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IMO Decisions to Enhance the Blue Economy

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The 70th session of the Marine Environment Protection Committee (MEPC) was held from 24-28 October 2016, at International Maritime Organisation (IMO) Headquarters in London. The meeting adopted key decisions which are likely to have a long-lasting effect on the marine environment and would contribute to enhancing the Blue Economy.

Among these, three landmark decisions deserve a mention.

Date of implementation of Global Sulphur Cap

Ships use Heavy Fuel Oil (HFO) which has high sulphur content and contributes to air pollution in the form of sulphur oxide (SOx) emissions. Under regulation 14 of Annex VI to MARPOL73/78 adopted in 2010 (applicable to all 171 IMO member states), the limit on the use of sulphur content in fuel used onboard ships has been progressively reduced from 4.5 percent (mass/mass) in 2011 to 3.5 percent on 01 Jan 2012 and this limit was to be further lowered to 0.5 percent in 2020. However, there was a provision in the regulations that the date of implementation could be deferred from 2020 to 01 Jan 2025. This decision was to be finalized by 2018 and was subject to an assessment of the availability of sufficient quantity of low sulphur fuel.

In order to limit SOx emissions, ships have the option of choosing amongst three alternate measures: first, to use low-sulphur compliant fuels such as Marine Gas Oil (MGO) or Marine Diesel Oil (MDO); second, to switch to liquefied natural gas or biofuels such as methanol by using dual fuel engines; and third, to use exhaust gas “scrubbers”, which prevent the release of SOx emissions into the atmosphere. While ships were free to

choose the most feasible technical option, it was a decision which was often based on the cost of implementing the solution.

The ambiguity in the date of implementation of the 0.5 percent limit, was leading to uncertainty in the minds of ship owners who were undecided about which technology to install onboard new ships which were yet to be ordered. On the other hand, this uncertainty was also reflected on the investment decisions of oil refiners who were unsure about the demand of low sulfur fuel for the shipping industry and were hesitating to invest in modification of the refineries which would enable them to produce bulk quantities of low sulfur fuel for the shipping industry. With the finalization of the decision for implementing the 01 Jan 2020 deadline, there is no further regulatory uncertainty and oil refineries can now invest in suitable infrastructure to meet the anticipated increase in the demand of low sulfur fuel for shipping. It also gives various actors and stakeholders time to prepare for a smooth transition to lower emissions. With this far reaching decision, it is hoped that sufficient measures can be implemented well in time so that there are no spikes in the cost of low sulphur fuel closer to 01 Jan 2020. While the supply and growth in the demand of clean fuels is a 'waiting game' between refiners and ship owners, the writing on the wall is evident that the demand for clean fuels will continue to grow during transition of the shipping industry.

The price of the low sulfur fuel is expected to higher by 50-100% than the HFO (a slightly lower cost differential exists for other alternatives to lower SOx emissions) which would lead to increased cost of operations for ship charters, implying lower profits. In order to offset the high cost of low sulfur fuel it is likely that freight rates would be increased leading to an overall increase in the cost of transportation by ships. On the other hand, this is likely to encourage adoption of green shipping and would stir investments in ship efficiency.

Roadmap for reducing GHG Emissions from Ships

The IMO has been leading efforts to lower GHG emissions from shipping and in 2011 it was the first industrial sector to adopt mandatory energy-efficiency measures. As a consequence, by the year 2025, all new ships built will be 30% more energy efficient than those built in 2014. Continuing its efforts, the MEPC approved a 'Roadmap' for developing a "Comprehensive IMO strategy on reduction of GHG emissions from ships" which would be applicable from 2017 through to 2023. The approved strategy follows a

three-step approach and would be adopted in 2018. The first step involves 'data collection', which would be followed by 'data analyses' in phase 2. These would form the basis for 'policy decisions' in phase 3. Various activities are planned with relevant timelines including implementation schedules as part of the three-step approach for improving energy efficiency onboard ships.

Adoption of data collection system for fuel oil Consumption

As the first step of the strategy, the MEPC adopted an amendment to chapter 4 of MARPOL Annex VI which would enter into force on 01 March 2018. Under the new Regulation 22A on collection and reporting of ship fuel oil consumption data, it is now mandatory for ships of 5,000 gross tonnage and above to collect, record and report the fuel consumption data used onboard ships, the cargo carried, and the distance travelled in each voyage. This data would have to be reported to the flag State at the end of each calendar year for verification which will then report the compiled data to the IMO ship fuel oil consumption database.

The mandatory reporting of fuel consumption data addresses a vital data gap and would enable a detailed assessment and analysis of energy efficiency onboard ships. As evident from the IMO GHG 3 study, there was some uncertainty in calculating emissions from shipping due to lack of consistent fuel consumption data. It is hoped that this amendment will provide reliable data over the next few years which would help the IMO to take an informed decision about the fair share of the shipping sector to mitigate GHG emissions under the Paris climate agreement.

The landmark decisions taken by the IMO has reduced policy uncertainty and signals a clear intent that the shipping industry is committed to environmental protection. These efforts also contribute to the UN Sustainable Development Goal (SDG) 13 on combatting climate change as well as SDG 14 on using the oceans for sustainable development. The IMO decisions are likely to encourage investments, infuse new technology, generate jobs and spur innovation thereby catalyzing the development of the Blue Economy.

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