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## "Sustainable freight transport in support of the 2030 Agenda for Sustainable Development"

## Initial IMO Strategy on reduction of GHG emissions from ships and programme of follow-up actions to 2023

by

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### **International Maritime Organization (IMO)**

- A specialized agency of the UN
- The IMO Convention adopted in 1948 and entered into force 1958
- 174 Member States, 3 Associate Members
- 81 consultative organizations; 64 IGOs
- Develop and maintain a comprehensive regulatory framework for international shipping on safety, environment, legal matters, technical co-operation, security and the efficiency of shipping
- Marine Environment Protection Committee (MEPC) – IMO body responsible for MARPOL, BWMC, etc.



Safe, secure and efficient shipping on cleaner oceans



## The role of international maritime transport in sustainable development

- Over 80% of global trade by volume and more than 70% of its value carried on board ships
- World seaborne trade volumes expanded by 4% in 2017 to reach 10.7 billion tons of cargo
- Volumes across all segments are set to grow, with containerized and dry bulk commodities expected to record the fastest growth at the expense of tanker volumes.



(Review of Maritime Transport 2018, UNCTAD)



#### IMO work to address GHG emissions from ships

- In September 1997 Air Pollution Conference adopted resolution 8 on CO<sub>2</sub> emissions from ships
- Resolution A.963(23) on *IMO Policies and Practices Related to the Reduction of Greenhouse Gas Emissions from Ships*, adopted by Assembly 23 in December 2003
- MARPOL Annex VI
  - Emissions controlled ODS, SOx, NOx, VOC
  - Mandatory energy efficiency rules (EEDI and SEEMP)
  - Collection and reporting of ship fuel oil consumption data
- IMO Assembly in December 2017 adopted for the Organization a Strategic Direction entitled: "Respond to Climate Change"



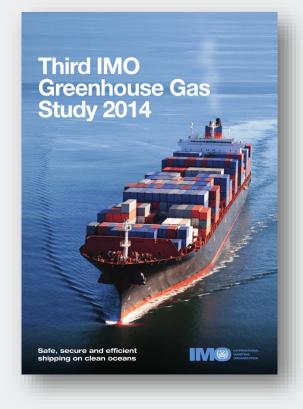




### **GHG** emissions from international shipping

- In 2012, international shipping CO<sub>2</sub> emissions were estimated to be 796 million tonnes accounting for 2.2% of global CO<sub>2</sub> emissions
- By 2050, CO<sub>2</sub> emissions from international shipping could grow by between 50% and 250%, depending on future economic growth and energy developments
- Demand is the key driver for growth in emissions

(Third IMO Greenhouse Gas Study 2014)





#### MEPC.304(72) Initial IMO Strategy on Reduction of GHG emissions from ships

#### RESOLUTION MEPC.304(72) (adopted on 13 April 2018)

#### INITIAL IMO STRATEGY ON REDUCTION OF GHG EMISSIONS FROM SHIPS

THE MARINE ENVIRONMENT PROTECTION COMMITTEE

RECALLING Article 38(e) of the Convention on the International Maritime Organization (the Organization) concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution from ships,

ACKNOWLEDGING that work to address greenhouse gas (GHG) emissions from ships has been undertaken by the Organization continuously since 1997, in particular, through adopting global mandatory technical and operational energy efficiency measures for ships under MARPOL Annex VI,

ACKNOWLEDGING ALSO the decision of the thirtieth session of the Assembly in December 2017 that adopted for the Organization a strategic direction entitled "Respond to Climate Change",

RECALLING the United Nations 2030 Agenda for Sustainable Development,

1 ADOPTS the Initial IMO Strategy on Reduction of GHG Emissions from Ships (hereinafter the Initial Strategy) as set out in the annex to the present resolution;

2 INVITES the Secretary-General of the Organization to make adequate provisions in the Integrated Technical Cooperation Programme (ITCP) to support relevant follow-up actions of the Initial Strategy that may be further decided by the Committee and undertaken by developing countries, particularly least developed countries (LDCs) and small island developing States (SIDS);

3 AGREES to keep the Initial Strategy under review, with a view to adoption of a Revised IMO Strategy on reduction of GHG emissions from ships in 2023.



## Initial IMO Strategy on Reduction of GHG emissions from ships – Contents

Contents						
1	INTRODUCTION					
2	VISION					
3	LEVELS OF AMBITION AND GUIDING PRINCIPLES					
4	LIST OF CANDIDATE SHORT-, MID- AND LONG-TERM FURTHER MEASURES WITH POSSIBLE TIMELINES AND THEIR IMPACTS ON STATES					
5	BARRIERS AND SUPPORTIVE MEASURES; CAPACITY-BUILDING AND TECHNICAL COOPERATION; R&D					
6	FOLLOW-UP ACTIONS TOWARDS THE DEVELOPMENT OF THE REVISED STRATEGY					
7	PERIODIC REVIEW OF THE STRATEGY					



## Initial IMO Strategy on Reduction of GHG emissions from ships

#### 2 VISION

IMO remains committed to reducing GHG emissions from international shipping and, as a matter of urgency, aims to phase them out as soon as possible in this century.



#### Initial IMO Strategy on Reduction of GHG emissions from ships

#### Levels of ambition

3.1 Subject to amendment depending on reviews to be conducted by the Organization, the Initial Strategy identifies levels of ambition for the international shipping sector noting that technological innovation and the global introduction of alternative fuels and/or energy sources for international shipping will be integral to achieve the overall ambition. The reviews should take into account updated emission estimates, emissions reduction options for international shipping, and the reports of the Intergovernmental Panel on Climate Change (IPCC), as relevant. Levels of ambition directing the Initial Strategy are as follows:

#### .1 carbon intensity of the ship to decline through implementation of further phases of the energy efficiency design index (EEDI) for new ships

to review with the aim to strengthen the energy efficiency design requirements for ships with the percentage improvement for each phase to be determined for each ship type, as appropriate;

#### .2 carbon intensity of international shipping to decline

to reduce  $CO_2$  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; and

#### .3 GHG emissions from international shipping to peak and decline

to peak GHG emissions from international shipping as soon as possible and to reduce the total annual GHG emissions by at least 50% by 2050 compared to 2008 whilst pursuing efforts towards phasing them out as called for in the Vision as a point on a pathway of CO<sub>2</sub> emissions reduction consistent with the Paris Agreement temperature goals.







#### Initial IMO Strategy on Reduction of GHG emissions from ships

# 5 BARRIERS AND SUPPORTIVE MEASURES; CAPACITY-BUILDING AND TECHNICAL COOPERATION; R&D

5.1 The Committee recognizes that developing countries, in particular LDCs and SIDS, have special needs with regard to capacity-building and technical cooperation.

5.2 The Committee acknowledges that development and making globally available new energy sources that are safe for ships could be a specific barrier to the implementation of possible measures.

5.3 The Committee could assist the efforts to promote low-carbon technologies by facilitating public-private partnerships and information exchange.

5.4 The Committee should continue to provide mechanisms for facilitating information sharing, technology transfer, capacity-building and technical cooperation, taking into account resolution MEPC.229(65) on *Promotion of technical co-operation and transfer of technology relating to the improvement of energy efficiency of ships*.

5.5 The Organization is requested to assess periodically the provision of financial and technological resources and capacity-building to implement the Strategy through the ITCP and other initiatives including the GIOMEEP project and the MTCC network.



# Programme of follow-up actions of the initial IMO strategy to 2023 (approved at MEPC 73)

Streams of activity	2018 MEPC 73	2019 MEPC 74	2020 MEPC 75 MEPC 76	2021 MEPC 77	2022 MEPC 78 MEPC 79	2023 MEPC 80
Candidate short-term measures (Group A) that can be considered and addressed under existing IMO instruments <sup>2</sup>	Invite concrete proposals	Consideration of proposals	addressed under existing IM	D instruments e.g. fu	erm measures that can be cons urther improvement of the exist n EEDI and SEEMP, ITCP <sup>3</sup>	
Candidate short-term measures (Group B) that are not work in progress and are subject to data analysis	Invite concrete proposals	Consideration of proposals	progress and are su	bject to data analysi	ort-term measures that are not is, consistent with the Roadma Fuel Oil Consumption DCS	
Candidate short-term measures (Group C) that are not work in progress and are not subject to data analysis	Invite concrete proposals	Consideration of proposals	progress and are not subject t	o data analysis e.g.	ort-term measures that are not National Action Plans guidelin els, research and development	es, lifecycle
Candidate mid-/long-term measures and action to address the identified barriers	Invite concrete proposals	Consideration of proposals including identification of barriers and action to address				of
Impacts on States <sup>4</sup>	Invite concrete proposals	Finalization of procedure		sessment, as approp particular paragrapl	priate, consistent with the Initia hs 4.10 to 4.13	Strategy,
Fourth IMO GHG Study	Scope	Initiation of the Study	Progress report Final report			
Capacity-building, technical cooperation, research and development	Development and implementation of actions including support for assessment of impacts and support for implementation of measures					
Follow-up actions towards the development of the revised Strategy			umption data collection pursuant A of MARPOL Annex VI (DCS)		on of the Initial Strategy taking DCS data and other relevant information	Adoption of revised Strategy

Includes ongoing work pursuant to regulation 21.6 of MARPOL Annex VI.



<sup>&</sup>lt;sup>3</sup> "In aiming for early action, the timeline for short-term measures should prioritize potential early measures that the Organization could develop, while recognizing those already adopted, including MARPOL Annex VI requirements relevant for climate change, with a view to achieve further reduction of GHG emissions from international shipping before 2023" (paragraph 4.2 of the Initial Strategy).

<sup>4</sup> Assessment of impacts on States to be undertaken in accordance with the procedure to be developed by the Organization.

## The future of international shipping





# Thank you for your attention





