IUMI Policy Agenda

11. Safe decarbonisation and alternative fuels

Brief description

Climate change is considered one of the most pressing issues of our time. It has also been identified by IUMI as a major concern to marine insurers. The effects of global warming are already evident and are changing the nature of the insured assets. The frequency of weather-related catastrophes has increased significantly which drives up losses and leaves some assets uninsurable. The potential impact of climate change is therefore a fundamental issue for regulators.

The shipping sector accounts for approx. 3% of global CO_2 emissions. International agreements on the need to combat climate change require the reduction of greenhouse gas emissions from shipping. In addition to regulatory pressures from the IMO, other stakeholders such as banks, charterers and the broader public are setting requirements for the environmental performance of vessels, for instance in connection with the financing of new ships and new chartering agreements. Therefore, the industry must examine low and zero carbon ship propulsion systems taking into account the entire value chain, not just the combustion cycle.

There is currently no agreement on which fuel or fuels will be favoured and there can be very little progress without political support for the necessary infrastructure which is internationally absent. Notwithstanding the imperative of the green energy transition, it is crucial for carriers to assess potential safety concerns associated with measures to reduce the carbon footprint. Proper risk management is critical and safety must not be an afterthought.

In April 2018, the IMO adopted the Initial IMO Strategy on the reduction of GHG emissions from vessels. A revised Strategy was adopted by MEPC 80 in July 2023, setting a well-to-wake target of net-zero GHG emissions by 2050. Interim goals were agreed with a 20% reduction by 2030 (compared with 2008), including a 40% carbon intensity reduction target and 5% uptake of net-zero technologies, fuel and/or energy savings, and 70% reduction by 2040. During its 83rd session in April 2025, the MEPC approved measures for a new fuel standard for ships and a global pricing mechanism for emissions. Under the draft regulations, ships will be required to comply with:

- Global fuel standard: Ships must reduce, over time, their annual greenhouse gas fuel intensity (GFI) – that is, how much GHG is emitted for each unit of energy used. This is calculated using a well-to-wake approach.

- Global economic measure: Ships emitting above GFI thresholds will have to acquire remedial units to balance its deficit emissions, while those using zero or near-zero GHG technologies will be eligible for financial rewards.

The extraordinary session of the MEPC in October 2025 during which the new rules were expected to be adopted was adjourned due to growing pressure from some IMO Member States opposing them. The future of the Net-Zero Framework is now uncertain and further negotiations will take place in the run-up to the next MEPC extraordinary session which is due to take place in October 2026. The postponement leads to further uncertainty in the shipping industry and may cause a patchwork of various regional regulations.

The Fourth IMO GHG Study 2020 is the first IMO greenhouse gas study published since the adoption of the Initial IMO Strategy on reduction of GHG emissions from ships. It demonstrates that whilst further improvement of the carbon intensity of shipping can be achieved, it will be difficult to reach IMO's 2050 GHG reduction ambitions through energy-saving technologies and speed reduction of ships. Therefore, under all projected scenarios, in 2050, a large share of the total amount of CO_2 reduction will have to come from the use of low-carbon alternative fuels.

In February 2023, IUMI co-sponsored a proposal for a new output at the IMO to undertake a regulatory assessment of safety aspects associated with reducing GHG emissions from vessels in line with the Organization's strategy and to develop a road map to support the safe delivery of IMO's strategy. The proposal was agreed by the Maritime Safety Committee in June 2023 and continued in a Correspondence Group in which IUMI participated.

In December 2024, the International Group of P&I Clubs and CMI along with several member states proposed to the IMO Legal Committee (LEG) a new output on the suitability of IMO liability and compensation regimes with respect to alternative fuels. The proposal was accepted and will be included in the provisional agenda for LEG 113 (2026) with a target completion year of 2027. An informal Correspondence Group had been established to structure the work in which IUMI participated.

The Marine Environment Protection Committee (MEPC) adopted in June 2021 a measure demanding energy efficiency requirements on existing vessels starting from 2023, and the introduction of carbon intensity targets for vessels with a first reporting deadline in March 2024.

In September 2021, the IMO's Sub-Committee on Carriage of Cargoes and Containers (CCC) initiated the development of guidelines on the safety of vessels using hydrogen as fuel under the International Code for Ships using Gases or Other Low-flashpoint Fuels (IGF Code). The guidelines address both liquefied and compressed fuel. The Sub-Committee plans to further develop and finalize the interim guidelines on hydrogen as fuel for approval at MSC 111 in 2026. In December 2024, the Maritime Safety Committee approved "Interim Guidelines for the safety of ships using ammonia as fuel" which had

also been developed by the CCC Sub-Committee. MSC 109 further adopted amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases (IGC Code) to enable the use of ammonia as fuel on ammonia carriers. The amendments will enter into force on 1 July 2026, but a circular was also approved to encourage voluntary early implementation.

The European Union is implementing its own legislation through their Fit for 55 package. In January 2024, the EU's Emissions Trading System (EU ETS) was extended to cover CO_2 emissions from all large ships (of 5000 gross tonnage and above) entering EU ports, regardless of the flag they fly. In addition, the package includes a requirement for owners to buy cleaner fuels and ports to ramp up supply of shore power and liquefied natural gas (LNG) as fuel.

A significant push for decarbonisation in the maritime industry was made by regulatory authorities but also in the form of various industry initiatives comprised of a diverse range of maritime stakeholders, e.g. the Poseidon Principles for Marine Insurance.

Under the current plans much of the existing fleet is going to be non-compliant with IMO requirements by 2030. Changes in vessel design, fuel and propulsion types, and infrastructure will affect the risk landscape for marine insurers going forward so underwriters must be prepared to assess new risks and potential safety concerns. Moreover, they are likely to play a role as facilitators for decarbonisation by providing guidance and advice to their insureds.

An important aspect of using alternative fuels safely is not only a comprehensive review of risks associated with the new fuels and propulsion methods, but also thorough consideration of how human performance may be influenced by new equipment, new ways of collaboration, and new procedures and processes for bunkering. At the same time, conventional fuel types will be in use for the foreseeable future and until the transition period is concluded. In February 2024, the Sub-Committee on Human element, Training and Watchkeeping (HTW) agreed to develop interim guidance on training for seafarers on ships using alternative fuels.

IUMI will:

- Increase awareness for alternative low and zero carbon fuel types and propulsion methods and contribute towards any necessary safety regulation amendments.
- Will support industry initiatives such as the Poseidon Principles for Marine Insurance which underpin the transition to zero emissions shipping.