-the-UK-1.6bn-yr-1-1.pdf>.

<sup>17</sup> See e.g. the Sector Report on Shipping, pg 27 <https://www.theccc.org.uk/wp-content/uploads/2020/12/Sector-summary-Shipping.pdf>

to overcome all barriers to decarbonising the international shipping sector and that supplementary domestic policies would be needed to be pursued where these can help overcome UK-specific market barriers, and where they do not lead to adverse impacts on competitiveness and/or carbon leakage.<sup>18</sup>

11. In the CCC's June 2023 Progress Report to Parliament, it highlighted that "[c]urrent uptake of zero-carbon fuels is essentially zero"<sup>19</sup> and that there are currently "no credible policies in place to meet the required emissions reduction by the Sixth Carbon Budget period".<sup>20</sup>
12. On 7 July 2023, the IMO adopted its 2023 GHG Strategy,<sup>21</sup> a non-binding strategy aiming for a 20% reduction in GHG emissions by 2030 on 2008 levels (striving for 30%) and a 70% reduction in 2040 on 2008 levels (striving for 80%). While this is a new and greater level of ambition from the IMO, even the upper emissions reduction targets in the Strategy (i.e. the "striving for" targets) are not aligned with emissions reduction pathways compatible with the temperature goal of the Paris Agreement.<sup>22</sup> As set out at §5 above, the UK Government-endorsed SBTi emissions reduction pathway, which is Paris-compatible, requires a 36% emissions reduction on 2020 levels by 2030 and a 96% reduction by 2040. This, alongside the fact that the Strategy is non-binding, means that it does not inhibit the UK from acting to meet its domestic

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<sup>18</sup> Ibid, pg 28.

<sup>19</sup> 2023 Progress Report to Parliament, pg 287 <https://www.theccc.org.uk/wp-content/uploads/2023/06/Progress-in-reducing-UK-emissions-2023-Report-to-Parliament-1.pdf>.

<sup>20</sup> Ibid, pg 292.

<sup>21</sup> <https://www.imo.org/en/OurWork/Environment/Pages/2023-IMO-Strategy-on-Reduction-of-GHG-Emissions-from-Ships.aspx>.

<sup>22</sup> I am aware that the International Energy Agency has stated that the IMO Strategy is "in line with the goals set out in the Paris Agreement" <https://www.iea.org/energy-system/transport/international-shipping>. Detailed analysis shows that the Strategy would result in international shipping exceeding its current share of the world's 1.5°C carbon budget by approximately 2032, but that the emissions pathway implied by the Strategy would not exceed the well below 2°C carbon budget, with "well below" interpreted as 1.7°C (<https://theicct.org/marine-imo-updated-ghg-strategy-jul23/>). In my view, this demonstrates that the GHG Strategy is not in line with the Paris Agreement temperature goal. Article 2(1)(a) does not set two temperature "goals". It sets a single goal of holding the increase in the global average temperature to well below 2 °C above pre-industrial levels **and** (conjunctive, not disjunctive) pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels. A strategy compliance with which would result in exceedance of 1.5°C by 2032 is not pursuing efforts to limit the temperature increase to 1.5°C.

legal obligations under the CCA 2008 and its international obligations in light of its 2035 NDC.

## **DISCUSSION**

### **Greenhouse Gas Emissions Constitute Marine Pollution**

13. As I have previously advised,<sup>23</sup> anthropogenic<sup>24</sup> GHG emissions (including maritime GHG emissions) fall within the definition of pollution of the marine environment, given the serious deleterious effect they have on marine life and the hazard they cause to human health. They therefore fall within the definition of pollution of the marine environment in Article 1(1)(4) of UNCLOS and so are caught by the various obligations imposed by UNCLOS on states to protect and preserve the marine environment.
  
14. In June 2023, in a submission to the International Tribunal on the Law of the Sea (“ITLOS”),<sup>25</sup> the UK Government stated authoritatively that anthropogenic GHG emissions fall within Article 1(1)(4), based on the plain language of that provision; the purpose of the provision; in light of other relevant international agreements and in light of the action of State Parties.<sup>26</sup> It is clear beyond peradventure that anthropogenic GHG emissions cause climate change (including ocean warming and sea level rise), and ocean acidification, and fall within the scope of Part XII of UNCLOS.

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<sup>23</sup> <https://www.transportenvironment.org/wp-content/uploads/2021/10/Briefing-paper-NDCs-legal-advice-Aviation-Shipping-Final-2021-2.pdf>

<sup>24</sup> Resulting from or produced by human activities.

<sup>25</sup> ITLOS is an independent judicial body with jurisdiction over any dispute concerning the interpretation or application of UNCLOS. ITLOS has agreed to respond to a request from the Commission of Small Island States on Climate Change and International Law for an advisory opinion related to States’ obligations to protect the marine environment from the effects of climate change. A number of parties made written submissions and hearings took place from 11 September 2023. <https://www.itlos.org/en/main/cases/list-of-cases/request-for-an-advisory-opinion-submitted-by-the-commission-of-small-island-states-on-climate-change-and-international-law-request-for-advisory-opinion-submitted-to-the-tribunal/>

<sup>26</sup> ITOLS Case 31 Request for An Advisory Opinion Submitted by the Commission of Small Island States on Climate Change and International Law, Written Statement of the UK (16 June 2023) §§11-41, pgs 11-18 [https://www.itlos.org/fileadmin/itlos/documents/cases/31/written\\_statements/1/C31-WS-1-27-UK.pdf](https://www.itlos.org/fileadmin/itlos/documents/cases/31/written_statements/1/C31-WS-1-27-UK.pdf).

15. GHG emissions also fall within the UK's domestic understanding of pollution of the marine environment: for example, the definition of "marine pollution" in the Merchant Shipping Act 1995 section 293(5) is sufficiently broad to include the GHG emission pollution caused by ships burning marine fossil fuels.

### **Port State Control**

16. International treaty obligations which pertain to shipping, in particular UNCLOS, acknowledge States' competence to (and sometimes obligation to) regulate environmental matters, without providing a territorial limit.
17. A crucial aspect of this is the extent of Port State Control. Countries have near unlimited jurisdiction over their ports and can impose a very broad range of conditions on entry of vessels, so long as they do not discriminate between ships based on flag state; are applied in good faith and do not contravene other regulations or constitute an abuse of rights.
18. UNCLOS provides no automatic right of entry into foreign ports. Articles 2(1), 8, 11 and 12 of UNCLOS give Port States jurisdiction over all vessels within their internal waters. Port States are empowered to impose conditions on the admission of ships to ports. Article 25(2) explicitly allows Port States to take such enforcement measures as they see fit to uphold the conditions attached to port access. There is no restriction on such powers.
19. Vessels voluntarily entering the port of a State Party thereby agree to submit to the conditions of entry to that port. These conditions can have extraterritorial consequences. For example, port access conditions concerning construction, design, equipment and manning ("CDEM") standards cannot by their nature apply exclusively when the ship is in port, but necessarily extend to vessels before entry, including when they are on the high seas. This does not amount to the Port State subjecting any part of the high seas to its sovereignty (contrary to Article 89), as the

extraterritorial effect of port access conditions is purely incidental to the way CDEM standards operate.

20. This incidental extraterritorial effect of Port State Control is not limited to CDEM standards. A further example arises in the way in which the United Kingdom has already asserted Port State powers to regulate operational data: the Merchant Shipping (Monitoring, Reporting and Verification of Carbon Dioxide Emissions) and the Port State Control (Amendment) Regulations 2017 (“**2017 MRV Regulations**”) require certain ships to carry and, if asked, produce a document specific to the ship verifying that it has undertaken annual accredited monitoring and reporting of CO<sub>2</sub> emissions.
21. The 2017 MRV Regulations implemented Regulation (EU) 2015/757 (“**the MRV Directive**”). They were made under the previous power in section 2 of the European Communities Act 1972 (the key provision giving legal effect to EU law in UK law), and so became retained EU law under section 6(7) of the EU (Withdrawal) Act 2018. However, the ultimate source of the 2017 MRV Regulations is Port State Control.<sup>27</sup> Under the Retained EU Law (Revocation and Reform) Act 2023 (“**REUL Act 2023**”), the 2017 MRV Regulations will become assimilated law at the end of 2023.

### **Control of Pollution of the Marine Environment**

22. Article 192 of UNCLOS provides that states have an obligation to protect the marine environment. The UK Government has stated in its Written Submission to ITLOS that, interpreted in good faith in accordance with the ordinary meaning of its terms, this article positively affirms the obligation of States to protect and preserve the marine environment.<sup>28</sup>

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<sup>27</sup> So too the MRV Directive, which operates as an amending directive to Directive 2009/16/EC on Port State control.

<sup>28</sup> UK Written Statement in ITLOS Case 31§§47-53, pgs 20-22.



23. This is important. This, and the other statements from the UK's Written Submission to ITLOS referred to in this advice, represent the considered view of the UK Government on the meaning of key provisions of UNCLOS, expressed in a public filing before the main international independent judicial body with jurisdiction over disputes concerning the interpretation or application of UNCLOS.
24. Article 194(1) of UNCLOS obliges State Parties, both individually and jointly, to take "*measures to prevent, reduce and control pollution of the marine environment*". Article 194(2) requires States to "*take all measures necessary to ensure that activities under their jurisdiction or control are co conducted as not to cause damage by pollution to other states and their environment*". This is a substantive obligation to prevent harm.
25. Article 211 of UNCLOS addresses pollution from ships. Articles 211(1) empowers states to act through the IMO to establish international rules and standards to prevent, reduce or control pollution of the marine environment from vessels. Importantly, Article 211(3) recognises the competence of Port States to "*establish particular requirements for the prevention, reduction and control of pollution of the marine environment*". This includes pollution from emission of GHG. By not geographically limiting the marine environment that States can protect via Article 211(3), UNCLOS accommodates measures taken by States to remedy environmental degradation.<sup>29</sup>
26. Article 212 of UNCLOS requires States to take "*other measures*", such as enforcement measures, necessary to prevent, reduce and control pollution of the marine environment "*from or through the atmosphere*", including air-borne pollution from vessels in the form of anthropogenic GHG emissions. Article 222 builds on this, requiring States to enforce, via their laws and regulations, the prevention, reduction and control of pollution from or through the atmosphere.

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<sup>29</sup> N L Dobson and C Ryngaert "Provocative climate protection: EU 'extraterritorial' regulation of maritime emissions (2017) 66(2) *International & Comparative Law Quarterly* 295 at 314.

27. There are two important aspects of Articles 207(1), 211(3), 212(1) and 222, read together:
- (a) they oblige States to adopt laws and regulations to prevent, reduce and control pollution of the marine environment, including pollution from vessels in the form of GHG emissions; and
  - (b) these measures must take into account internationally agreed rules, standards and recommended practices and procedures, including the Paris Agreement temperature goal and the best available science. The UK accepts that the current IPCC reports reflect best available science in the context of climate change and its effects on the marine environment.<sup>30</sup>
28. The UK Government has stated authoritatively that “*the plain terms of Article 212(1) require States Parties to adopt (and where necessary review and amend) domestic laws and regulations to prevent and reduce anthropogenic greenhouse gas emissions as necessary for the protection and preservation of the marine environment, on the basis that the UNFCCC and the Paris Agreement are the relevant generally accepted international rules and standards*” (emphasis added).<sup>31</sup>
29. There are no regulations from the IMO which will reduce GHG emissions in line with the Paris Agreement, including the 2023 IMO GHG Strategy. In light of the above, and given the urgency for developed countries to act to avert dangerous climate breakdown,<sup>32</sup> the stage has been reached where the UK is arguably obliged to act outside the IMO (rather than just having the power to do so).<sup>33</sup> The steps taken by the UK will need to be subject to the reasonableness requirements of proportionality and non-discrimination in Article 227 of UNCLOS and non-abuse of rights in Article 300,

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<sup>30</sup> Written Statement in ITLOS Case 31, §68, pgs 29-30; see also §§88-90, pgs 42-43.

<sup>31</sup> Ibid, §69.

<sup>32</sup> See, e.g. IPCC 2023 AR6 Synthesis Report <https://www.ipcc.ch/report/ar6/syr/>; CCC 2023 Progress Report to Parliament <https://www.theccc.org.uk/publication/2023-progress-report-to-parliament/>.

<sup>33</sup> While still also continuing to push for ambitious action in the IMO.

and in line with the SBTi emissions reduction pathway compatible with the temperature goal of the Paris Agreement.

### **Review of primary legislative powers**

30. I have reviewed the following pieces of primary legislation:
- (a) the Merchant Shipping Act 1995 (“**the 1995 Act**”);
  - (b) the Merchant Shipping and Maritime Security Act 1997;
  - (c) the Finance Act 2000;
  - (d) the Marine Safety Act 2003;
  - (e) the Climate Change Act 2008; and
  - (f) the Energy Acts 2004, 2008 and 2013.
31. I have also reviewed the following pieces of secondary legislation:
- (a) the Merchant Shipping (Prevention and Control of Pollution) Order 1987;
  - (b) the Merchant Shipping (Prevention of Pollution) (Law of the Sea Convention) Order 1996;
  - (c) the Merchant Shipping (Prevention of Pollution) (Intervention) (Foreign Ships) Order 1997;
  - (d) the Climate Change Levy (General) Regulations 2001;
  - (e) the Renewable Transport Fuel Obligations Order 2007
  - (f) the Merchant Shipping (Port State Control Regulations) 2011;
  - (g) the Renewable Heat Incentive Scheme Regulations 2014 and 2018;
  - (h) the Environmental Damage (Prevention and Remediation) (England) Regulations 2015;
  - (i) the 2017 MRV Regulations; and
  - (j) the Merchant Shipping (Prevention of Pollution from Noxious Liquid Substances in Bulk) Regulations 2018.
32. In light of that review, I consider that there is a primary power which would allow for secondary legislation to be made placing an obligation on all ships entering UK ports

to comply with a GHG emissions pollution standard, which could include a fuel emissions standard: section 129 of the 1995 Act, which I address in detail below.

33. Before doing so, however, it would be helpful to explain why three other potential routes are not available. First, the Climate Change Act 2008 provides the powers to set carbon targets and budgeting (sections 1-31) and establishes the Climate Change Committee (sections 32-43). It also provides for a number of discrete mechanisms to address climate change, including giving the Secretary of State the power to establish “trading schemes” (sections 44-55).
34. Section 44(2) defines “trading scheme” broadly, by reference to the limitation or encouragement of limitation of activities that consist of or cause GHG emissions; and encouraging activities that consist of or cause GHG reductions or removals. Schedule 2 specifies the matters required by regulation in relation to both types of scheme. While the general definition is broad, and arguably a scheme obliging all ships entering UK ports to comply with a GHG pollution standard, including a fuel emissions standard, could fall within section 44(2)(a), paragraph 9 of Schedule 2 makes it clear that it would be excluded, because a straight emissions standard scheme would not provide for participants to trade in any allowances or credits under the scheme. The powers are thus not sufficiently broad to include a freestanding obligation on all ships entering UK ports to comply with a fuel emissions standard.
35. They are, however, sufficiently broad to include shipping emissions within the UK Emissions Trading Scheme (“**UK ETS**”). The UK Government has announced the intention to bring domestic shipping into the UK ETS by 2026.<sup>34</sup> There is nothing in the CCA 2008 preventing international shipping emissions from being included within the UK ETS as per the recommendation of the CCC.<sup>35</sup> A percentage of emissions

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<sup>34</sup> <https://www.gov.uk/government/consultations/developing-the-uk-emissions-trading-scheme-uk-ets>.

<sup>35</sup> Letter: Development of the UK Emissions Trading Scheme (UK ETS). <https://www.theccc.org.uk/publication/letter-development-of-the-uk-emissions-trading-scheme-uk-ets/>

from voyages which start or end in the UK could be included, as well as 100% of emissions from domestic shipping.

36. Second, the Energy Act 2004 empowers the Secretary of State to impose by order on each transport fuel supplier a renewable transport fuel obligation (“**RTFO**”) (sections 124-132). The Renewable Transport Fuel Obligations Order 2007 put the RTFO in place from 15 April 2008. It is intended to deliver reductions in GHG emissions from fuel used for transport purposes by encouraging the supply of renewable fuels. It places an obligation on fuel suppliers to ensure that fuels for use in road vehicles and non-road mobile machinery contain a percentage of renewable material. The obligation also contains a sub-mandate for the supply of “*development fuels*”, a category which includes hydrogen as a renewable fuel of non-biological origin (required for zero-emission shipping).
37. This is instructive, as it is an example of the use of UK primary and secondary legislation to impose a regulatory mechanism to incentivise zero-emission shipping through focusing on the fuels used by that shipping. These powers are, however, focused on the supply of renewable fuels. They do not oblige the uptake of those fuels by the shipping sector, nor are the powers within the Energy Act 2004 currently sufficiently broad to encompass a regulatory scheme aimed creating demand for renewable fuel by imposing a fuel emission standard. It would be open to the Government to amend the Energy Act 2004 to provide such powers, but given that a robust and broad primary power already exists under section 129 of the 1995 Act, the Government can move straight to implementing a fuel emission standard under that power.
38. Third, the 2017 MRV Regulations, discussed in §§20-21 above. It would be open to the Government to amend the MRV Regulations in a number of different ways to address the UK’s international shipping emissions, including imposing a freestanding obligation on all ships entering UK ports to comply with a GHG pollution standard,

such as a fuel emissions standard; or other measures such as requiring energy efficiency standards or imposing a fuel levy or emissions change.

39. A combination of the powers in the REUL Act 2023 and the powers of the UK as a Port State would provide the basis for any or all of such amendments to be made. However, this may not be the optimal approach, given the MRV Regulations are a self-contained monitoring and reporting system, setting out a particular mechanism for achieving GHG reduction.

### **Section 129(1) of the Merchant Shipping Act 1995**

40. In my view, there is a clear, broad and user-friendly primary power which would allow for secondary legislation to be made placing an obligation on all ships entering UK ports to comply with a GHG pollution standard, such as a fuel emissions standard. Section 129 of the 1995 Act makes provision for the prevention of pollution from ships. Section 129(1) provides:

*“Her Majesty may by Order in Council make such provision as She considers appropriate for the purpose of giving effect to any provision of the United Nations Convention on the Law of the Sea 1982 (Cmnd 8941) for the protection and preservation of the marine environment from pollution by matter from ships.”*

41. As set out above, the UK Government has recently stated authoritatively in its Written Submission to ITLOS that the obligation in UNCLOS to protect and preserve the marine environment includes the obligation to adopt domestic laws and regulations to prevent and reduce anthropogenic GHG emissions, which necessarily includes taking measures to reduce GHG emissions from shipping. That being the case, the express provision in section 129(1) for secondary legislation “*giving effect to*” any provision of UNCLOS for protection of the marine environment “*from pollution by ships*” – which is an important subset of the sources of anthropogenic GHG emissions causing climate change and ocean acidification – empowers the UK Government to act pursuant to Articles 1(1)(4), 2(1); 25, 192, 194, 211(3), 212(1) and 222 of

UNCLOS to place an obligation on all ships entering UK ports to comply with a GHG pollution standard, including a fuel emissions standard.

42. The UK Government has emphasised that the due diligence standard,<sup>36</sup> which operationalises the primary rules of international law, including UNCLOS, requires States to “*formulate and implement policies to prevent the relevant harm, including through legislative and administrative measures*” as well as exercising a certain level of vigilance in their enforcement.<sup>37</sup> This obliges States to “*do the utmost*” to prevent damage, by deploying adequate means.<sup>38</sup> The UK Government’s view is that, at a minimum, Article 194(2) of UNCLOS requires each State Party to take measures to prevent, reduce and control anthropogenic GHG emissions and address climate change and ocean acidification, “*within its domestic legal system, including the adoption of laws, regulations and other administrative measures, with effective enforcement and monitoring mechanisms.*”<sup>39</sup>
43. Accordingly, the power under section 129(1) of the 1995 Act is sufficiently broad to allow the Government, acting via an Order or Orders, to impose a variety of regulatory obligations on all ships entering UK ports to prevent, reduce or control pollution from GHG emissions. These could include a fuel emissions standard, a fuel levy or emissions charge, or mandatory efficiency standards. In my view, this route would likely be preferable to making widescale amendments to the 2017 MRV Regulations.

### **Further Mechanisms**

44. Section 100 of the Energy Act 2008 empowers the Secretary of State to make regulations to establish a scheme to facilitate and encourage the renewable generation of heat and about the administration and financing of such a scheme.

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<sup>36</sup> “Due diligence” is a standard against which State conduct can be assessed in many areas of international law: see Alice Ollino *Due Diligence Obligations in International Law* (2022) pgs 18, 55 and 63.

<sup>37</sup> Written Statement in ITLOS Case 31, §66, pgs 28-29.

<sup>38</sup> *Responsibilities and obligations of States with respect to activities in the Area, Advisory Opinion, 1 February 2011, ITLOS Reports 2011* §§110 and 131.

<sup>39</sup> Written Statement in ITLOS Case 31, §67, pg 29.

Known as the Renewable Heat Incentive, instituted and regulated by the Domestic Renewable Heat Incentive Scheme Regulations 2014 and 2018/611, it is a financial incentive scheme which makes regular payments to individuals and organisations that install eligible renewable heating systems.

45. It would be open to the UK Government to take the same sort of approach to providing funding for vessel retrofit and replacement. This would likely require amendment of the relevant primary legislation, possibly the Energy Act 2008, to provide a primary power for the Secretary of State to institute, finance and administer such a scheme via regulations.

## **CONCLUSION**

46. For the reasons set out above, my view is that section 129 of the Merchant Shipping Act 1995 provides a clear, broad and user-friendly primary power which would allow for secondary legislation to be made placing an obligation on all ships entering UK ports to comply with a variety of regulatory obligations to prevent, reduce or control pollution from GHG emissions. These could include a fuel emissions standard, a fuel levy or emissions charge, or mandatory efficiency standards.
47. This would be in line with Articles 1(1)(4), 2(1); 25, 192, 194, 211(3), 212(1) and 222 of UNCLOS. It would reflect the UK Government's authoritative statement that anthropogenic GHG constitute pollution of the marine environment and that the obligations on states to act under the Part XII regime in UNCLOS is engaged in respect of climate change and ocean acidification.

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