

FuelEU Maritime

Road to decarbonizing the maritime transport

WHO ARE WE?



Who are we?

We are CMW - a team of specialists in the fields of maritime law, shipping, seaports, shipbuilding, the TSL sector, the energy and fuel market, as well as real estates, in particular port property.

The founders of CMW have over 25 years of professional experience and an established position both in Poland and on the international legal services market.

We provide comprehensive: legal and tax advisory services, in particular to entrepreneurs and investors, both domestic and foreign. We communicate in English and provide legal assistance to clients in Poland and on international markets.

We also provide legal and tax advice on foreign legal systems and orders through a network of cooperating law firms worldwide.

We have offices in Szczecin and Gdansk.



Who are we?



RAFAŁ CZYŻYK

Managing Partner | Attorney at Law

Bio

Co-founder and Managing Partner of CMW Legal. Graduate of the Faculty of Law at the University of Szczecin. Legal counsel at OIRP in Szczecin (2001). Participant of a number of internships in international law firms in London and New York. In 2002, he completed postgraduate studies in European law.

He specializes and has extensive, practical experience in shipbuilding and off-shore contracts, maritime law, seaports, transport law, shipping, both maritime and land-based, as well as M&A and handling financial transactions.

He regularly appears in proceedings before common courts and arbitration tribunals, both at home and abroad, especially subject to shipping claims arising out of both contracts and torts.

He served for many years as Chairman of the Chamber for the Resolution of Sports Disputes of the Polish Football Association. Member of the legal working group of the European Community Shipowners' Association (ECSA). He has advised the Polish Shipowners' Association (ZAP).

Who are we?



SEBASTIAN KITA

Partner | Attorney at Law

Bio

Partner at CMW Legal and coordinator of CMW's Tri-City office.

Studied and graduated a law degree at the Nicolaus Copernicus University in Torun. Attorney at law at the District Chamber of Attorneys at Law in Gdansk.

He has authored many articles and lectures in the field of shipping and seaports. He was a speaker at the Annual International Maritime Law Seminar in London. Member of the Polish Maritime Law Association.

Specialist and practitioner in the fields of seaports, infrastructure and transport and contractual and non-contractual relationships.

He advises Clients in the field of intellectual property law, in particular in respect of works, patents, trademarks and industrial designs, as well as provides legal assistance in registering trademarks, industrial designs and patents and represents Clients in litigation proceedings before the Polish Patent Office.

He regularly appears in common courts and arbitration tribunals, both Polish and abroad, especially subject to shipping claims arising out of both contracts and torts.

INTRODUCTION



Introduction

In line with the **Paris Agreement** on reaching climate neutrality by 2050, and the **2019 European Green Deal**, in July 2021 the EU adopted the **European Climate Law**, which made the goals of keeping the global temperature increase to well below **2°C** and pursuing efforts to keep it to **1.5°C** legally binding.

EU maritime transport moves 77% of external trade and 35% of all trade by value among the EU countries, while around 9% of the traffic is estimated to be between ports within the same EU country.

Shipping – which transports about 90% of global trade – is, statistically, the least environmentally damaging mode of transport, when its productive value is taken into consideration.

In 2018, shipping generated **2.9%** of global anthropogenic CO₂ emissions. In the EU, ships generated **13.5%** of all GHG emissions from transport in 2018 (compared to 71% from road transport and 14.4% from aviation).



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IMO'S PROPOSALS



Emissions inventory

- The greenhouse gas (GHG) emissions — including carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), expressed in CO₂e — of total shipping (international, domestic and fishing) have increased from 977 million tonnes in 2012 to 1,076 million tonnes in 2018 (**9.6% increase**). In 2012, 962 million tonnes were CO₂ emissions, while in 2018 this amount grew 9.3% to 1,056 million tonnes of CO₂ emissions
- The share of shipping emissions in global anthropogenic emissions has increased from 2.76% in 2012 to **2.89%** in 2018
- Carbon intensity has improved between 2012 and 2018 for **international shipping**. The overall carbon intensity, was approx. **21-29%** better than in 2008. Improvements in carbon intensity of international shipping have slowed since 2015, with average annual percentage changes ranging from 1 to 2%

The IMO Initial Strategy

- Cut annual greenhouse gas emissions from international shipping by **at least half by 2050**, compared with their level in 2008, and work towards phasing out GHG emissions from shipping entirely as soon as possible in this century
- The Initial GHG Strategy envisages a reduction in carbon intensity of international shipping (to reduce CO2 emissions per transport work), as an average across international shipping, by at least **40% by 2030**, pursuing efforts towards **70% by 2050**, compared to 2008
- The Initial Strategy will be revised in 2023



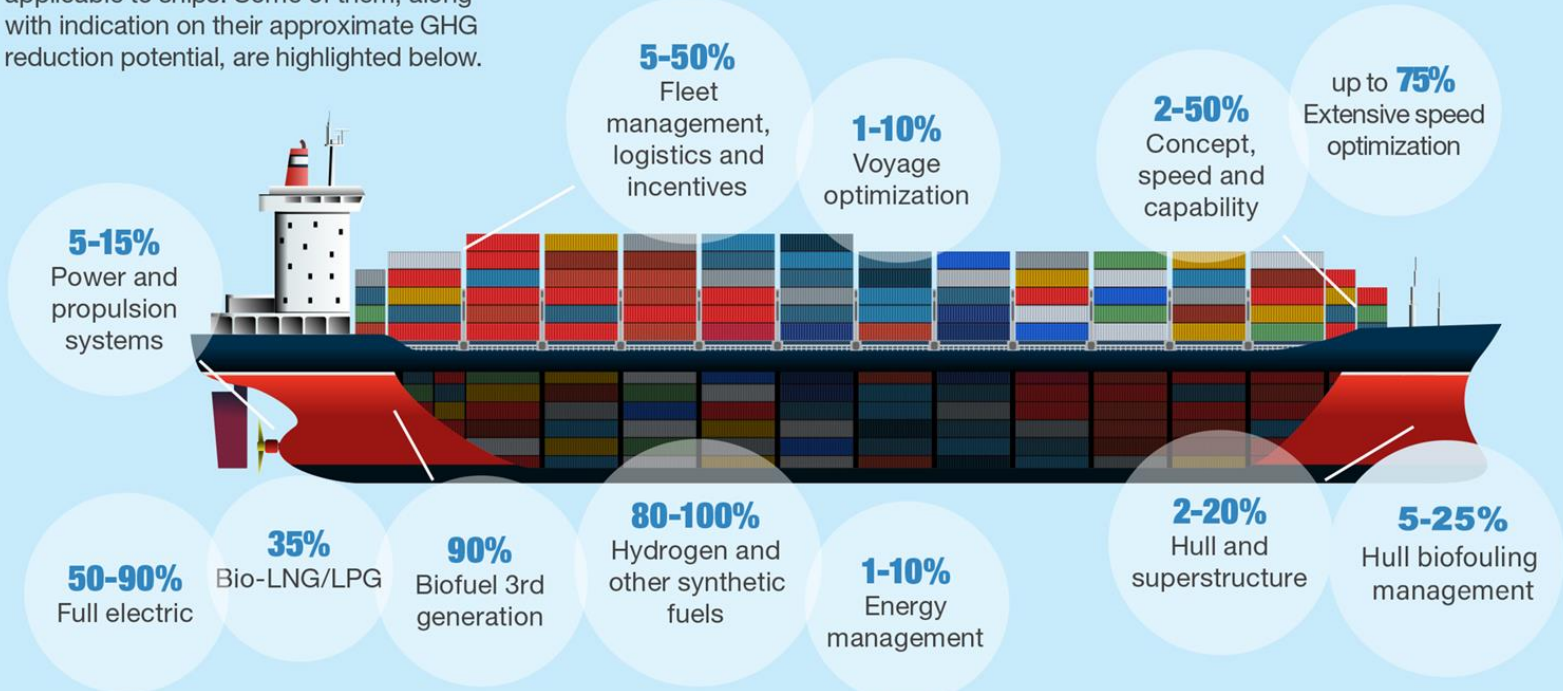
Short term measures

- The short-term measure is aimed at meeting the target set in the IMO Initial GHG Strategy – to reduce carbon intensity of all ships by 40% by 2030, compared to 2008. These will be mandatory measures under MARPOL Annex VI
- Attained Energy Efficiency Existing Ship Index (**EEXI**) is required to be calculated for ships of **400 gt** and above, in accordance with the different values set for ship types and size categories. This indicates the energy efficiency of the ship compared to a baseline. Ships are required to meet a specific required EEXI, which is based on a required reduction factor (expressed as a percentage relative to the EEDI baseline)
- Annual operational carbon intensity indicator (CII) and CII rating

Achieving the goals

A wide variety of design, operational and economic solutions

Achieving the goals of the Initial IMO GHG Strategy will require a mix of technical, operational and innovative solutions applicable to ships. Some of them, along with indication on their approximate GHG reduction potential, are highlighted below.



FIT FOR 55



Definition

- the Fit for 55 package is a set of proposals to revise and update EU legislation and to put in place new initiatives with the aim of ensuring that EU policies are in line with the climate goals agreed by the Council and the European Parliament
- reducing net greenhouse gas emissions by at least **55%** by 2030, compared to 1990 levels
- Europe becoming the world's **first climate-neutral continent by 2050**



EU Emissions Trading System

- has successfully brought down emissions from power generation and energy-intensive industries by 42.8% in the past 16 years
- proposition to lower the overall emission cap even further and increase its annual rate of reduction.
- proposition to phase out free emission allowances for aviation and align with the global Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)
- proposition to include shipping emissions for the first time in the EU ETS
- to address the lack of emissions reductions in road transport and buildings, a separate new emissions trading system is set up for fuel distribution for road transport and buildings
- Member States should spend the entirety of their emissions trading revenues on climate and energy-related projects

Renewable Energy Directive & Energy Efficiency Directive

- an increased target to produce **40%** of energy from renewable sources by 2030
- sustainability criteria for the use of bioenergy are to be strengthened
- public sector will be required to renovate 3% of its buildings
- requiring average emissions of new cars to come down by 55% from 2030 and 100% from 2035 compared to 2021 levels (all new cars registered as of 2035 shall be zero-emission)
- to install charging and fuelling points at regular intervals on major highways: every 60 kilometres for electric charging and every 150 kilometres for hydrogen refuelling

FUELEU MARITIME



Proposal for a regulation

- proposal for a regulation of the European Parliament and of the Council on the use of renewable and low-carbon fuels in maritime transport and amending Directive 2009/16/EC
- the limit on the greenhouse gas intensity of energy used on-board by a ship arriving at, staying within or departing from ports under the jurisdiction of a Member State
- the obligation to use on-shore power supply or zero-emission technology in ports under the jurisdiction of a Member State

Application

- Regulation will apply to all ships above a **gross tonnage of 5000**, regardless of their flag in respect to:
 - i. the energy used during their stay within a port of call under the jurisdiction of a Member State,
 - ii. the entirety of the energy used on voyages from a port of call under the jurisdiction of a Member State to a port of call under the jurisdiction of a Member State,
 - iii. a half of the energy used on voyages departing from or arriving to a port of call under the jurisdiction of a Member State, where the last or the next port of call is under the jurisdiction of a third country.
- Regulation shall not apply to warships, naval auxiliaries, fish-catching or fish-processing ships, wooden ships of a primitive build, ships not propelled by mechanical means, or government ships used for non-commercial purposes

GHG limits

- The yearly average greenhouse gas intensity of the energy used on-board by a ship during a reporting period shall not exceed the limit:
 - 2% from 1 January 2025
 - 6% from 1 January 2030
 - 13% from 1 January 2035
 - 26% from 1 January 2040
 - 59% from 1 January 2045
 - 75% from 1 January 2050



Calculation

- the yearly GHG limit will be based on the average onboard GHG intensity of the fleet in 2020 – to be determined by the EU Commission
- companies will need to calculate GHG emissions per unit of energy used on board, based on their reported fuel consumption and the emissions factors of their respective fuels
- emission intensity of biofuels and biogas, among others, will be determined using the Renewable Energy Directive, whereas fossil fuels should be assessed using FuelEU Maritime's default emission factors

Energy used at berth

- from 1 January 2030, a ship at berth in a port of call under the jurisdiction of a Member State shall connect to on-shore power supply and use it for all energy needs while at berth
- it will apply to all container ships and passenger ships
- exemptions:
 - i. ships that are at berth for less than two hours
 - ii. ships that use zero-emission technologies
 - iii. ships that have to make an unscheduled port call for reasons of safety or saving life at sea
 - iv. ships that are unable to connect to on-shore power supply due to unavailable connection points in a port or because the shore installation at the port is not compatible with the on-board on-shore power equipment

Enforcement



- an electronic database will be implemented by the EU Commission to register the performance and compliance of each ship
- shipping companies are responsible for monitoring the type and amount of energy used in operation and at berth. They must submit to verifiers a standardized emissions monitoring plan for each of their vessels by 31 August 2024. Their records must contain the emissions factors for each type of fuel used at berth and at sea. At the end of April each year, shipping companies will need to submit their data
- accredited verifiers will assess each monitoring plan and calculate the yearly average GHG intensity of a ship's onboard energy and its reflection of yearly targets. The verifier will issue a document of compliance, which must be kept onboard all ships calling at an EU port

PROS AND CONS



Potential advantages



- contribution to addressing the barriers identified in the IMO GHG Strategy, given that the global introduction of alternative fuels will be integral to achieving the agreed levels of ambition
- stimulation of demand for low and zero-carbon marine fuels which is currently negligible
- building economies of scale in the supply of low and zero-carbon marine fuels, potentially bringing down their cost so as to reduce the price spread relative to current fuels
- providing shipowners and operators with an encouragement to use low and zero-carbon marine fuels and so meet the increasing demands of customers looking to reduce the carbon footprint of their supply chains
- supporting development and global consideration of fuel standards for low and zero-carbon marine fuels

Potential disadvantages



- risk of being in conflict with the goal-based approach to reducing the carbon intensity of shipping, reflected in the amendments to MARPOL Annex VI approved by IMO in November 2020
- risk of adopting fuel standards at variance to those agreed globally by IMO and ISO, with respect both to carbon factors and safety standards
- significant challenges of enforcing EU maritime standards among fuel suppliers outside EU jurisdiction which could jeopardise the achievement of the intended emission reductions
- risk of substantially disrupting the international fuel market by certifying which fuel suppliers could and which ones could not refuel ships calling at EU ports (a two-tier market)
- risk of market distortion if smaller companies, and those providing non-scheduled services, are less able to have access to fuels that comply with EU standards

Potential disadvantages



- risk of overly prescriptive emphasis on use of biofuels
- risk that mandating use of certain fuels, with increased costs, diverts resources from more effective CO2 reduction measures for ships
- risk of undermining IMO negotiations to implement the Initial Strategy on Reduction of GHG Emissions from Ships, so setting back global efforts to adopt measures for absolute emissions reduction
- risk of increased political tension with third countries that could potentially lead to trade disputes if this is deemed to be interference with fuel standards adopted and enforced by non-EU States

