

Maritime Issues - Internal regulation on ship emissions: The MEPC 74 continues to develop the IMO' s initial strategy for reducing CO2 emissions - IMO and Norway launch GreenVoyage-2050 Project

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【概要 : Summary】

Although maritime transport is considered being by far the most energy-efficient transport mode on a per tonne-km basis, the shipping industry produces around 2.2% of global GHG emissions. Since shipping is explicitly excluded from the UNFCCC's COP21 Paris agreement of future CO2 emission reduction, the International Maritime Organisation (IMO) has the responsibility to take measures for reducing global GHG emissions from maritime transport. In the past years, the pressure increased for the IMO to take action to reduce the sector's GHG emissions. The IMO's 70th session of the Marine Environment Protection Committee (MEPC 70) formally adopted the new mandatory fuel consumption data collection system for ships. It also approved a 2017-2023 roadmap for developing an IMO strategy on the reduction of GHG emissions.

The IMO's MEPC 72 adopted the initial strategy on GHG emission reduction for international shipping and guiding principles on 13 April 2018. It also decided to reach a 50% CO2 emission reduction for the international maritime shipping by 2050. The MEPC 73 continued the work on the initial strategy and approved a programme of follow-up actions. Most recently, the MEPC 74 considered the implementation of the IMO's initial GHG strategy on the reduction of GHG emissions from ships. Candidate short-, mid- and long-term measures with possible timelines and their

impacts on States were listed, based on the MEPC 73's approved programme of follow-up actions up to 2023. The MEPC 74 reached some meaningful changes to the Energy Efficiency Design Index (EEDI) framework, as the tightening of energy efficiency targets for some new ships is a necessary step to reduce GHG emissions. The MEPC 74 also agreed on the terms of reference for the 4th IMO GHG study and considered concrete proposals for short-term measures including speed reduction. However, no final decisions were taken on the short-term measures. Therefore, the next MEPC 75 will have to consider energy efficiency measures for existing ships to reduce GHG emissions in short-term, as well as medium- and long-term measures. Finally, the IMO and Norwegian government launched the joint GreenVoyage-2050 project with the aim to provide technical assistance and to promote green technology to states with the aim to reduce GHG emissions. The GreenVoyage-2050 project is expected to increase in scope to accelerate implementation of the initial GHG strategy.

However, if the IMO's measures and ambitions to reduce GHG emissions from maritime transport will be sufficient to avoid unilateral action by the EU under the EU-ETS remains to be seen.

【記事 : Article】

1. IMO' s preparation for reducing GHG emissions and the initial GHG strategy

The maritime transport's GHG emissions fall into the IMO's responsibilities and with some delay, the IMO finally decided in 2016 to develop a GHG Roadmap. At its 70th meeting, the MEPC formally adopted the new mandatory fuel consumption data collection system. The MEPC's 71st meeting adopted Guidelines for data verification procedures to be utilized by administrations for the verification of annual fuel oil consumption data. The focus was set on ships of 5,000 gross tonnage and above because they account for approximately 85% of CO2 emissions from international shipping. The data collection began on 1 January 2019 and data will be reported to the IMO at the end of each calendar year.

On 13 April 2018, the IMO's MEPC 72 adopted the initial strategy on GHG emission reduction for international shipping and guiding principles. The initial strategy on the reduction of GHG emissions from ships aims at reducing the total shipping sector's GHG emissions by "at least" 50% by 2050, from 2008 levels. The initial strategy identifies levels of ambition for the international shipping sector. It should, firstly, reduce the carbon intensity of ships through implementation of further phases of the EEDI for new ships, among others. Secondly, it includes a reduction of CO2 emissions per transport work, as an average across international shipping, by at least 40% by 2030, and towards 70% by 2050, compared to 2008. Thirdly, the GHG emissions from international shipping should peak and decline as soon as possible, besides achieving a reduction of the total annual GHG emissions by at least 50% by 2050 compared to 2008. The MEPC 73 continued the work on the initial strategy by approving a programme of follow-up actions and a follow-up programme, including candidate short-term measures (Group A) that can be considered and addressed under existing IMO instruments; candidate short-term measures (Group B) that are not work in progress and are subject to data analysis; and candidate short-term measures (Group C) that are not work in progress and are not subject to data analysis. The MEPC 73 invited the MEPC 74 to consider concrete proposals on candidate short-term measures. Also the

Fourth IMO GHG Study, should be initiated in 2019.

2. EU measures to reduce CO2 emissions from shipping

In 2011, the IMO adopted mandatory energy-efficiency measures with technical and operational requirements for new and existing vessels with the adoption of amendments to MARPOL Annex VI (resolution MEPC.203 (62)), including the EEDI and the Ship Energy Efficiency Management Plan (SEEMP). However, since the progress in setting up a regulation for reducing GHG emissions from shipping at international level was too slow, the EU introduced Regulation (EU) 2015/757, on the monitoring, reporting and verification of CO2 emissions from maritime transport as of 2018. Large ships above 5000 gross tonnage using EU ports are required to report their verified annual emissions and other relevant information. Furthermore, the EU also called on the IMO to have a system in place as of 2021 for global shipping, comparable to EU-ETS, otherwise the shipping sector could become part of the EU-ETS, starting from 2023. The IMO prepared the introduction of a global GHG emission reduction schemes and measures also in order to avoid such unilateral, regional measures as planned by the EU.

However, regarding the aim to reduce GHG emissions from shipping, also in the EU, Member States including Malta, Greece and Cyprus with the largest registered tonnage perform the worst on climate ambition. Instead, Germany, Belgium and France, the Netherlands, Spain, Sweden, UK, Denmark, Luxembourg and Finland demonstrated higher ambitions within the IMO negotiations.

At the MEPC 72, some of the EU Member States, which are IMO member states, along with the Marshall Islands, the world's second-biggest ship registry, supported a goal of cutting GHG emissions by 70 to 100% by 2050, compared with 2008 levels. However, the opposition from in particular the US and Saudi Arabia, but also from Brazil and Panama limited the achievements at the MEPC 72.

Meanwhile, on 4 February 2019, the European

Commission adopted a proposal for a regulation to revise the EU system for monitoring, reporting and verification of CO₂ emissions from maritime transport (Regulation (EU) 2015/757). This proposal COM (2019) 38/F1 aims at taking appropriate account of the global data collection system for fuel oil consumption of ships, and to facilitate the harmonious implementation of the EU and IMO systems.

3. The MEPC 74 decisions on measures for reducing GHG emissions from maritime transport

The IMO's MEPC 74 from 13 to 17 May 2019 considered a number of measures to supporting the objectives of the IMO's initial strategy for reducing the GHG emissions from ships. The MEPC 74 confirmed the IMO's commitment to reducing GHG emissions from international shipping. In particular, the MEPC 74 approved, among others, amendments to strengthen existing mandatory requirements for new ships; initiated the 4th IMO GHG Study; adopted a resolution on encouraging cooperation with ports to reduce emission from shipping and agreed terms of reference for the sixth and seventh intersessional working groups in November 2019 and in March 2020, respectively. The MEPC 74 also discussed possible candidate short-term, mid- and long-term measures for reducing GHG emissions with possible timelines and their impacts on States. Regarding the EEDI and energy saving related issues, the MEPC 74 approved draft amendments to two relevant regulations in MARPOL Annex VI and a new paragraph 3 was added to Reg. 20 of MARPOL. The MEPC 74 approved the time period and the reduction rates for EEDI phase 3 requirements for certain ship types. Due to a lack of time, considerations of a paper on technical consequences of EEDI on ship machinery design and new issues as a result of introduced changes was deferred to MEPC 75. The MEPC 74 adopted a resolution to encourage voluntary cooperation between ports and shipping, in order to contribute to reducing GHG emissions from ships. ^[1]_{SEP}A procedure for assessing the impact of candidate measures on states, particularly for less developed countries (LDCs) and small island

developing states (SIDs), was agreed and approved.

^[1]_{SEP}The terms of reference for the 4th IMO GHG Study were agreed. The study will focus on the latest inventory and forecast scenarios for GHG emissions from ships. However, while there were proposals for short-term measures for emission reduction, mostly concerning operational and technical efficiency, as well as speed limits, the MEPC 74 did not take any final decisions, as major economies including China, India, the US, were hesitant to support initiatives such as mandatory speed limits. Instead the MEPC 74 left much of the negotiations for the MEPC 75 in 2020.

However, a working group on reducing GHG emissions was established during MEPC 74, with one of its tasks to consider and prioritise a range of short-term measures to reduce GHG for shipping. In order to consider the demands for urgent action to tackle the climate emergency, two inter-sessional meetings on GHG emissions will be held in November 2019 and one week before the MEPC 75.

These two inter-sessional meetings are tasked to consider measures on operational energy efficiency, on reduction of methane slip and emissions of volatile organic compounds and the uptake of alternative, low-carbon and zero carbon fuels, among others. The IMO will have to take a decision on the implementation of immediate measures by summer 2020 in order to achieve short-term GHG reductions.

4. The GreenVoyage-2050 Project

Meanwhile, the IMO and the Norwegian government launched the so-called GreenVoyage-2050 Project. On 13 May 2019, the Specialist Director of the Norwegian Ministry of Climate and Environment Sveinung Oftedal signed the GreenVoyage-2050 Project as collaboration between IMO and the Government of Norway to support the IMO's initial strategy to reduce GHG emissions from maritime transport. In the GreenVoyage-2050 Project's initial period of two years, global efforts will concentrate on testing of technical solutions for reducing GHG emissions in shipping. It is also expected to enhancing knowledge and information sharing to support the IMO's GHG reduction strategy.

The GreenVoyage-2050 aims at including more than 50 countries in 14 sub-regions. In the initial pilot stage, eight countries, from five high-priority regions (Asia, Africa, Caribbean, Latin America and Pacific), are expected to undertake actions at national level. GreenVoyage-2050 is expected to eventually include more demonstration and infrastructure efforts, and will also have more pilot countries to join the project.

The project will also build capacity in developing countries, including small island developing states (SIDS) and least developed countries (LDCs) in order to help to fulfil their commitments to meet climate-change and energy-efficiency goals for international shipping.

The Norwegian government supports the project with NOK 10 million (USD 1.1 million) for the initial two years. Subject to government approval, Norway will commit to providing additional funding for 2020 and for the following years of the project.

5. Conclusion

Regarding the introduction of measures to reduce GHG emissions from maritime transport, the IMO has been postponing the introduction of measures to tackle the GHG emissions for the past decade. Only in April 2018, the IMO's MEPC 72 decided to adopt the initial strategy to reduce GHG emissions from shipping by 50% by 2050, based on 2008 figures. The new mandatory data collection system for reporting the ship fuel oil consumption data is intended to be the first in a three-step approach under the roadmap towards 2023. The new mandatory data collection system and the adoption of the strategy to reduce GHG emissions from shipping at the MEPC 72 were very important steps to avoid any regional and unilateral steps to reduce the shipping industry's GHG emissions. For the time being, the IMO seems to have succeeded in taking the right decisions to avoid unilateral action by the EU to include maritime transport's GHG emissions in the EU-ETS. However, the IMO's initial GHG strategy does not give a schedule for the set up of legal restrictions on CO2 output. Rather, it is a framework

for IMO member states to set levels of ambition to reduce GHG emissions. The MEPC 74 has agreed to tighten energy efficiency targets for new vessels across seven ship types in total, as a long-term climate measure, which is seen as a modest and necessary step to reduce the maritime transport's impact on climate change. The measure could reduce CO2 emissions by about 750 million tonnes of CO2 cumulatively from 2022 to 2050. However, so far the MEPC has not taken any decision on short-term measures to reduce GHG for shipping, with the MEPC 74 postponing again the discussion to two inter-sessional meetings on GHG emissions in November 2019 and in spring 2020. With the EU waiting for the IMO's results by 2021 in order to eventually deciding on the introduction of unilateral GHG emissions reduction measures in maritime transport, it is important to present IMO actions and concrete mandatory measures that could enter into effect by 2023. Projects like the GreenVoyage-2050 Project could support the IMO's initial strategy to reduce GHG emissions from maritime transport and could play a bigger role for achieving some results in the short-term GHG emission reduction.

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