

Regional webinar Sustainable Smart Ports in Africa

IMO's policies and how they contribute to promoting the use and distribution of renewable energy in African ports

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International Maritime Organization



UN Specialized Agency mandated to set a global regulatory framework to ensure safe, secure and efficient shipping on cleaner oceans



IMO Convention was adopted in 1948. IMO headquarters in London



IMO has developed more than 50 international instruments, including SOLAS and MARPOL and over 1,000 guidelines and recommendations



In 2023: 175 Member States, 3 associated members, 156 observer organizations (IGOs and NGOs)



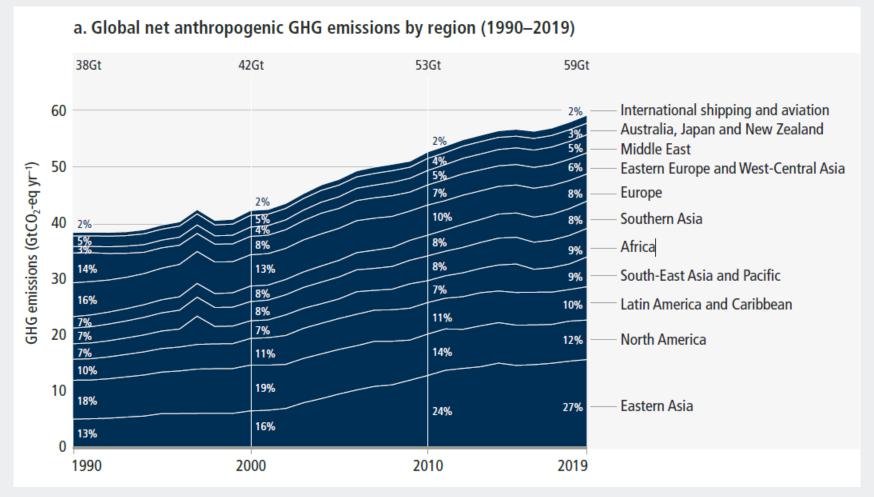
IMO regulates >50,000 ships trading worldwide







How much does international shipping contribute to global GHG emissions?



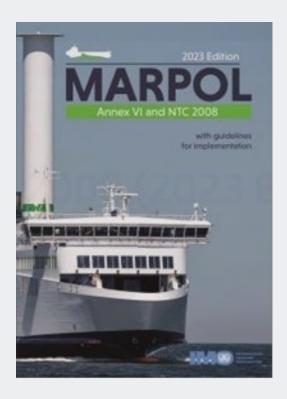
Source: IPCC, 2022





Who regulates these emissions?

IMO is the UN Specialized Agency mandated to address emissions from fuels used for international maritime transport



MARPOL Annex VI MEPC 80/WP.12
Annex 1, page 1

ANNEX 1

DRAFT RESOLUTION

Adopted on [7 July 2023]

2023 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 concerning the functions of the Marine Environment Protection Committee (the Committee) to consider and take appropriate action with respect to any other matters falling within the scope of the Organization which would contribute to the prevention and control of marine pollution from shirs

ACKNOWLEDGING that work to address greenhouse gas (GHG) emissions from ships has been undertaken by the Organization continuously since the adoption of Corference Resolution 8 on CO₂ emissions from ships in September 1997, in particular, through the adoption of global mandatory technical and operational energy efficiency measures for ships under MARPOL Annex VI.

ACKNOWLEDGING ALSO the decisions of the Assembly at its thirtieth and thirty-second sessions in December 2017 and December 2021, that approved for the Organization a strategic direction to "Respond to climate change",

RECALLING that the Committee at its seventy-second session (MEPC 72) in April 2018 adopted, by resolution MEPC 304(72), the Initial IMO Strategy on Reduction of GHG Emissions from Ships (Initial IMO GHG Strategy).

NOTING that the Initial IMO GHG Strategy foresees that a revised IMO GHG Strategy should be adopted in 2023,

RECALLING the United Nations 2030 Agenda for Sustainable Development,

RECALING ALSO the Paris Agreement adopted at the UN Climate Change Conference (COP 21), which identifies the long-term goal to hold the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change, as was also reaffirmed in the Collagoro Climate Pock at COP 29 and in the Chamm el-Shelbi Implementation Plan at COP

RECALLING FURTHER IMO Assembly resolution A.998(25) on the need to develop capacitybuilding for the development and implementation of new and amendments to existing instruments,

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2023 IMO GHG Strategy

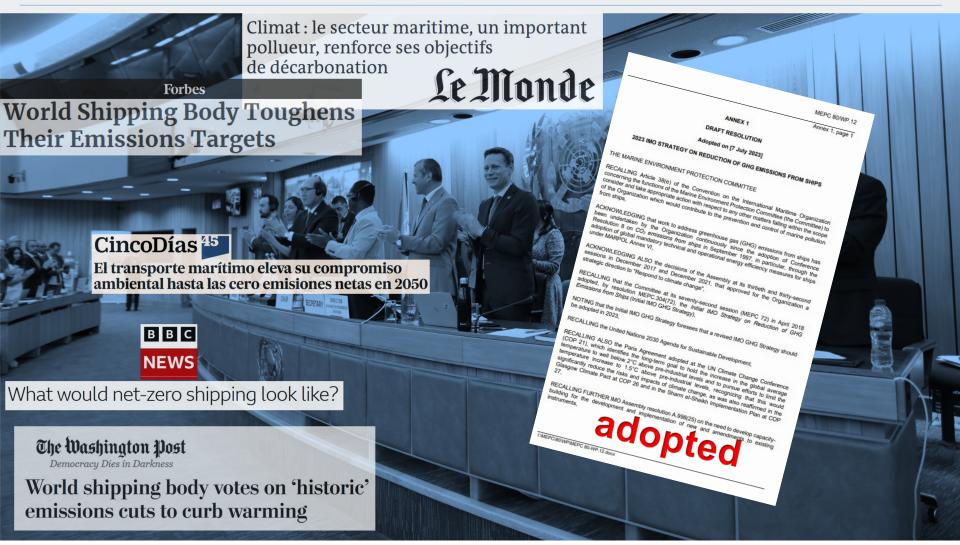


Fourth IMO GHG Study





2023 IMO Strategy on Reduction of GHG Emissions from Ships







Where do we need to go?

Vision

As a matter of urgency, IMO aims to phase out GHG emissions <u>as soon as possible</u>, while promoting <u>a just and equitable</u> <u>transition</u> in the context of this Strategy.

Levels of ambition

Further strengthen energy efficiency design requirements for ships.

2030: reduce carbon intensity by at least 40%, compared to 2008.

2030: have at least 5%, striving for 10%, of the energy used by international shipping to be zero or near-zero GHG emission.

Net-zero target

Net-zero GHG emissions from international shipping <u>close to 2050</u>, taking into account different national circumstances.

Indicative targets

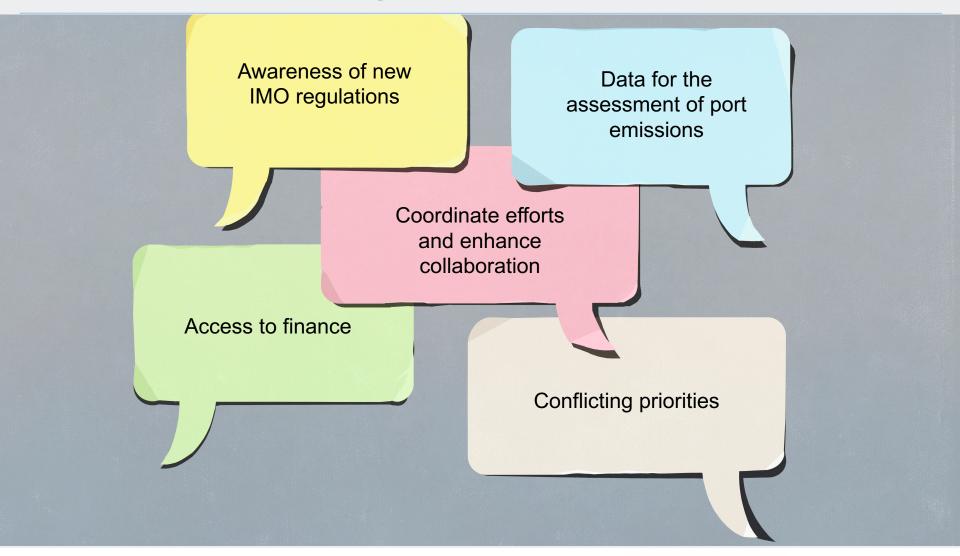
2030: reduce the total annual GHG emissions from international shipping by at least 20%, striving for 30%, compared to 2008.

2040: reduce the total annual GHG emissions from international shipping by at least 70%, striving for 80%, compared to 2008.





What are the challenges?







What are the opportunities?



Compliance with global regulation

Effective environmental protection





Increased competitivity





What can ports in Africa do?

MEPC RESOLUTION 366(79) (adopted on 16 December 2022)
INVITATION TO MEMBER STATES TO ENCOURAGE VOLUNTARY COOPERATION BETWEEN THE PORT AND SHIPPING

MEPC 79/15/Add.1 Annex 11, page 1

ANNEX 11

MEPC RESOLUTION.366(79) (adopted on 16 December 2022)

INVITATION TO MEMBER STATES TO ENCOURAGE VOLUNTARY COOPERATION BETWEEN THE PORT AND SHIPPING SECTORS TO CONTRIBUTE TO REDUCING GHG EMISSIONS FROM SHIPS

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

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

RECALLING ALSO that Regulation 28.10 of MARPOL ANNEX VI encourages Administrations, port authorities and other stakeholders as appropriate to provide incentives to ships rated A or B,

HAVING ADOPTED resolution MEPC.304(72) on the Initial IMO Strategy on reduction of GHG emissions from ships (hereinafter the Initial Strategy),

NOTING that the Initial Strategy calls for the encouragement of port developments and activities globally to facilitate reduction of GHG emissions from shipping, including provision of ship and shoreside/orshore power supply from renewable sources, infrastructure to support supply of alternative low-carbon and zero-carbon fuels, and to further optimize the logistic chain and its planning, including ports,

RECALLING that, at its seventy-fourth session, the Committee adopted resolution MEPC.323(74) on the Invitation to Member States to encourage voluntary cooperation between the port and shipping sectors to contribute to reducing GHG emissions from ships,

RECALLING ALSO that, at its seventy-ninth session, the Committee agreed to revise resolution MEPC.323(74),

RECOGNIZING that many ports are already taking action to facilitate the reduction of GHG emissions from ships,

RECOGNIZING ALSO present-day initiatives for increasing cooperation between ports and other actors in the maritime industry in developing actions that aid the reduction of GHG emissions of the maritime transport system,

RECOGNIZING FURTHER that these actions and initiatives could be part of voluntary National Action Plans which are encouraged in resolution MEPC.XX(79),

RECOGNIZING the value of capacity-building, knowledge sharing and cooperation for all States, including developing countries, particularly least developed countries (LDCs) and small island developing States (SIDS),

HAVING AGREED the need to encourage further cooperation between ports and shipping to facilitate the reduction of GHG emissions from ships and the value of collaboration,

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MEPC RESOLUTION.366(79) (adopted on 16 December 2022)

INVITATION TO MEMBER STATES TO ENCOURAGE VOLUNTARY COOPERATION BETWEEN THE PORT AND SHIPPING SECTORS TO CONTRIBUTE TO REDUCING GHG FMISSIONS FROM SHIPS





1. Supporting the viability of business cases for ship and inport renewable power-to-ship solutions and the use of these solutions

Kenyan Ports
Authority
commissioned
study to assess the
suitability of installing a
5-10 MWp solar plant

Solar powered shore power considered for Mombasa Port

by The Editorial Team - January 25, 2023 in Emissions, Ports



Credit: ABL Group

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ABL Group conducted a feasibility study, investigating two possible brownfield sites for the installation of a solar photovoltaic (PV) plant to generate renewable energy powered shore power at the Port of Mombasa, Kenya.

Source: Solar powered shore power considered for Mombasa Port - SAFETY4SEA



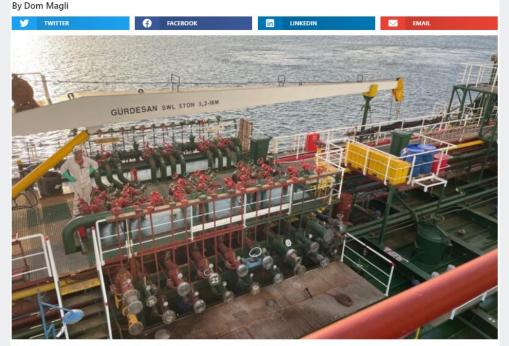


2. Encouraging safe and efficient bunkering

First green
green bunkering
operation that
took place in Africa and
the Middle East.
SCZONE intends to
transform its ports into
a regional hub for
bunkering services

SCZONE achieves successful green bunkering milestone at East Port Said

August 18, 2023



The General Authority for the Suez Canal Economic Zone (SCZONE) has confirmed the successful inaugural green bunkering operation using methanol at East Port Said.

Source: <u>SCZONE</u> achieves successful green bunkering milestone at East Port <u>Said - Port Technology International</u>





Source: South Africa's

MEPC RESOLUTION.366(79)

3. Promoting incentive schemes that address GHG emissions and sustainability of international shipping

expand use of wind and solar power technologies at eight South African ports as well as explore other sources of power

South Africa's Ports Authority Explores Investment in Renewables



File image courtesy Transnet

PUBLISHED JUL 29, 2022 9:09 PM BY THE MARITIME EXECUTIVE

Transnet National Ports Authority (TNPA) South Africa has issued a request for information for project ideas for the supply of renewable energy at South Africa's main commercial ports.

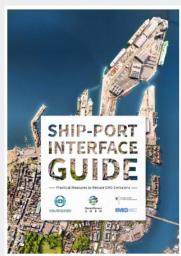


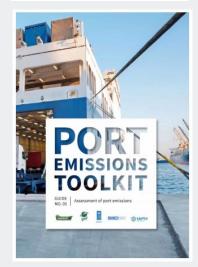


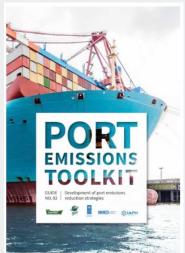
4. Supporting the industry's collective efforts to improve quality and availability of data for the optimization of port calls

Technical cooperation resources for ports through the Green Voyage 2050 project













5. Facilitating voluntary cooperation through the whole value chain, including ports, to create favourable conditions to reduce GHG emissions

Consortium
aims to assess
how zeroemission shipping can
unlock opportunities for
South Africa's and
contribute to a just
transition

Maritime, mining, steel, and energy industry leaders join forces to develop first-ever concept for a green corridor between South Africa and Europe

A new consortium will explore the options for developing a maritime green corridor for the zero-emission shipping of iron ore between South Africa and Europe. This ground breaking initiative is the first of its kind from Africa and represents an important step in the region's involvement in shipping's decarbonization.

Source: Maritime, mining, steel, and energy industry leaders join forces to develop first-ever concept for a green corridor between South Africa and Europe (globalmaritimeforum.org)





Source: Youth for Green Hydrogen (Y4H2) Scholarship for Namibia Students attract 1154 applicants - SASSCAL

Exploring other opportunities

Youth for Green Hydrogen (Y4H2) Scholarship for Namibia Students attract 1154 applicants

