



Transport Malta



Addressing Greenhouse Gas Emissions from Ships - Developments in the International Legal Framework

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Overview / structure

- Existing legal framework for emissions
- Recent developments at EU and international level
- Work in progress aimed at the reduction of GHG emissions from ships and future expectations



GHG Emissions – Introduction

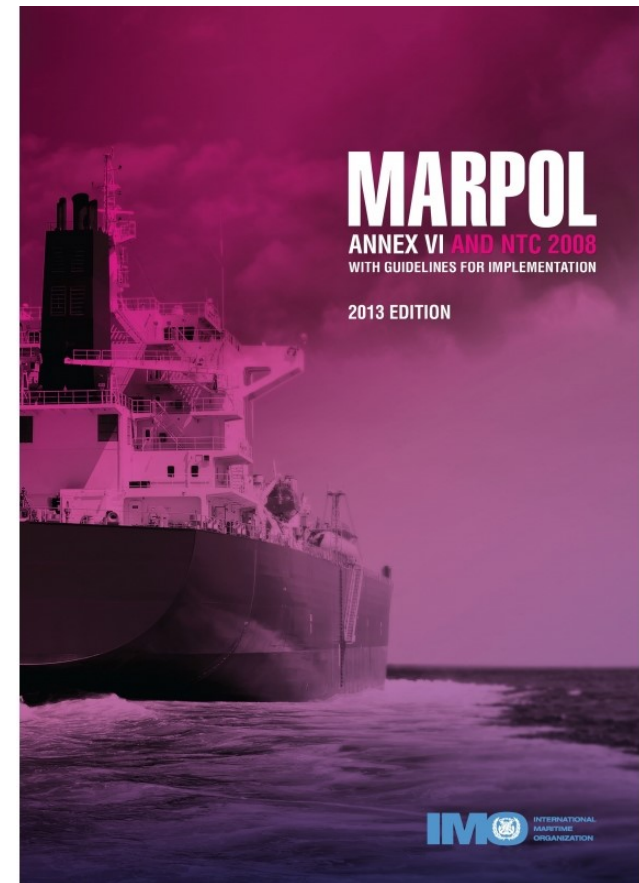


- International shipping: most energy-efficient mode of transport - about 90% of all goods transported by sea.
- **CO₂ emissions from shipping** projected to increase by 50% to 250% in the period to 2050 – despite the huge improvements of the average efficiency of the fleet.
- Growth anticipated in view of the expected increase in world trade, and **consequential increase in demand**.
- Global approach required to further enhance energy efficiency & effective emissions control. IMO agreed a **3-step approach**:
 - 1. Data collection**
 - 2. Data analysis**
 - 3. Decision-making on further measures.**

International Convention for the Prevention of Pollution from Ships (MARPOL) Annex VI



- Existing IMO Instrument to regulate emissions from ships.
- Entered into force in 2005 (amended several times).
Later than the International convention for the Prevention of Pollution from Ships (1983).
- Regulations for controlling airborne emissions from ships of **sulphur oxides (SOX)**, **nitrogen oxides (NOX)** and other emissions.



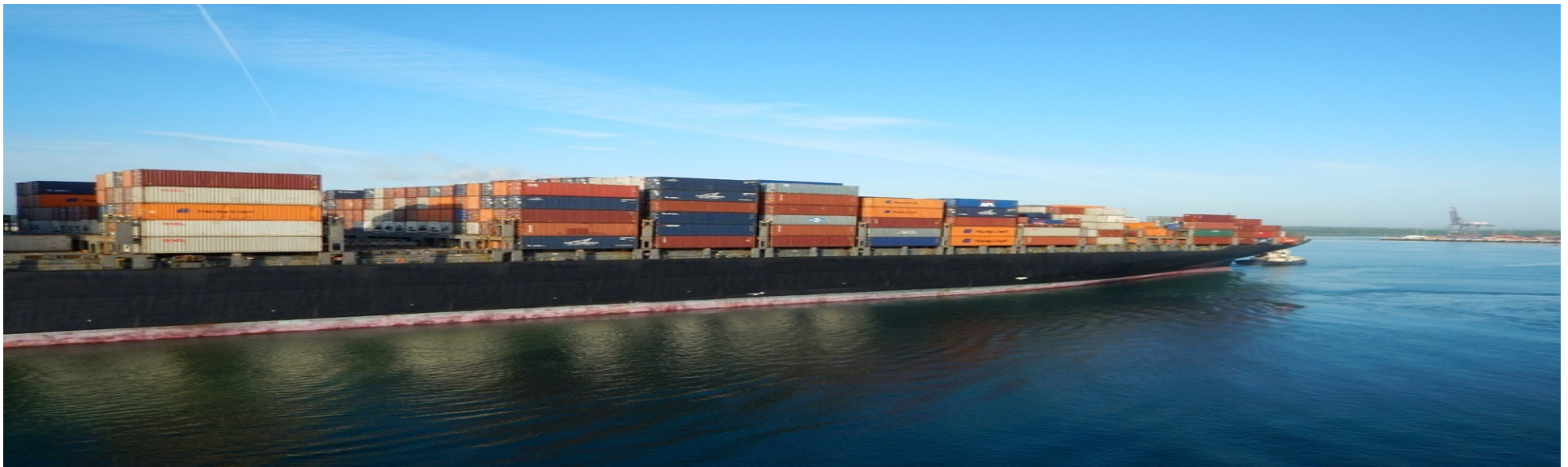
Energy Efficiency Design Index & Ship Energy Efficiency Management Plan



- Included in MARPOL Annex VI. First global **legally binding instrument to address CO₂ emissions** from ships – in force since 2013.
- **EEDI** sets compulsory **energy efficiency standards** for new ships (built after 2013). Non-prescriptive, performance-based mechanism. Leaves the choice of technologies for specific ship design, to the industry.
- **SEEMP** establishes a mechanism for operators to improve the energy efficiency of existing ships against business-as-usual operations. Provides an approach for monitoring ship and **fleet efficiency performance** over time.

EU MRV Regulation

- Regulation (EU) 2015/757 on the monitoring, reporting and verification of CO₂ emissions from maritime transport – entered into force on **1 July 2015**.
- **Scope of application:** Shipowners and operators are required to monitor, report and verify CO₂ emissions from ships above **5,000 GT** and which **call at an EU port** (irrespective of Flag).



EU MRV - Timelines



- **31 August 2017** – Companies obliged to prepare a monitoring plan for each of their ships that fall under the scope of the regulation, and submit such plans to the accredited verifiers for approval.
- **1 January 2018** – Companies shall monitor, for each of their ships, CO₂ emissions, fuel consumption and other parameters.
- **30 April 2019** – Verified annual emission reports submitted to the flag State and EC, through THETIS MRV (electronic database developed and operated by EMSA).
- **30 June 2019** – Emissions data made publicly available by EC.

IMO Data Collection System



- Adopted by IMO during MEPC 70 - Oct 2016
- New regulation 22A added to chapter 4 of MARPOL Annex VI
- Ships of 5,000 GT + will be required to submit to their Administration annual reports on fuel oil consumption and other parameters through a methodology included in the Ship Energy Efficiency Management Plan.



	EU MRV	IMO DCS
Scope – size	5,000 GT	5,000 GT
Scope - geographic	Ships calling at EU ports	International voyages globally
Main parameters reported	Fuel consumption, distance travelled, time spent at sea, cargo carried, transport work	Fuel consumption, distance travelled
Verification	Complex, prescriptive requirements. Mandatory use of verifiers accredited by EU accreditation bodies.	Basic verification, in accordance with IMO Guidelines.
Transparency	Individual ship data published.	Data to be aggregated and anonymised.
1 st reporting	1 January 2018	1 January 2019

Alignment of the EU MRV and the IMO DCS



- EU MRV, Article 22(3):

In the event that an international agreement on a global monitoring, reporting and verification system for greenhouse gas emissions [...] is reached, the Commission shall review this Regulation and shall, if appropriate, propose amendments to this Regulation in order to ensure alignment with that international agreement.

- Adoption of IMO DCS triggered application of this Article.
- EC currently engaged in stakeholder consultation (open until 1 Dec 2017).

Recent developments: EU ETS



- EC proposal to revise the **EU ETS Directive**.
- EP proposed to **include shipping in the ETS**. MS opposed EU regional measures: not appropriate for international shipping.
- Negotiations came to an end (informally) – Shipping will not be included in the ETS. **Recital but no article** to be included (Compromise - Political signal that IMO should act).

IMO and UNFCCC

- Dec 2015: COP 21 - United Nations Framework Convention on Climate Change reached an unprecedented agreement on a global climate deal - **Paris Agreement**.
- Key goal to limit global temperature rise to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C.



- Paris Agreement: No reference to international maritime transport.
- But shipping must play its part to contribute towards the goals of the Paris Agreement. **IMO recognized its role in mitigating the impact of GHG emissions from international shipping.**
- Work in progress at IMO for shipping to play its part in CO₂ reductions.

IMO Roadmap



- MEPC 70 (Oct '16) approved a Roadmap for developing a comprehensive **IMO strategy on reduction of GHG emissions** from ships.
- Roadmap contains a **list of activities**, including further IMO GHG studies and significant intersessional work with relevant timelines.
- Foresees adoption of an initial strategy in **2018** - to include short, mid and long-term further measures.
- Provides for a **revised strategy to be adopted in 2023**.

Next Steps



- **Next MEPC 72** (April 2018) is expected to adopt an initial strategy for the reduction of GHG emissions.
- **STRATEGY Expected contents:**
- **Levels of Ambition** e.g.:
 - Emission to peak and then decline
 - Setting a cap – annual emissions to be kept below a defined level.
 - Carbon intensity of shipping to decline.

- **List of candidate measures e.g.:**
 - Operational measures, optimisation of logistics chains, operational speed, measures taken in ports.
 - Use of alternative fuels, Innovation, R&D
 - Further improving the existing energy efficiency framework
 - Possible market-based measures to incentivize GHG emission reduction.
- **Supportive measures** / Technical cooperation
- **Periodic Review of the Strategy** (taking into account data from the IMO DCS)

Conclusion

- Whatever the future measures to be adopted it is important to follow fundamental principles:
 - Measures at international level
 - Equally applicable to all flag States
 - Cost-effective
 - Maintain level playing field / avoid distortion of competition.



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Thank you for your attention

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