Q&A: Revision of the Shipping MRV Regulation

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Summary

Today shipping is the only sector not yet subject to emission reduction targets or measures in the EU. This is despite EU related CO₂ emissions from maritime transport being comparable to the emissions of Belgium and representing 13% of total EU transport emissions.

However, since the introduction of the Monitoring, Reporting and Verification Regulation in 2015, ships are required to monitor and report, among others, their CO_2 emissions and operational efficiency scores. The idea back in 2015 was that this would be the first step of a staged approach for the inclusion of maritime CO_2 emissions in the EU's Climate Policy.

In 2019 EC President Ursula von der Leyen committed to act on shipping emissions, which was later reflected in the European Green Deal (EGD). First-executive Vice President Frans Timmermans also committed during the Parliamentary hearings to consider EP's proposals on shipping in line with the EGD. The ongoing revision of the MRV creates a strong momentum to regulate EU maritime CO₂ emissions to achieve the Union's climate goals. The MEPs are seizing this momentum by proposing goal-based reduction targets for maritime emissions and by including maritime emissions into the EUs emissions trading system. The revision also creates an opportunity to position the EU as the global leader on green hydrogen deployment in shipping, thus putting Europe in prime position to win the technological competition.

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1. What is the magnitude of EU related maritime CO2 emissions?

EU related CO₂ emissions from maritime transport reached 138 Mt in 2018. This represents 3.7% of total EU CO₂ emissions (= comparable to the emissions of Belgium) and 13% of the EU transport emissions.¹ Emissions from ships sailing to and from the Netherlands, Belgium and Norway were larger than or comparable to the CO₂ of their total national passenger car fleet in those countries.²



Expressed in terms of fuel consumption, these emissions correspond to 44 million tonnes of fuel, or close to 7% of the EU total oil demand.³

The European Commission forecasts that EU-related ship CO₂ emissions will increase by 86% in 2050 compared to 1990-levels, despite the adoption of minimum ship efficiency standards for new ships by

EU_shippings_climate_record_20191209_final.pdf

¹ https://ec.europa.eu/clima/sites/clima/files/transport/shipping/docs/c_2020_3184_en.pdf

²https://www.transportenvironment.org/sites/te/files/publications/Study-

³ https://ec.europa.eu/clima/sites/clima/files/transport/shipping/docs/c_2020_3184_en.pdf

the IMO in 2011.⁴ If nothing is done to tackle these emissions, they risk undermining the goals of the Paris Agreement and the efforts deployed by other sectors.

2. What is the shipping MRV regulation about?

2.1. What does the original MRV regulation (2015/757) include?

Today shipping is the only sector not yet subject to emissions reduction targets or measures in the EU. However, since the introduction of the MRV - or Monitoring, Reporting and Verification Regulation ships are required to monitor and report, among others, their CO₂ emissions and operational efficiency scores. The idea back in 2015 was that this would be the first step of a staged approach for the inclusion of maritime CO₂ emissions in the EU's Climate Policy.

The MRV requires all ships above 5000 gross tonnage to report their annual fuel consumption and associated CO₂ emitted during the voyages between the European Economic Area (EEA) ports, between the last non-EEA ports and the next EEA ports, between the last EEA ports and the next non-EEA ports and those occurring when the ship is at berth.⁵ This approach allows the MRV to cover around 90% of all EU CO₂ emissions, whilst only including around 55% of all ships calling at EEA ports. The first year of compliance was set for 2018 with the first emissions reports released on June 30th 2019.

2.2. What emissions are covered by the MRV?

Currently only CO₂ emissions are covered by the MRV. However, MEPs are proposing to extend it to all greenhouse gas emissions (GHG). In practice, this means that the MRV would also cover methane emissions from LNG ships in the future. But before this can enter into force, the Commission will need to propose a methodology on how to monitor and report methane emissions.

⁴ https://ec.europa.eu/transparency/regdoc/rep/1/2019/EN/COM-2019-38-F1-EN-MAIN-PART-1.PDF

⁵ The European Economic Area (EEA) combines the countries of the European Union (EU) and member countries of the European Free Trade Association (EFTA) to facilitate participation in the EU's single market. The EFTA Member States are Iceland, Liechtenstein, Norway, but excluding Switzerland.

2.3. Why is the MRV being revised?

The original MRV regulation included a revision clause to seek possible harmonisation with a global IMO system whenever the latter was agreed. The adoption of EU MRV in 2015 triggered similar debate at the IMO, leading to the agreement on a global monitoring system, called Data Collection System (DCS, see question 2.5.) in 2018. The European Commission has since proposed to revise the EU MRV in order to harmonise some of its elements with the DCS without undermining the climate objectives of the EU.

The revision of the MRV creates a strong momentum to regulate EU maritime CO₂ emissions to achieve the Union's climate goals. Currently shipping is the only sector excluded from obligations to reduce its emissions at the EU level. The MEPs are seizing this momentum by proposing goal-based reduction targets for maritime emissions and by including maritime emissions into the EU's emissions trading system. The revision also creates an opportunity to position the EU as the global leader on green hydrogen deployment in shipping.

2.4. How does the revised MRV help to reach the EU's 2030 and 2050 climate targets?

The European Commission forecasts that EU-related ship CO_2 emissions will increase by 86% by 2050 compared to 1990-levels. If no action is taken, this risks undermining the EU's Paris Agreement commitments and the efforts deployed by other sectors.

Today there is no EU regulation in place to tackle shipping's emissions. Under the current MRV, ships are only required to monitor and report on their emissions. Even though this in itself could already lead to a greenhouse gas emission reduction of up to 2% in 2030 compared to business-as-usual, further action is clearly needed. The monitoring and reporting of emissions was therefore always intended as a first step of a staged approach for the inclusion of maritime CO₂ emissions in EU Climate Policy. In this revision of the MRV, the EP proposes to take the intended next steps by introducing a goal-based operational CO₂ standard for shipping companies and by including shipping in the EU's emissions trading system. The first measure would significantly improve the industry's efficiency and create demand for innovative technologies and zero-carbon fuels, while the second one would create a revenue stream that can be used to finance their deployment.

2.5. Why is the MRV better than the IMO's Data Collection System?

After the adoption of the EU MRV, the IMO adopted its own system. Their so called Data Collection System (DCS) entered into force on March 1st 2018. Under the DCS ships are required to monitor their emissions, starting from the year 2019. However, unlike the EU MRV, the IMO DCS doesn't include transport work based on actual cargo/passenger carried. As a result, DCS cannot measure the real-world efficiency of ships. DCS is neither third-party verified. Also, the IMOs DCS is not transparent: the reported data will never be made public.

	MRV	DCS			
Transparency	Data accessible to the public	Reported data will never be made public			
Trustworthiness / susceptibility to fraud	Third party verified	Relies exclusively on unreliable flag state enforcement			
Insight into a ship's real-world operational efficiency?	Yes, using cargo data which is reported	No, relies on deadweight (DWT) capacity as a proxy → you can't differentiate an empty ship from an efficient one			

Full alignment on any of these provisions of the MRV with the IMO DCS would thus be to the clear detriment of the transparency and accuracy goals of the MRV regulation and should be resisted.

2.6. Which players in the maritime sector does the MRV impact?

The MRV requires shipping companies, which could be vessel owners or charters, to monitor and report their CO_2 emissions and operational efficiency indicators. In the event of a change of company, the

ongoing revisions to MRV aim to also ensure that the new company is only responsible for the reporting period during which the change of ownership/operatorship has taken place. Close to 2000 shipping companies reported CO₂ emissions of their ships during the first year of the EU MRV implementation, half of which are European.

Ships used for dredging, ice-breaking, pipe laying, offshore installation activities, fish-catching/ processing and government ships used for non-commercial purposes are exempt.

3. Why are the MEPs proposing to introduce CO₂ operational standards into the MRV? What do they entail?

To reduce shipping's climate impact, the MEPs want to create a measure that would allow each shipping company the flexibility to choose the most convenient and suitable compliance strategy. At the same time, the EP wants to send a strong signal to potential technology and zero-carbon fuels suppliers by creating a future demand for their products in shipping. Operational CO₂ standards measure up to this dual goal.

How does it work? The regulator sets an average carbon intensity objective for shipping companies to achieve in the near future, in this case -40% by 2030 below the 2018 baseline. This doesn't mean that each ship will need to improve its CO₂ intensity by 40%. Similar to the existing CO₂ emission standards for cars, the 40% target is an average across all ships (per ship size category) under a shipping company's responsibility. It is then up to the shipowner to choose the means of achieving that set goal and on which individual ships to apply those means of compliance. To comply in the near-term, ships can reduce their operational speed, increase their load-factor, install energy saving devices (including wind-assist technologies) or implement other operational optimisations. In the mid-term they will need to switch to zero-carbon fuels/energy sources to propel the ship and produce auxiliary power. This would force existing ships to retrofit and incentivise news ship designs to be optimised for new propulsion methods.

3.1. How are operational CO_2 standards good for a competitive EU economy and for job creation?

The operational CO₂ standards would apply to all shipping companies, regardless of the flag, ownership or age of their ships, so long as they call at EEA ports. By improving the energy efficiency of European

shipping, they would reduce fuel bills for ship and cargo owners. This would make European exports more competitive while contributing to sustainable international trade. As we are eventually transitioning to zero-carbon fuels in order to achieve climate neutrality, it is important to start improving ships' operational energy efficiency today. This would ensure that vessels require less fuel to operate, enabling shipowners to absorb the extra costs of using sustainable e-fuels (as they'd need less fuel).

Operational CO₂ standard would also put Europe in prime position to win the technological competition. The European maritime technology sector produces around half of the world's marine equipment each year.⁶ The major technology providers for ship efficiency are already European (e.g. Siemens, Alstom, ABB, MAN Energy, Wärtsilä, CMB Technologies, ABC, BEVI, etc.), with European shipyards (e.g. Fincantieri, Saint Nazaire/STX, Damen, Meyer Werft, Meyer Turku, Stocznia Gdańsk, etc.) offering the most advanced ship designs and technologies compared to Asian competitors. In addition, there are more than 100 European companies promoting hydrogen technology, while the EU is developing a strategy to deploy hydrogen at mass scale, of which shipping can be the primary user in transport. European operational CO₂ standards would create demand for the services of European companies and help revive the EU (ship) manufacturing sector, thus contributing to jobs creation and sustainable economic recovery.

3.2. Why won't operational CO₂ standards create additional administrative burden on the industry?

Under the MRV, ship operators are already required to monitor and report their operational carbon intensity performance (e.g. gCO2/tonne-nautical-mile) along with total CO₂ emissions. They will continue to perform this duty in the future regardless. Annual carbon intensity reports can be used both for setting the historical (2018) baseline and verify annual compliance with the set reduction targets in the future. Therefore, reduction requirements won't create new administrative burden.

3.3. How can operational CO₂ standards get ships to use hydrogen?

Goal-based requirements on ships to reduce their operational emissions would in essence create demand for new clean innovative technologies/fuels to meet those targets. Operational CO₂ standards thus create more certainty for businesses that there would be a growing market for their products.

⁶ EC, 2019 Annual Report on CO2 Emissions from Maritime Transport, 2020, page 4. <u>https://ec.europa.eu/clima/sites/clima/files/transport/shipping/docs/swd_2020_82_en.pdf</u>

Green hydrogen has the most potential as a future fuel for shipping; either in its pure form, or in the form of ammonia as a hydrogen carrier. So operational CO₂ standards would create a strong demand for green hydrogen in shipping.

3.4. Do operational CO₂ standards reward first movers?

The implementation of operational CO₂ standards does indeed reward first movers. This is rather because the standard would require ships to reduce their carbon intensity compared to the fleet average, as opposed to their own performance in the past (i.e. 2018). As a result, early investments in energy efficiency would allow the first movers to make the least extra effort to comply with the 2030 target. Therefore, companies who have already made a big effort to improve their efficiency before 2018 (the first year of the MRV reporting and thus the baseline for the 2030 target) would be rewarded by the policy. They can either choose to make a small effort to comply, or they can make a similar investment as their competitors, in order to retain their competitive edge. Either way, they would be in pole position to come out on top.





2018 baseline would reward already efficient companies to comply with EU operational CO2 standards

3.4.1. Why doesn't the EP use the IMOs 2008 baseline?

The IMO chose 2008 as a baseline for its -40% carbon intensity improvement target for 2030. At the time of this IMO decision in 2018, this was criticised as a political move. Not only because 2008 was the year with the highest emissions and lowest efficiency in shipping, but also because carbon intensity of shipping had already improved by 30% between 2008 and 2015. This was not the result of a conscious, climate-driven effort. It was just shipping's response to the global economic crisis after 2008. Back then it was in the commercial interest of ships to slow down to save fuel bills. As a positive externality, this

also improved their carbon intensity. So when the IMO decided on its 2008 baseline, their 2030 target had already been three-quarters met.

If the EU were to opt for that same 2008 baseline, ships would practically be required to improve their carbon intensity by only 10% between 2018-2030. This would likely be achieved under normal market forces (via operational optimisation), even without any policy intervention. Similarly, the European Commission has found that most of the improvements made before 2018 had actually come from slow steaming and smaller engine sizes in new ships, not from applying energy saving devices.⁷

Besides the low ambition of the 2008 baseline, there is also a bigger problem: there is no granular carbon-intensity data available from 2008. It is therefore almost impossible to design an operational energy efficiency measure with 2008 as a baseline that relies on a cargo-based efficiency metric.

3.5. How to enforce operational CO₂ standards?

The operational CO₂ standard is a target that needs to be reached by a set date. The baseline for this target will be calculated for each ship type and size category on the basis of the data from the 2018 MRV reportings (the first year of compliance). As companies need to linearly reduce their annual CO₂ emissions per transport work, checking compliance will be a matter of comparing their annual submission with the baseline, to see if they are on track to meet the linearised annual objectives. As there is already a monitoring and reporting duty on shipping's emissions under the current MRV, this will be relatively easy to track. The most effective tool to ensure compliance is dissuasive penalties (e.g. a base amount of \in 100/tonne_CO2 as defined by the EU ETS Directive). These penalties should be proportionate to the level of non-compliance and applied only on the excess CO₂ emitted. The penalty for recurrent annual non-compliance should increase by the base amount, year on year, until compliance is ensured. Thereafter the penalty could be reset to the base amount.

3.6. Why not use the Energy Efficiency Design Index (EEDI)?

Design standards like the EEDI (and the EIV) are theoretical design stamps that shipowners receive when buying ships. These theoretical calculations assume operational and weather conditions that are hardly ever true in the real-world, such as seas always being calm, ships always being full, or operational speeds being optimal. As a result, there is a large performance gap between ship design standards and

⁷ https://ec.europa.eu/clima/sites/clima/files/transport/shipping/docs/swd_2020_82_en.pdf

real-world maritime operations. In fact, one-third of EU shipping's emissions can be attributed to this performance gap.⁸ This highlights the inadequacy of the ship design standard as a regulatory tool to predict and reduce maritime emissions.

In addition, design standards usually apply to new ships only and depend on fleet renewal to cut emissions. As the fleet covered by the EU MRV system is relatively young (11 years old on average), this poses a real problem. Considering that ships can be used for 25 to 30 years, a large part of the monitored fleet is likely to still be operating in 2040. Therefore, measures to reduce shipping's emissions need to apply both to new ships and existing ships and thus directly regulate their real-world operations.

4. Why is the EP proposing to extend ETS to maritime via the MRV regulation? What does that entail?

During a hearing in the European parliament, the Commission's vice-president Frans Timmermans committed to treat own-initiative proposals on shipping from the Parliament in line with Commission president Ursula von der Leyen's Political Guidelines.⁹ In those Guidelines, von der Leyen commits to extend the Emissions Trading System to the maritime sector. This was basically a nod from Timmermans to the Parliament in case it wants to come up with a proposal on maritime emissions. Through this MRV revision, the Parliament is acting upon that nod. An extension of the ETS to the maritime sector means that the "polluter pays" principle would, for the first time ever in the EU's history, also apply to shipping.

4.1. What will be the scope of the shipping ETS?

All EU related maritime CO₂ emissions will be covered. This includes:

- domestic ship emissions within the EU member states (i.e. domestic shipping),
- journeys between the EU/EEA member states (i.e. intra-EEA international),
- journeys from EU/EEA ports to the first port of call outside the EU/EEA and journeys from the last port of call outside the EU/EEA to the first EU/EEA port (i.e. extra-EEA international shipping).

⁸https://www.transportenvironment.org/sites/te/files/publications/Study-

EU_shippings_climate_record_20191209_final.pdf

⁹ https://www.europarl.europa.eu/resources/library/media/20190927RES62422/20190927RES62422.pdf and https://ec.europa.eu/commission/sites/beta-political/files/political-guidelines-next-commission_en.pdf

As under the current MRV Regulation, all ships over 5000 gross tonnes would be required to comply. Ships used for dredging, ice-breaking, pipe laying, offshore installation activities, fishcatching/processing and government ships used for non-commercial purposes are exempt.

4.2. What will the revenues from maritime ETS be used for?

The EP is proposing to earmark a substantial part of the maritime ETS revenues, raised by the sale of emissions allowances, for a Maritime Transport Decarbonisation Fund (MTDF, see question 4.3.). This flow-back mechanism resembles how the NER 300 Programme, as well the Innovation and the Modernisation Funds, will be resourced and operated in Phase 4 (2021-2030) of the ETS. The fund would serve as a support mechanism aimed exclusively at helping the shipping industry and ports to meet the innovation and investment challenges of the transition to a low-carbon economy. The establishment of such a Fund for shipping was first examined in detail in the Commission's 2013 Impact Assessment.

The remaining revenues would flow to the Member States to be used to tackle climate change in the Union and third countries, to protect and restore marine ecosystems impacted by global warming or to support a just transition.

4.3. What is the Maritime Transport Decarbonisation Fund?

The Maritime Transport Decarbonisation Fund is to be set up under the ETS Directive with a dual task to reduce administrative burden on shipping companies (see question 4.4.) and to help finance initiatives to reduce ship CO_2 emissions. Specifically, the Fund would finance energy efficiency improvements, deployment of innovative technologies and zero-carbon fuels (e.g. green hydrogen, ammonia) in vessels and relevant infrastructure in European ports.

4.4. Why does the Maritime Transport Decarbonisation Fund reduce administrative burden on maritime companies?

In principle, shipping companies would be subject to the default ETS rules and have to purchase and surrender ETS allowances (EUAs). Companies would however, by derogation from the default ETS rules, be able to opt out and pay a contribution to the Maritime Transport Decarbonisation Fund (see question

4.3.) instead. Contributions would be based on each ship's reported emissions in the previous year via the MRV regulation and the ETS carbon price in the preceding year. This means that shipping companies would be able to estimate their ETS dues even before they start emitting CO2 and account for these costs in their charter party and freight transportation contracts. Fund revenues would then be used to purchase and surrender EUAs on behalf of Fund members (i.e. shipping companies). The total quantity of allowances purchased by the Fund each year would be equal to the total quantity of allowances fund members would otherwise be required to surrender individually under the ETS.

This is designed to address the concerns of industry – especially small ship operators - about any increased administrative burden of complying with the ETS. Shipping companies would only have to comply with the provisions of the EU MRV system, i.e. report their emissions and pay applicable carbon dues to the Fund under the ETS directive. The remaining administrative tasks to comply with the ETS would be carried out by the Fund on behalf of the ship companies.

4.5. How can ETS get ships to use hydrogen?

The EP proposes to earmark a substantial amount of the revenues generated by the maritime ETS to a Maritime Transport Decarbonisation Fund (see question 4.3.). The Fund could finance, among others, the roll out of green hydrogen and ammonia vessels and of energy efficiency technologies.





4.6. What does the maritime ETS impact assessment say?

The European Commission performed a very in-depth impact assessment for a maritime ETS back in 2013: it's 189 pages long¹⁰ and has a 412 pages long underlying technical study¹¹. The analysis concluded that a maritime ETS could lead to a greenhouse gas emission reduction of 21% in 2030 compared to business-as-usual. The economic basis of the impact assessment still stands today. Back in 2013, the impact assessment calculations were based on a carbon price of €36. That is not only higher than the carbon price today, it's also higher than the carbon prices we were seeing before the COVID-19 crisis. Therefore, the economic impact on the industry has not changed since. In this regard, redoing another impact assessment would incur duplication of work and only cause delays in the process.

4.7. Why won't the ETS lead to competitive distortions in the shipping industry?

The ETS will apply to all ships. Regardless of the owner, operator, flag or ship age, all ships arriving at and/or departing from EU ports will be subject to the rules of the ETS. Ships cannot evade the ETS by changing their flag or home port.

4.7.1. What would be the added costs of maritime ETS on seaborne consumer products?

The cost impact of shipping ETS on the price of consumer goods in Europe would be insignificant. This is because maritime transport contributes only a small percentage to final consumer prices and changes in these transport prices - in either direction - would not have huge impacts on trade. This is explained by the economies of scale, due to large transport capacity of modern ships, which lower the unit cost of seaborn transports.

T&E has estimated, based on the shipping CO_2 data from the maritime industry, the likely impact of a maritime ETS on the prices of some of the consumer goods that are internationally transported by

<u>https://ec.europa.eu/clima/sites/clima/files/transport/shipping/docs/ghg_maritime_report_en.pdf</u> and its annex: https://ec.europa.eu/clima/sites/clima/files/transport/shipping/docs/ghg_maritime_annex_en.pdf

¹⁰ See part 1:

https://ec.europa.eu/clima/sites/clima/files/transport/shipping/docs/swd_2013_237_1_en.pdf and part 2: https://ec.europa.eu/clima/sites/clima/files/transport/shipping/docs/swd_2013_237_2_en.pdf ¹¹ See the study:

ships. As the figure below demonstrates, if ships calling at EU ports were required to pay even a €50 per tonne of CO₂ price under the EU ETS and if these costs were passed on to final consumers proportionate to each products' share of CO₂ in shipping, the price increase on these consumer goods would be insignificant. For example, a kg of banana from Ecuador or an iPad from China would respectively cost Belgium consumers about 0.55% and 0.0005% more (all else being equal). The difference is measured in euro cents.

Prod	luct	Origin	Destination	Distance	Ship CO2 emitted per item	Additional costs with shipping in the ETS with €50/tonne CO2	Old Price in Belgium* without ETS	New price in Belgium* with ETS	Price increase due to ETS
(Banana (single)	Ecuador	Netherlands	10464 km	22 g	0.11000 € Cents	1.200	1.207 €/kg of banana	0.5500%
	iPad (single)	China	Denmark	19327 km	55 g	0.27500 € Cents	550	550.003 €/iPad	0.0005%
<u>s</u>	Grain (1 kg)	Brazil	Holland	10416 km	21 g	0.10500 € Cents	0.16	0.161 €/kg of grain	0.6562%
	Diesel (1 litre)	USA	Italy	8575 km	24 g	0.12000 € Cents	1.4	1.401 €/litre of diesel	0.0857%

Insignificant impact of shipping ETS on consumer goods

* Product prices in Belgium were found based on desk research.

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4.8. Why won't the maritime ETS lead to evasion ("carbon leakage")?

Since the EU shipping ETS would only cover the last leg of the journey from a non-EU/EEA port to an EU/EEA port, and the first leg of the journey from an EU/EEA port to a non-EU/EEA port, ships could hypothetically attempt to reduce their ETS obligations by adding a stopover in a nearby non-EU/EEA port. This would theoretically limit their ETS compliance costs and thus leading to "carbon leakage".

However, such an evasion is either legally not possible or practically cost ineffective. Ships can use such an evasive stop-over port call tactic only if they carry commercial operations (cargo or passenger) in those evasion ports. Because, port calls have a specific definition under the EU MRV legislation: *"port of call' means the port where a ship stops to load or unload cargo or to embark or disembark passengers*". Therefore, stops for all other purposes (e.g. refuelling, obtaining supplies, relieving the crew, shelter from adverse weather,...) cannot be used as pretext to avoid obligations under the EU maritime ETS.

Secondly, making an evasive port call outside the EU would generate even more costs (extra fuel burn, additional port dues, opportunity costs, etc), which on average would be larger than the ETS compliance costs. Therefore, according to the detailed EC impact assessment on maritime ETS, ships would be better off complying with the EU ETS than avoiding it with an evasive port call.



Evasion from ETS is more costly than compliance (EC, 2013 impact assessment)



4.8.1. Does this change when fuel prices are high?

Instinctively, one would think that the higher the fuel price, the more shipowners would be willing to make an extra port call to reduce their ETS dues. However, practically the opposite is true: the higher the fuel prices, the lower the inclination to avoid ETS by making extra port calls.

This is because making extra port calls causes ships to use more fuel, thus increasing their annual fuel costs. Hence, higher fuel prices make complying with ETS more cost-effective than evasion.

4.9. How to enforce the ETS?

The enforcement of a maritime ETS will follow the enforcement rules already in place under the existing ETS Directive for industrial installations and aircraft operators. Shipping companies would need to submit an emissions report, which will then be verified by an accredited verifier (as is already the case under the current MRV). Once verified, companies will need to surrender the equivalent number of allowances or pay emissions dues to the Maritime Transport Decarbonisation Fund. Member States are then responsible to enforce the compliance with the EU ETS via port-state control (PSC).

4.10. How does the MRV differ from the fuel tax?

Theoretically speaking, a fuel tax as a form of indirect carbon pricing can also be implemented by the EU/member states. However, fuel taxes would create practical and procedural challenges. Practically, a fuel tax can only be applied to marine fuels sold in European ports, leaving out marine fuel sales in non-EU ports. This would create incentive for ships to bunker in non-EU ports only, which is technically feasible due to their large fuel tanks, while diminishing the effectiveness of the fuel tax as an indirect carbon pricing. This would not be an issue under the ETS system because it doesn't depend on fuel sales, but rather regulates activity-based emissions on EU-related voyages.

Procedurally, to implement marine fuel taxation the EU Energy Tax Directive (2003/96/EC) must be revised to remove the current bans under Article 14(1)(c) on taxation of marine fuel sold to ships on the EU territory. However, ETD revision requires unanimity voting in the Council of the EU, allowing any single member state to block the revision. Unlike ETD, the revision of the ETS Directive or MRV Regulation can be achieved by a qualified majority in the Council under the ordinary legislative procedure (OLP). Hence, no single country could block the legislation.

Therefore, EU ETS presents, practically and procedurally, a more effective mechanism to apply carbon

pricing to shipping.

Further information

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