

IMO's Regulations to Reduce GHG Emissions and the Subsequent Response Measures

Impact on Ship Finance

Orestis Schinas
oschinas@aegean.gr

Department of Shipping, Trade and Transport
University of the Aegean

October 31, 2023



UNIVERSITY OF THE AEGEAN

Contents

- 1 The Current Regulatory Landscape
 - International Regulation
 - European Regulation
- 2 Sustainable Ship Finance
- 3 Conclusions



The Current Regulatory Landscape



IMO: MEPC80

The way ahead?

Main takeaways:

- 1 Tackling climate change - 2023 IMO GHG Strategy adopted
- 2 Energy efficiency of ships – draft amendments to IMO ship fuel oil consumption Data Collection System (DCS) approved



2023 IMO GHG Strategy I

A decent compromise?

The sentiment...

- *There were high expectations...*
- *there had been strong pressure on the IMO to align its GHG strategy with the UN's strategy of net-zero by 2050...*
- *IMO was expected to adopt an upgraded greenhouse gas (GHG) strategy at this MEPC...*



2023 IMO GHG Strategy II

A decent compromise?

The actual progress...

- ➊ Guidelines on life cycle GHG intensity of marine fuels
- ➋ Interim guidance on the use of biofuels
- ➌ Adopted a revised GHG strategy, the *2023 IMO GHG Strategy*



The actual progress I

not a game changer yet!

Life Cycle Assessment (LCA):

- ten (10) **environmental** aspects are included, but other **social and economic sustainability** aspects may be included at a later stage ← **this could be a game-changer**
- introduce a **Fuel Lifecycle Label (FLL)**, which is a tool to collect and convey the information relevant for the LCA of marine fuels and electricity provided by onshore power supply ← **a sign of operational pragmatism**
- spillovers monitored (see points on land use and IPCC remarks, etc.)



The actual progress II

not a game changer yet!

Interim guidance on the use of biofuels :

- biofuels that have been certified by an international certification scheme, such as ICAO, meeting its sustainability criteria, referring to the sustainability criteria of the CORSIA, and that provide a *well-to-wake* GHG emissions reduction of at least 65% compared to the *well-to-wake* emissions of fossil MGO according to that certification, may be assigned a carbon factor (C_f) equal to the value of the well-to-wake GHG emissions of the fuel according to the certificate multiplied by its lower calorific value (LCV) ← this could be a game-changer
- The recognized documentation for the labelling **sustainable** should be provided along with the **Bunker Delivery Note (BDN)**, to facilitate the verification of the reported biofuel consumption ← another sign of operational pragmatism



The actual progress III

not a game changer yet!

- Biofuels not certified as sustainable or not fulfilling the well-to-wake emission factor criterion should be assigned a C_f equal to the C_f of the equivalent fossil fuel type
- This interim guidance will be withdrawn immediately upon the future inclusion of a well-to-wake GHG methodology for biofuels in the LCA Guidelines.



The actual progress IV

not a game changer yet!

the 2023 IMO GHG Strategy

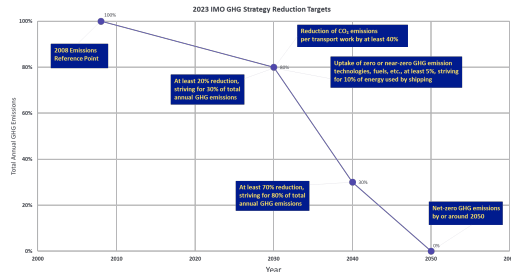


Figure: IMO 2023 GHG Reduction Strategy



The actual progress V

not a game changer yet!

- ① an enhanced common ambition to reach net-zero GHG emissions from international shipping by or around, i.e., close to, 2050, taking into account different national circumstances, whilst pursuing efforts towards phasing them out as consistent with the long-term temperature goal set out in Article 2 of the Paris Agreement.
- ② a review of the carbon intensity of the ship with the aim of strengthening the energy efficiency design requirements for ships;
- ③ an uptake of alternative zero and near-zero GHG emission technologies, fuels and/or energy sources to represent at least 5%, striving for 10%, of the energy used by international shipping by 2030



The actual progress VI

not a game changer yet!

- ④ a mere goal: the reduction of CO₂ emissions per transport work, as an average across international shipping, by at least 40% by 2030 (against 2008)
- ⑤ indicative checkpoint: reducing total annual GHG emissions by at least 20%, striving for 30% by 2030
- ⑥ the developing and finalizing of a basket of candidate measure(s) delivering on the reduction targets comprising of the following;
 - i a technical element, namely a goal-based marine fuel standard regulating the phased reduction of the marine fuel's GHG intensity; and
 - ii an economic element, on the basis of a maritime GHG emissions pricing mechanism.



The European Policy Sandbox I

Europe is preparing and testing the policies of tomorrow:

- 1 The EU Taxonomy
- 2 The Sustainable Finance Disclosures Regulation (SFDR)
- 3 The EU-ETS



The EU Taxonomy I

Europe paves the way...

EU Taxonomy

Regulation (EU) 2020/852 of the European Parliament and of the Council establishes a framework to facilitate sustainable investment

→ mandatory disclosure obligations

- ① financial market participants
- ② undertakings subject to the non-financial reporting directive are anticipated



The EU Taxonomy II

Europe paves the way...

key concepts

- 1 Environmentally Sustainable Economic Activities
- 2 Environmental Objectives
- 3 Screening Criteria



Environmentally Sustainable Economic Activities

- ① Contributes substantially to one or more of the environmental objectives
- ② Does not significantly harm any of the environmental objectives
- ③ Is carried out in compliance with the minimum safeguards
- ④ Complies with technical screening criteria



Environmentally Sustainable Economic Activities

- ① Climate change mitigation;
- ② Climate change adaptation;
- ③ The sustainable use and protection of water and marine resources;
- ④ The transition to a circular economy;
- ⑤ Pollution prevention and control; and
- ⑥ The protection and restoration of biodiversity and ecosystems.



Screening Criteria I

determining whether an activity

- 1 contributes substantially to one or more objectives
- 2 does not significantly harm (DNSH) any of the other environmental objectives



Screening Criteria II

These criteria for maritime transport are divided into the following categories:

- ❶ Inland passenger water transport;
- ❷ Inland freight water transport;
- ❸ Retrofitting of inland water passenger and freight transport;
- ❹ Sea and coastal freight water transport, vessels for port operations and auxiliary activities;
- ❺ Sea and coastal passenger water transport; and
- ❻ Retrofitting of sea and coastal freight and passenger water transport.



Screening Criteria III

the activities related to maritime transport cover purchase, financing, leasing, rental and operation of:

- 1 Inland passenger water transport and sea and coastal freight
- 2 Sea and coastal freight, vessels for port operations and auxiliary activities, such as tugboats, mooring vessels, pilot vessels, salvage vessels and ice-breakers.
- 3 Sea and coastal passenger water transport.



Screening Criteria IV

Important notice 1

there is a requirement in both Annex 1 (climate change mitigation) and Annex 2 (climate change adaption) that deep-sea, short-sea and inland water vessels are **not engaged in the carriage of fossil fuels**.

Important notice 2

so far yachting and cruise ships are exempted from the Taxonomy - this is an issue! Is DNSH certificate a possible circumvention?



The SFDR Regulation I

Reporting becomes a challenge....

EU Taxonomy

Regulation (EU) 2019/2088 aims to increase sustainability transparency within the finance industry by requiring financial institutions to offer standardized Environmental, Social, and Governance (ESG) disclosures to investors.



The SFDR Regulation II

Reporting becomes a challenge....

- ① The SFDR became applicable on 10 March 2021. Its scope captures financial market participants and financial advisers operating in the EU. It sets specific rules for how and what sustainability-related information they need to disclose.
- ② Aims to reduce greenwashing, enhance transparency, and promote the flow of capital towards more sustainable assets.
- ③ All financial market actors in the EU fall under the scope of SFDR regulations.
- ④ It also classifies investment funds under three articles according to the funds' sustainability focus:
 - Article 6: Funds without a sustainability scope or mandate
 - Article 8: Funds supporting ESG initiatives.
 - Article 9: Funds with explicit sustainability objectives.



The EU-ETS I

Introducing the Carbon Price....

- ❶ The EU Emissions Trading System (EU ETS) will be extended to maritime transport emissions from 2024.
- ❷ The new rules entered into force on 5 June 2023.
- ❸ The EU Emissions Trading System, together with the monitoring, reporting and verification (MRV) of ships' emissions, are one of the Commission's main tools to reduce GHG emissions in maritime transport
- ❹ Shipping companies must surrender (use) their first ETS allowances by 30 September 2025 for emissions reported in 2024. The share of emissions that must be covered by allowances gradually increases each year:
 - 2025: 40% of emissions reported for 2024 must be covered by emission allowances
 - 2026: 70% of emissions reported for 2025
 - 2027 and beyond: 100% of reported emissions



Sustainable Ship Finance



Sustainable finance I

A novelty or a buzzword?

a formal definition

Sustainable finance refers to the process of taking environmental, social and governance (ESG) considerations into account when making investment decisions in the financial sector, leading to more long-term investments in sustainable economic activities and projects.

Environmental considerations : climate change mitigation and adaptation, preservation of biodiversity, pollution prevention, and the circular economy.

Social considerations : inequality, inclusiveness, labor relations, investment in human capital and communities, as well as human rights issues.

Governance considerations : management structures, employee relations, and executive remuneration

In a nutshell: ESG consideration (must) play a fundamental role in the decision-making process.



Sustainable finance II

A novelty or a buzzword?

Why is Sustainable Finance **important**?

Sustainable finance has a key role to play in delivering on the policy objectives under the European Green Deal as well as the EU's international commitments on climate and sustainability objectives. It does this by channeling private investment into the transition to a climate-neutral, climate-resilient, resource-efficient and fair economy, as a complement to public money. Sustainable finance will help ensure that investments support a **resilient economy**. The European Union strongly supports the transition to a low-carbon, more **resource-efficient** and sustainable economy and has been at the forefront of efforts to build a financial system that supports sustainable growth.

Source: EU - Green Deal



UNIVERSITY OF THE AEGEAN

Conclusions



Conclusions

Policy Developments

IMO

- Strengthening of shipping's GHG emission targets in 2050 from a 50% reduction in emissions vs 2008 to net zero emissions
- Emission targets are set to be measured on a well to wake basis
- New target for zero/near-zero emission fuels to account for at least 5%, striving for 10%, of total international shipping energy use by 2030
- Guidelines adopted setting out the methodology for calculation of lifecycle GHG emissions of marine fuels
- Approval of amendments to the Data Collection System (DSC) to facilitate collection of more detailed data on fuel consumption

Europe

- The EU Taxonomy influences investment decisions and credit policies.
- The SFDR enhances transparency and mandates standardized ESG disclosures to investors
- The EU-ETS as cap-and-trade system introduces shipping to the market and logic of allowances
←carbon has a price!



Conclusions

Impact on Ship Finance

- greening is a statutory requirement → owners (borrowers) **must** comply
- investors and lenders allocate funds as per carbon policies ← **impact of ESG on Fls**

the unique opportunity

carbon has a price ⇒ permission to trade → opportunity to:

- ① diversify → *built new ships* or *retrofit* existing ones → ↓ consumption ↑ efficiency → ↓ CO_{2eq} emissions
- ② gain from carbon trading
- ③ attract investors through effective ESG policies (and reporting)



Thank You for Your Attention!
Happy to answer your questions!

