Questions & Answers on greenhouse gas emissions from shipping

1. What initiatives to address maritime emissions has the Commission taken today?

The European Commission has today adopted a Communication\(^1\) setting out a strategy for progressively including greenhouse gas (GHG) emissions from maritime transport in the EU's policy for reducing its overall GHG emissions.

As a first step in implementing this strategy, the Commission has proposed a Regulation which would establish an EU-wide system for the monitoring, reporting and verification (MRV) of carbon dioxide (CO\(_2\)) emissions from large ships starting in 2018. The draft Regulation requires approval by the European Parliament and Council to become law.

2. Why is action needed to reduce maritime shipping emissions?

While shipping is more fuel-efficient than other transport sectors, its GHG emissions are significant and growing fast. Without action, maritime GHG emissions are expected to more than double by 2050, due to anticipated growth in the world economy and associated transport demand.

Emissions from maritime transport account for 3% of global GHG emissions today and this share is expected to reach 5% by 2050. At EU level, the international maritime sector today accounts for 4% of GHG emissions and these are also expected to increase significantly in the future. Such growth would undermine the efforts by other sectors to cut the EU’s overall GHG emissions.

3. Why is the Commission proposing measures at EU level, not internationally?

The European Union and its Member States have consistently supported ambitious international action to address climate change. They are actively engaged in current discussions within the International Maritime Organization (IMO) to develop energy efficiency standards for existing ships and on other medium- to long-term measures. Monitoring and reporting proposals are part of this gradual approach.

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\(^1\) Integrating maritime transport emissions in the EU's greenhouse gas reduction policies
The EU has a strong preference for a global approach to maritime emissions led by IMO. The EU and its Member States are working closely in IMO with the USA, Japan, Australia, Canada, Russia, Korea and others on these issues.

Consistent with this international cooperation, the EU system of MRV for shipping emissions is designed as a concrete contribution to building an international system. First steps in this direction have recently been taken at the IMO, with active support from the EU and partner countries. By yielding further insights into the sector's potential to reduce emissions, an MRV system will also provide new opportunities to agree on efficiency standards for existing ships.

The Commission's proposal combines monitoring of data on CO2 emissions with other data related to energy efficiency. This will facilitate the alignment of the EU scheme with any IMO system agreed in future.

4. What does the Commission's progressive approach to addressing maritime emissions consist of?

The strategy set out in the Communication consists of three consecutive steps:

- The system of MRV of emissions proposed today;
- The setting of reduction targets for the maritime transport sector;
- The application of further measures, including market-based measures (MBMs), in the medium to long term.

Priority is given to establishing an MRV system because it is necessary for the other two steps. Robust MRV of emissions will deliver robust data for setting emission reduction targets. It is also a prerequisite for any market-based measure or efficiency standard, whether applied at EU level or globally.

5. What are the costs and benefits of the proposed MRV system?

The Commission's analysis of the proposal shows the MRV system will be economically profitable for the shipping sector. The predicted fuel cost savings would outweigh the cost of monitoring, reporting and verification of emissions, leading to net cost savings of up to €1.2 billion a year by 2030.

The MRV system would also reduce emissions by up to 2% compared with a 'business as usual' scenario. By providing reliable data on ships' fuel consumption and emissions, the system would encourage the sector to implement technical and operational measures for reducing emissions and fuel consumption at no (or even negative) cost. Such measures are already available but not sufficiently used. Their uptake is currently hampered by market barriers such as lack of information and lack of access to finance.

While yielding environmental and economic benefits, the EU MRV system is also designed to contribute actively to an IMO agreement on global measures to reduce shipping emissions based on MRV systems.
6. What are the expected impacts on trade?
As the MRV system is expected to trigger efficiency gains, maritime transport costs would decrease compared with business as usual. Extra-EU trade would particularly benefit since more than 90% of it is transported by ship.

7. What journeys will be covered by the monitoring and reporting obligations?
The application of the MRV rules will follow the principles of international maritime law in that it will be applied in a non-discriminatory manner to all ships regardless of their flags. From 1 January 2018, CO₂ emissions and fuel efficiency will need to be monitored for:

- all intra-EU Union voyages (i.e., those between ports under the jurisdiction of an EU Member State)
- all incoming voyages from the last non-EU port to the first EU port of call;
- all outgoing voyages from an EU port to the next non-EU port of call.

After being monitored, this data will need to be independently verified and then reported to the Commission and the ship’s flag state.

Emissions from vessels within ports will also need to be monitored, reported and verified. This is intended to encourage the use of available shore-based emission-reduction technologies.

8. What obligations will the Regulation impose on ship owners, and by when?
The monitoring and reporting obligations will apply by calendar year.

Annual emissions and other relevant information from shipping activities will need to be collected from 2018 onwards. This will be done according to the methodology agreed in each ship’s monitoring plan. The data will then need to be verified by an accredited verifier and reported to the Commission and to the ship’s flag State.

Verified emission reports for shipping activities in 2018 covered by the EU Regulation are to be submitted by 30 April 2019.

By 30 June of each year, starting in 2019, ships covered by the Regulation will have to carry on board a valid document confirming compliance in the previous year with the monitoring and reporting obligations. Flag state and Port State authorities will check ships’ compliance through inspections.

Ship owners can choose from a list of four monitoring methods. Depending on their choice, monitoring could be entirely based on documents and data which are already carried on all ships today, such as bunker fuel delivery notes.

9. Are non-EU ships also covered? What about small ships?
The Regulation will cover all types of ships above 5000 gross tons with the exception of the following categories, which are fully exempted: warships, naval ships, ships for catching or processing fish, ships not propelled by mechanical means, yachts and government ships for non-commercial purposes.
Based on the principles of non-discrimination and flag neutrality, the Regulation will apply to any such ship calling at any EU port, irrespective of where it is registered.

The 5000 gross ton threshold means that only large ships emitting significant levels of emissions will be covered. The threshold has been selected after a careful and objective analysis aimed at avoiding administrative burdens on small and medium-sized ships which do not produce significant emissions. The Commission estimates that the MRV requirements will apply to 90% of the CO2 emissions arising from voyages to, from and between EU ports, and to around 55% of ships calling at EU ports.

10. What types of data will be collected?

The primary objective is to collect data on CO2 emissions, which will help raise the sector's awareness of its contribution to climate change. Accordingly, the amount and type of fuel consumed by ships on routes covered by the Regulation are the core data to be collected.

Ship owners will also have to provide information on distance travelled, cargo carried and time spent at sea, in particular to obtain a general overview of ships' average energy efficiency. This will facilitate the alignment of the EU regulation with the on-going IMO discussions, which focus on enhancing the energy efficiency of the sector.

The proposed MRV system will not cover other GHGs besides CO2 nor air pollutants since measuring equipment for these is currently not sufficiently reliable. However, the scope could be expanded at a later stage, in order to clarify and simplify monitoring and reporting requirements.

11. When will the Regulation enter into force?

The proposal will be discussed by the European Parliament and Council under the co-decision procedure. This can take one to two years before agreement is reached and legislation adopted.

The Commission proposes that the Regulation enters into force in July 2015. This would allow the Commission and Member States to prepare the necessary measures through implementing and delegated acts, but no specific obligations for ship owners would arise at that moment. The MRV obligations will apply to shipping activities carried out from 1 January 2018.

12. What if IMO adopts a global framework for maritime emissions?

The likely timeline for the Regulation's adoption leaves ample opportunity for the IMO to make progress before the EU rules come into force. Moreover, in the draft Regulation the Commission specifically states its intention to propose amendments to take into account progress towards an international agreement on global measures to reduce GHG emissions from maritime transport.