

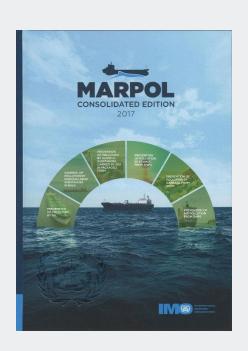


MARPOL Annex VI: Defining binding regulations aimed at reducing air pollution from ships

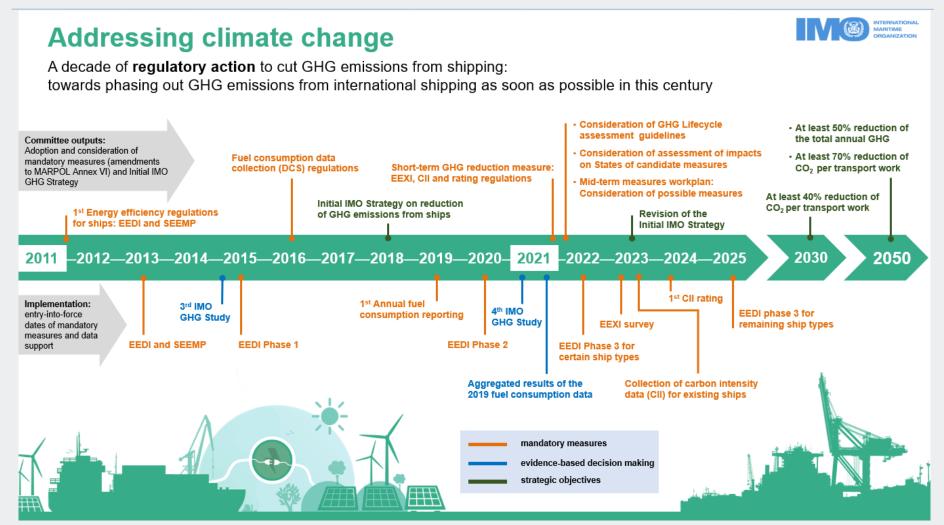
International Convention for the Prevention of Pollution from Ships (MARPOL)

MARPOL Annex VI on Air Pollution from Ships:

- adopted in 1997
- ratified by 103 States 97% of world tonnage
- contains binding requirements which are enforced globally by flag States and port States
- Chapter 3 regulates air pollution: sulphur content of bunker fuels (IMO2020) – emission control areas (ECAs), NOx emissions from engines
- Chapter 4 regulates energy efficiency of ships (GHG emissions)



GHG reduction: Over a decade (2011-2022) of mandatory IMO energyefficiency requirements in MARPOL Annex VI



See: https://www.imo.org/en/MediaCentre/HotTopics/Pages/Cutting-GHG-emissions.aspx



GHG reduction: Over 10-years of mandatory IMO energy-efficiency requirements in MARPOL Annex VI

Ship Energy Efficiency Management Plan (SEEMP)

Since 2013: Each ship shall have a ship-specific SEEMP on board

Energy Efficiency Design Index (EEDI)

Since 2015: Gradually more stringent energy efficiency performance of **new build ships** under subsequent EEDI phases

IMO's Fuel Consumption Data Collection System

Since 2019: Ships over 5,000 gt to report **annual fuel consumption data** to their Administration; forwarded to IMO

2020: 111 Administrations - 27,723 ships - 203 m tonnes fuels

The growing mandatory energy efficiency framework in MARPOL Annex VI provides key building blocks for future GHG reduction measures



Implementing the 2018 IMO Initial Strategy on Reduction of GHG emissions from international shipping



Implementing the Initial IMO GHG Strategy: Promoting global action across the maritime value chain

Resolution MEPC.323(74) on Cooperation between ports and the shipping sector to reduce GHG emissions

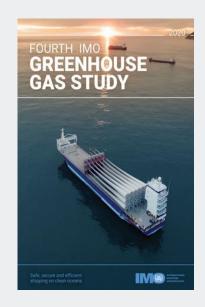
- Ports are key in decarbonizing international shipping
- IMO promotes worldwide cooperation between shipping and ports through various instruments

Resolution MEPC.327(75) on National Action Plans to address GHG emissions from ships

 National action plans to develop policies and strategies to address GHG emissions from international shipping

Establishment of the IMO multi-donor GHG Trust Fund

 Supporting consideration and implementation of IMO's GHG instruments



MARCH 17, 2022

Supporting National Action Plans for emissions reduction

The IMO-Norway GreenVoyage2050 Project has published a new guide on the development of National Action Plans (NAPs) to address GHG emissions from ships. The guide responds to...



Implementing the Initial IMO GHG Strategy: IMO's short-term measure Improving the energy efficiency of the global fleet

New mandatory energy efficiency requirements

- MEPC 76 (June 2021): following consideration of IMO's first 'comprehensive impact assessment', adopted set of binding requirements (EEXI, CII, enhanced SEEMP and rating) to reduce carbon intensity of the world fleet
- Entry-into-force November 2022 review/strengthening by 2026

Guidelines supporting implementation of the measure

Following consideration by the Correspondence Group and ISWG-GHG 12,
 MEPC 78 adopted/approved 12 guidelines/guidance supporting implementation of the measure

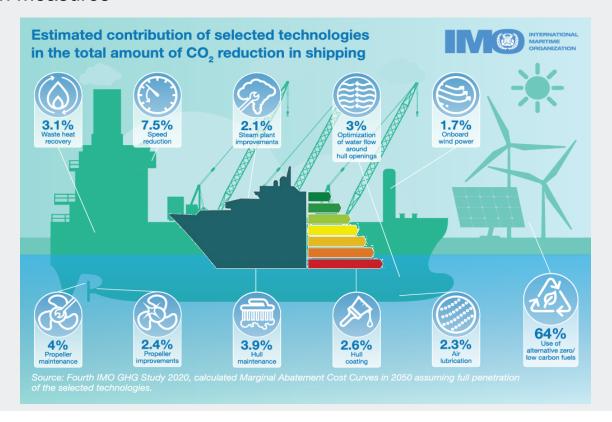
Enhanced involvement of the maritime value chain in the energy efficiency performance of a ship

 IMO's CII is valuable tool for Administrations, ports, and other stakeholders, incl. financial sector, cargo owners, to enhance their involvement and provide incentives to most energy efficient ship



The short-term IMO GHG reduction measure: enhanced involvement of the maritime value chain in a ship's energy efficiency performance

- Continuous energy efficiency improvements of existing fleet is of key importance to reduce the world's fleet overall energy needs
- The short-time measure provides relevant building blocks for future GHG reduction measures





Implementing & revising the Initial IMO GHG Strategy

Putting in place the uniform global regulatory framework aimed at phasing out GHG emissions from international shipping in line with the IMO GHG Strategy

- .1 Lifecycle GHG emission guidelines
- .2 Safety regulations for low-carbon marine fuels
- .3 Further enhancement of the IMO Data Collection System

.4 Development of mid-term measures – including assessments of impacts on States

Revision
of the
Initial IMO
GHG
Strategy



IMO GHG Strategy: putting in place a uniform global regulatory framework to decarbonize global shipping

.1 Lifecycle GHG emission guidelines

- LCA GHG guidelines are essential to incentivize investment and uptake of marine fuels according to their 'real' climate impact
- ISWG-GHG 11 (March 2022): Important progress made on development of IMO Lifecycle GHG guidelines covering well-to-wake emission values (incl. well-to-tank & tank-to-wake)
- MEPC 78 agreed to establish a Correspondence Group (China, Japan, EC) to further develop the guidelines: discussions will focus on sustainability criteria, third-party verification/certification, continuous review of default values: interim report to MEPC 79 final report to MEPC 80
- MEPC 80 (July 2023) to consider final draft guidelines in view of adoption
- Regulatory application of LCA guidelines be discussed separately: essential building block for mid-term GHG reduction measures, notably for carbon pricing and/or a low carbon fuel standard



IMO GHG Strategy: putting in place a uniform global regulatory framework to reduce GHG emissions from ships

.2 Safety regulations for low-carbon marine fuels

- Important work underway (MSC,CCC) on development of IMO safety guidelines for ships using alternative fuels (fuel cell, hydrogen, ammonia)
- Safe onboard use and bunkering is key to take-up of low carbon fuels
- Enhanced cooperation between MSC-MEPC

.3 Further enhancement of the IMO Data Collection System (DCS)

- IMO's DCS has central role in the implementation of the short-term measures and future mid-term measure, incl. possible market-based measure
- MEPC 78 approved amendments to the IMO DCS reporting requirements for EEXI, CII and rating values (to be adopted by MEPC 79)
- MEPC 78 approved a new workstream on further revisions of the IMO DCS, to be included in the agenda of ISWG-GHG



IMO GHG Strategy: putting in place a uniform global regulatory framework to reduce GHG emissions from ships

Basket of candidate mid-term GHG reduction measures

- MEPC 76 : approved Work plan on the development of mid-term measures
- ISWG-GHG 11 :
 - made good progress with the lessons-learned exercise of the comprehensive impact assessment of the short-term measure
 - Initiated a review of the Procedure for assessing impacts on States, to be finalized by MEPC 79
- ISWG-GHG 12 and MEPC 78: finalized consideration of the various technical and economic proposals for mid-term measures under Phase I of the Work plan, in particular:
 - GHG fuel standard (GFS)
 - Emissions cap-and-trade system
 - International Maritime Sustainability Funding and Reward Mechanism (IMSF&R)
 - Levy-based MBM
 - Zero Emission Vessels (ZEVs) Incentive Scheme
 - Other possible mechanisms (e.g. EEDI Phase IV, corridor concept,...)



IMO GHG Strategy: putting in place a uniform global regulatory framework to reduce GHG emissions from ships

Basket of candidate mid-term GHG reduction measures

MEPC 78 :

- o recognized that all proposals contain valuable elements
- agreed on the further development of a "basket of candidate mid-term GHG reduction measures" (Phase II) integrating technical and carbon pricing elements
- encouraged proponents of different proposals to work together on possibly combining elements of their proposals, to be further considered by ISWG-GHG 13, ahead of MEPC 79
- o timing of a **future comprehensive impact assessment** of a (basket of) measures in application of MEPC.1/Circ.885, as may be amended, to be further considered



Implementing the Initial IMO GHG Strategy: putting in place a uniform global regulatory framework to reduce GHG emissions from ships

Revision of the Initial IMO GHG Strategy

- Following COP 26, and in view of the urgency for all sectors to accelerate their efforts to reduce GHG emissions, IMO agreed at MEPC 77 to initiate the revision of the Initial Strategy; to strengthen the level of ambition; adopt a revised Strategy by MEPC 80
- MEPC 78 considered 13 concrete first proposals on the revision submitted by Member States and observer organizations, and reiterated its commitment
- Constructive discussions at MEPC 78 focused primarily on the levels of ambition while ensuring a fair and just transition in the revised Strategy
- Substantial support for phasing-out/zero/net-zero by 2050 and intermediate targets; substantial number of other delegations were not in a position to support such targets
- Broad support to expand on "just and equitable" transition; also addressing financial/technical support; access to/deployment of technology; port-infrastructure



Implementing the Initial IMO GHG Strategy: putting in place a uniform global regulatory framework to reduce GHG emissions from ships

Revision of the Initial IMO GHG Strategy

Other elements of discussion:

- sectoral targets/newly formulated targets (percentage of the fleet) vs. global (across-the-board) objectives
- in-sector/out-sector financial support
- links to UNFCCC, notably temperature goals, 2050 targets and CBDR-RC
- Need for additional studies (alternative fuels, TRL)
- Comprehensive vs. limited review

MEPC 78 agreed to:

- invite for further submissions, containing concrete proposals, incl possible text proposals, addressing any section of the Initial Strategy
- request the Secretariat to consider carrying out additional studies and organizing information sessions/symposia, supporting the revision process
- encourage delegations to work together intersessionally on developing concrete proposals



Implementing the Initial IMO GHG Strategy: putting in place a uniform global regulatory framework to reduce GHG emissions from ships

Next steps

- ISWG-GHG 13 (5-9 December 2022): main focus on (1) revision of the Strategy;
 - (2) finalizing the review of the Procedure for Assessing Impacts on States; and
 - (3) further consideration of a basket of mid-term candidate measures
- MEPC 79 (12-16 December 2022), incl. GHG working group
 - ISWG-GHG 14 (dates t.b.c.)
 - o **ISWG-GHG 15** (26-30 June 2023, t.b.c.)
- MEPC 80 (3-7 July 2023, t.b.c.): revised Strategy to be adopted; end of Phase II of the consideration of mid-term measures

Need for concerted action to achieve GHG reduction targets for international shipping

- The 2018 IMO Initial Strategy: change of 'mind-set' and GHG reduction R&D, pilots and other initiatives around the world
- IMO is on course with transposing policy objectives in the Strategy into binding regulations
- MARPOL Annex VI covers all trade and ship types operating worldwide, and are enforced globally by port and flag States
- Decarbonizing international shipping requires joint efforts: decision-makers in IMO require full support of entire maritime value chain
- Shipping will play a pivotal role in the world's energy transition whilst ensuring equal access to maritime transport services for developeddeveloping States
- Global climate action requires equitable and fair decision making which leaves nobody behind; additional support to IMO's technical cooperation initiatives and the IMO GHG TC-Trust Fund



Thank you for your attention





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