3er ENCUENTRO INTERNACIONAL DE INVESTIGADORES.
CAMPUS TECNOLÓGICO DE ALGECIRAS.

Objetivos de la Agenda 2030 para el Desarrollo Sostenible

25 / 26 octubre 2018

How #international #shipping and the maritime community contribute to #SustainableDevelopment @ConnectSDGs

Esteban Pacha Vicente
Transport & Infrastructures Attaché
Embassy of Spain in London

GOBIERNO DE ESPAÑA MINISTERIO DE FOMENTO

FUNDACIÓN CAMPUS TECNOLÓGICO ALGECIRAS

UCA Universidad de Cádiz

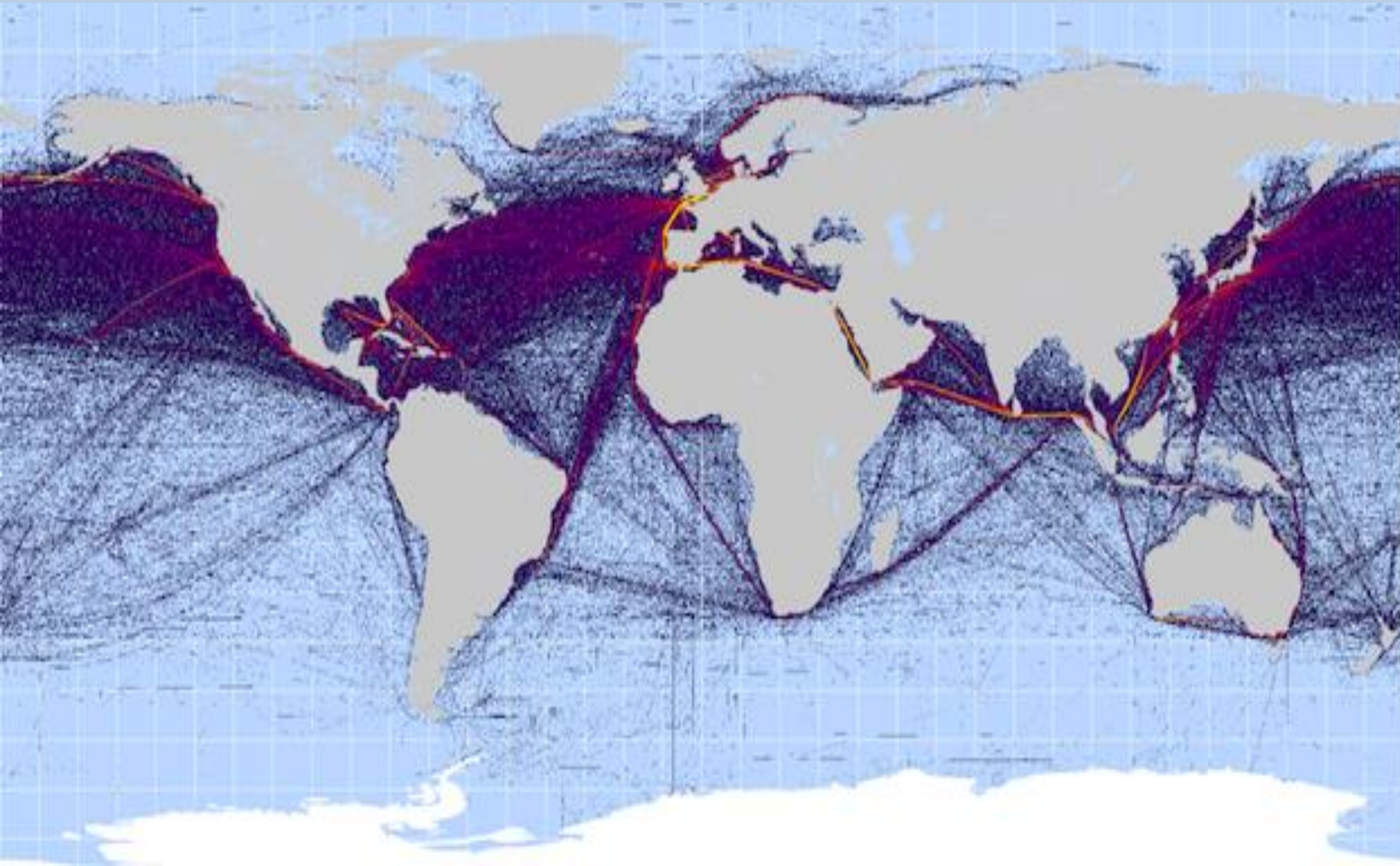
British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL

JUNTA DE ANDALUCIA

Ayuntamiento de Algeciras

MANCOMUNIDAD DE MUNICIPIOS DEL CAMPO DE GIBRALTAR

INTERNATIONAL SHIPPING



IMO @IMOHQ · 10h

Ships - dependable, low-cost transport for materials, goods, fuel and food. Helps lift millions out of poverty. UN maritime agency IMO works to ensure shipping strengthens contribution to blue economy and sustainable growth. #EndPovertyDay #SDG1 #IDEP2018 bit.ly/2xv8aXw

1 20 48

IMO
OUR HERITAGE
BETTER SHIPPING
FOR A BETTER FUTURE

What/Who exactly IMO is?

safe, secure and efficient shipping on clean oceans

173 Member States + 3 Associate States

65 OGs + 77 ONGs

Annual budget € 35 MM

300 staff

IMO BODIES

IMO SECRETARIAT

ASSEMBLY

COUNCIL

MARITIME SAFETY COMMITTEE

MARINE ENVIRONMENT COMMITTEE

LEGAL COMMITTEE

FACILITATION COMMITTEE

TECHNICAL COOPERATION COMMITTEE

IMO Conventions, Codes, Guidelines, Manuals & Recommendations

International shipping is indispensable for economic growth and sustainable development and therefore plays a role in all of the SDGs

3 SDGs have particular resonance for IMO:

SDG 13 Climate action, SDG 7 Clean energy, SDG 14 Use of the oceans

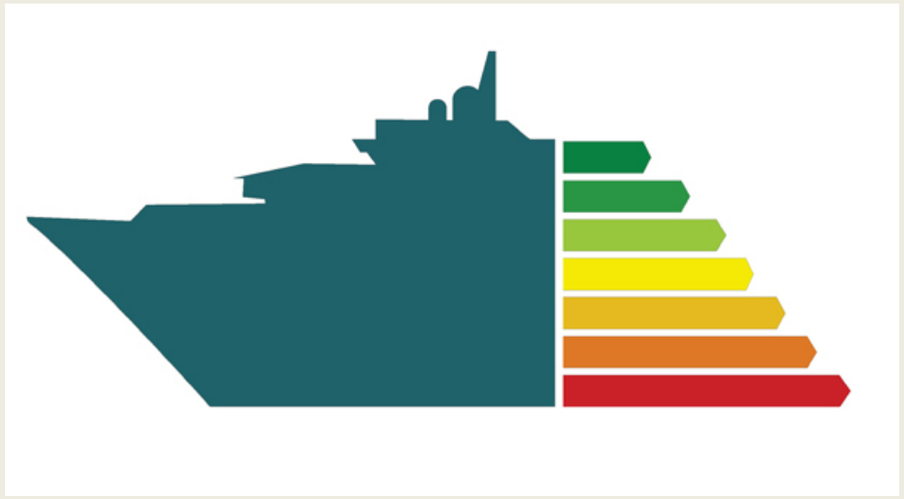
But also

Reduction of GGE from ships

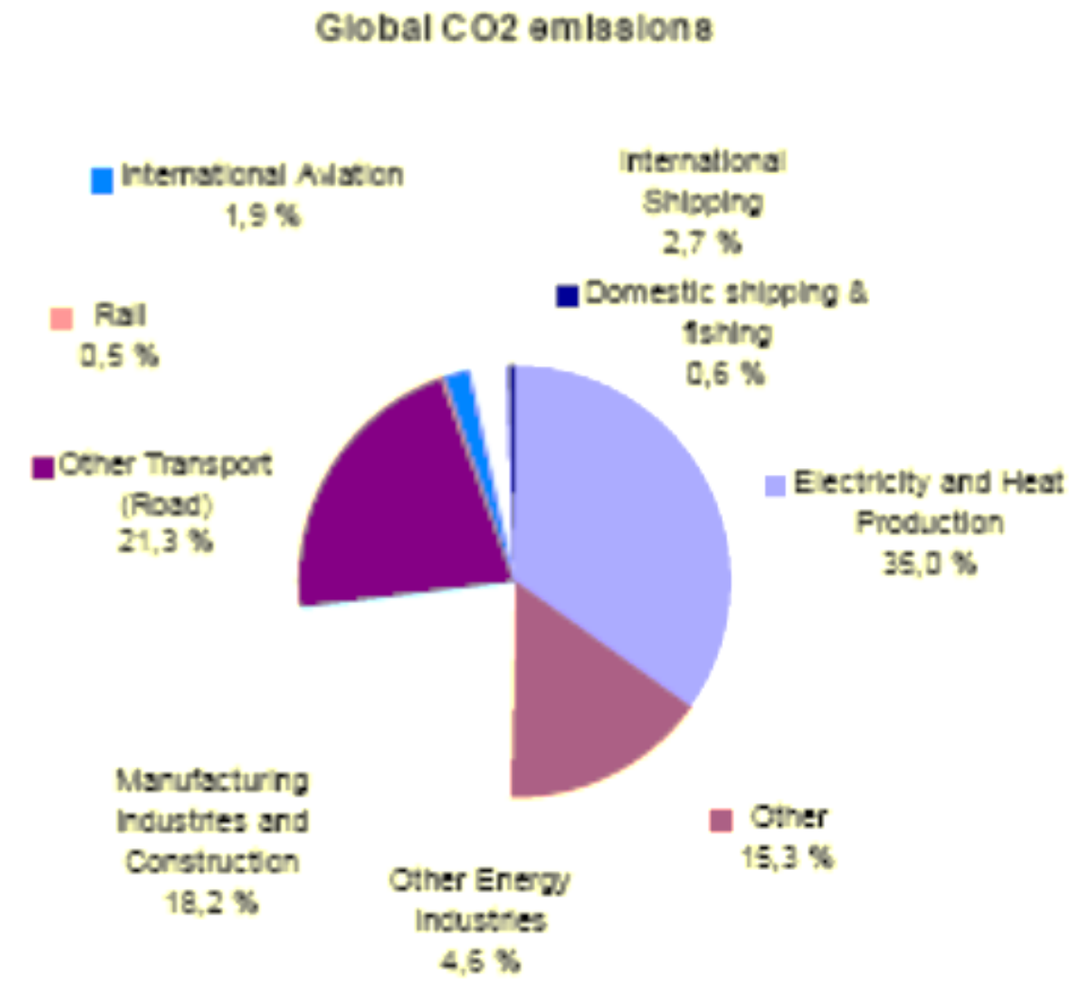
Global efforts to reduce greenhouse gas emissions from shipping rely heavily on improvements in energy efficiency and increased uptake of low-carbon technologies.

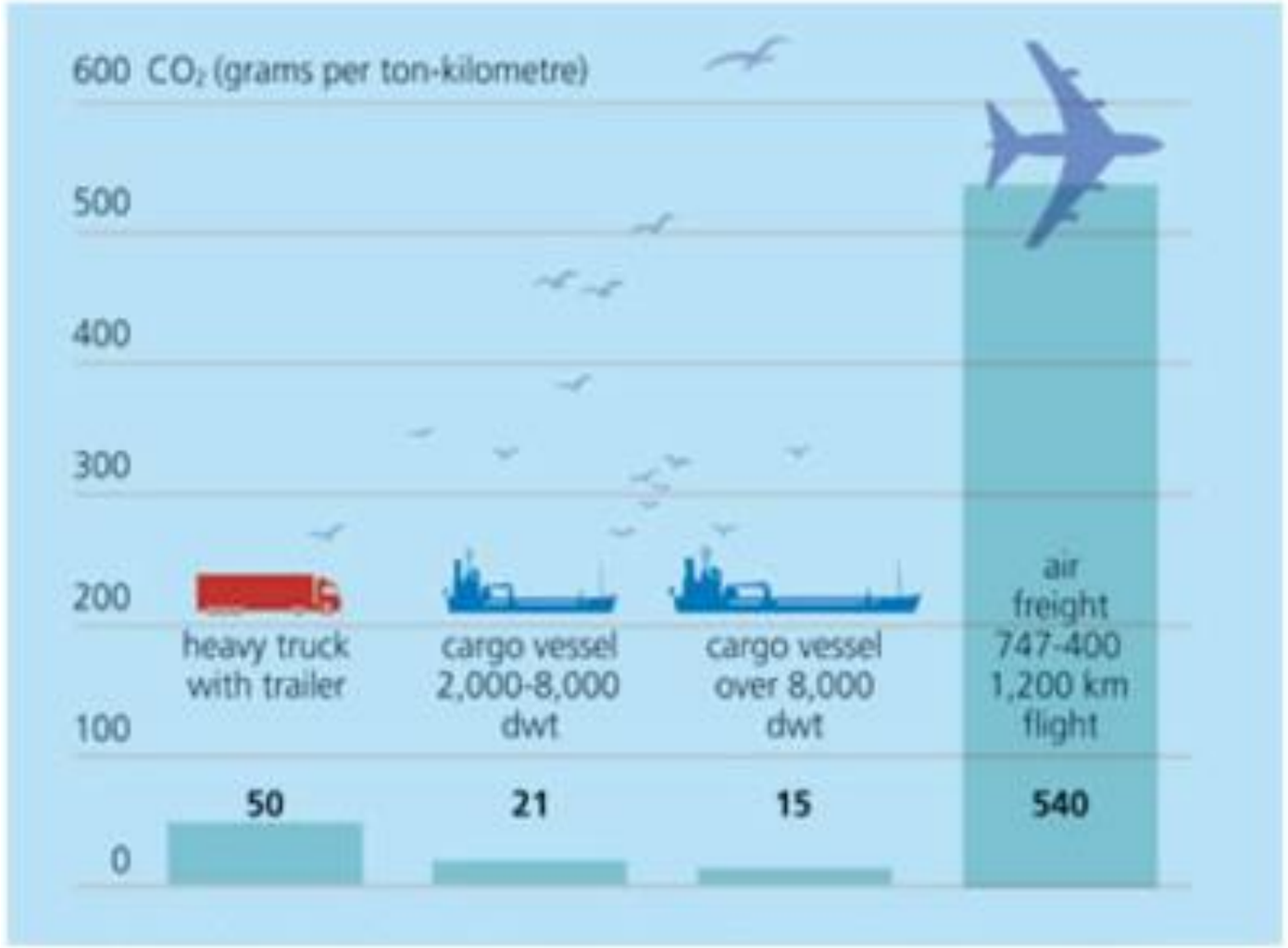
1

Energy efficiency in shipping
Why it matters?



Shipping produces 870 mm tons of CO_2
≤ 3% of global GHG emissions that could increase up to 250% by 2050 if no action is taken*





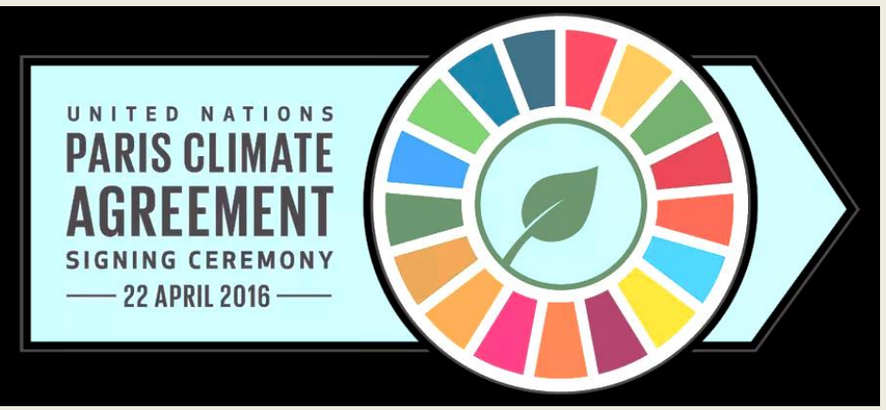
*Third IMO GHG Study 2014: 796 million tonnes of CO2 emitted by international shipping in 2012 (2.2% of the total global CO2 emissions for that year).

But still de most efficient mode of transport

MARPOL Annex VI
Prevention of Air Pollution from Ships

- In force since 19 May 2005
- Limits the main air pollutants from ships
- Regulates emission of sulphur oxides (SOx) and nitrous oxides (NOx) and particulate matter
- Prohibits emissions of ozone substances (ODS)
- Regulates shipboard incineration, and the emissions of volatile organic compounds (VOC) from tankers
- Establishes Emission Control Areas (ECAs) to reduce emissions in designated sea areas.

UNFCCC | Paris Agreement 2016



1. Nationally Determined Contributions (NDCs) EU (including Spain) binding target of 40% domestic reduction in GHG emissions by 2030 compared to 1990

1. Temperature increase <2ºC compared to preindustrial levels by 2100

1. 25% Reduction in GHG emissions by 2030

Climate Change and Maritime Transport

From 1/1/2013

- **Energy Efficiency Design Index (EEDI)** mandatory for new ships - requires a minimum energy efficiency level per capacity mile (e.g. tonne mile)
- **Ship Energy Efficiency Management Plan (SEEMP)** for all ships - establishes a mechanism to improve the energy efficiency of a ship in a cost-effective manner

From 1/3/2018

- **Data Collection System (DCS) -** ships >5,000 GT required to collect and report consumption data for each type of fuel oil they use through the IMO Ship Fuel Oil Consumption Database

ShippingEfficiency.org ship's theoretical CO2 emissions of over 76,000 existing ships

IMO Strategy on reduction of GHG emissions from ships

Resolution MEPC.304(72)

ADOPTED @IMOHQ #mepc72

on 13 April 2018

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

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.

IMO Strategy on reduction of GHG emissions from ships

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."

SHORT, MID AND LONG TERM MEASURES

- Short-term measures agreed by MEPC between 2018 and 2023
- Mid-term measures finalized between 2023 and 2030
- Long-term measures beyond 2030

IMO Strategy on reduction of GHG emissions from ships

LEVELS OF AMBITION

1. **Carbon intensity of the ship**

To review the energy efficiency design requirements for ships

2. **Carbon intensity of international shipping**

To reduce CO_2 emissions per transport work across international shipping 40% by 2030 compared to 2008

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

To peak GHG emissions from international shipping ASAP and reduce total annual GHG emissions 50% by 2050 compared to 2008

IMO @IMOHQ · 33m

Historic breakthrough as UN maritime body IMO adopts greenhouse gas reduction strategy for shipping. 50% emission reduction by 2050, firm commitment to pursue total phase out. Big win for the planet! bit.ly/2EJEh7R #MEPC72 #climatechange @UNFCCC @UN @UNEnvironment

IMO @IMOHQ · 7h

IMO in the news: Dirty Fuel Won't be Tolerated, International Shipping Watchdog Says: bloom.bg/2N29lDT #SulphurLimit #ReducingAirPollution @technology @business

Broad support by Shipping Organizations, Ship-owners, Press, Academia…

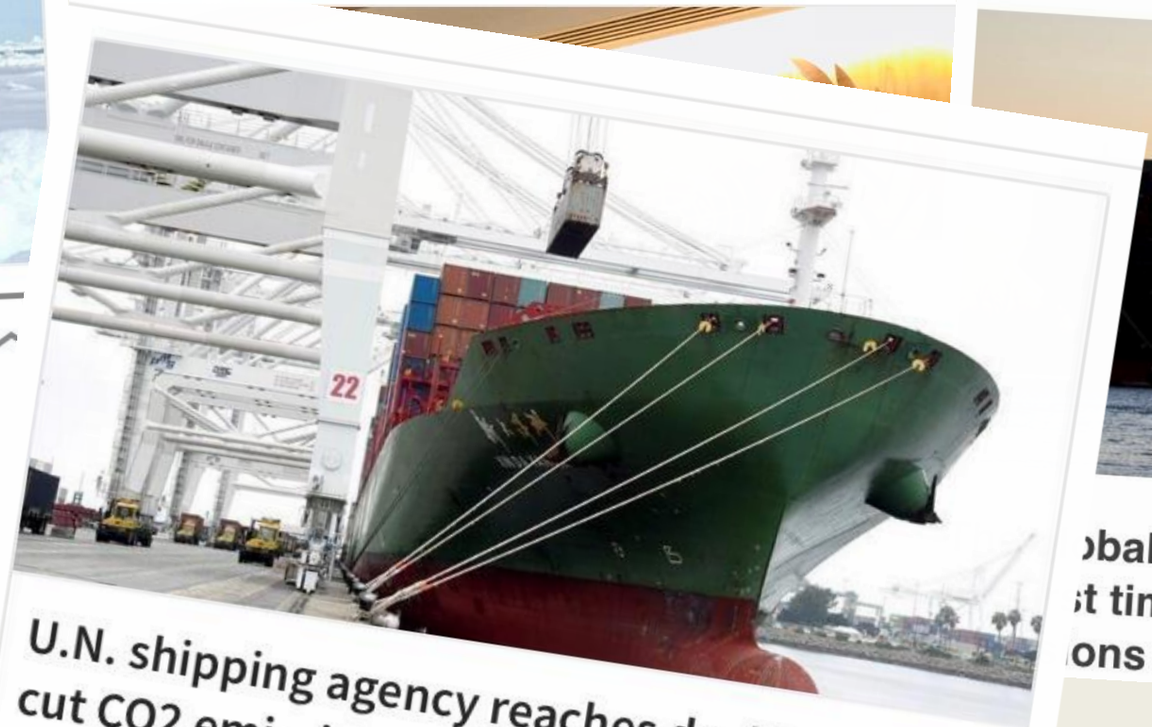
UK Chamber of Shipping
3.958 seguidores
3 horas

…uccess! The UK Chamber welcomes IMO's …ecision to target at least a 50% reduction in …arbon emissions from shipping by 2050. We say …t should be seen as a "stepping stone" to full …decarbonisation in the long term. Full statement …ere: https://lnkd.in/exGzu-e

IMO agrees at least 50% reduction in carbon emissions from shipping by…
ukchamberofshipping.com

Simon Bergulf
Director Regulatory Affairs, A.P. Møller - Maersk
2 horas

It's been two intensive weeks at the International Maritime Organisation, negotiations at UN level are never easy and especially not when you are entering uncharted territory. But the achievement is well worth the many hours. The IMO just adopted a strategy to bring down the emissions from shipping on par with the Paris agreement goals, I.e. as a minimum 50% reduction by 2050 with a view to full decarbonization. **A.P. Moller - Maersk** fully supports this agreement and looks forward to continue our journey with concrete measures and technology to reach our goal. I would like to particularly thank the committed and always hardworking team from the Danish Maritime Authority. **Andreas Nordseth** you can be very proud of your GHG musketeers.



U.N. shipping agency reaches deal to cut CO2 emissions
reuters.com

Global shipping in 'histori… climate deal
By David Shukman
Science editor

13 April 2018 | Science & Environment

…obal shipping industry has for …st time agreed to cut its …ons of greenhouse gases.

Work in progress

MEPC 73

22-26 October 2018

1 Inventory of GHG emissions from international shipping 2012-2018

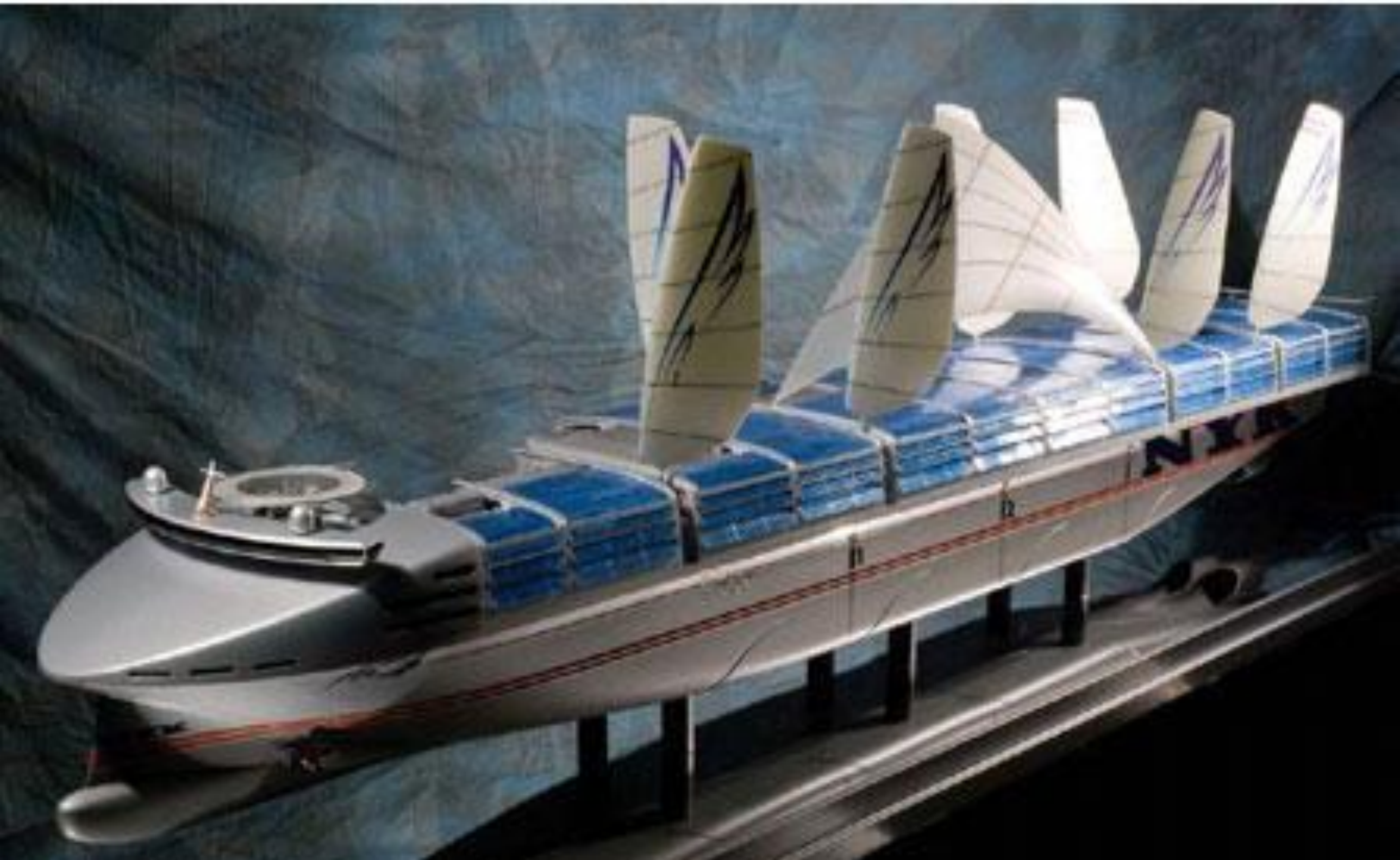
The inventory should include current global emissions of GHGs and relevant substances emitted from ships of 100 GT and above engaged in international voyages, taking into account implementation of EDDI and other measures

2 Scenarios for future shipping emissions 2018-2050: Fourth IMO GHG Study

The study could set shipping emissions out to 2050 and beyond within the context of a pathway of CO2 emissions reduction consistent with the Paris Agreement temperature goals as identified in the Initial Strategy.

- **May 2019** MEPC 74 to agree to the Terms of reference, establish a Steering Committee
- **October 2019** Contract awarded
- **Spring 2020** MEPC 75 to consider a progress report
- **Autumn 2020** MEPC 76 to consider the Fourth IMO GHG Study for approval

CO_2 free



Sulphur 2020

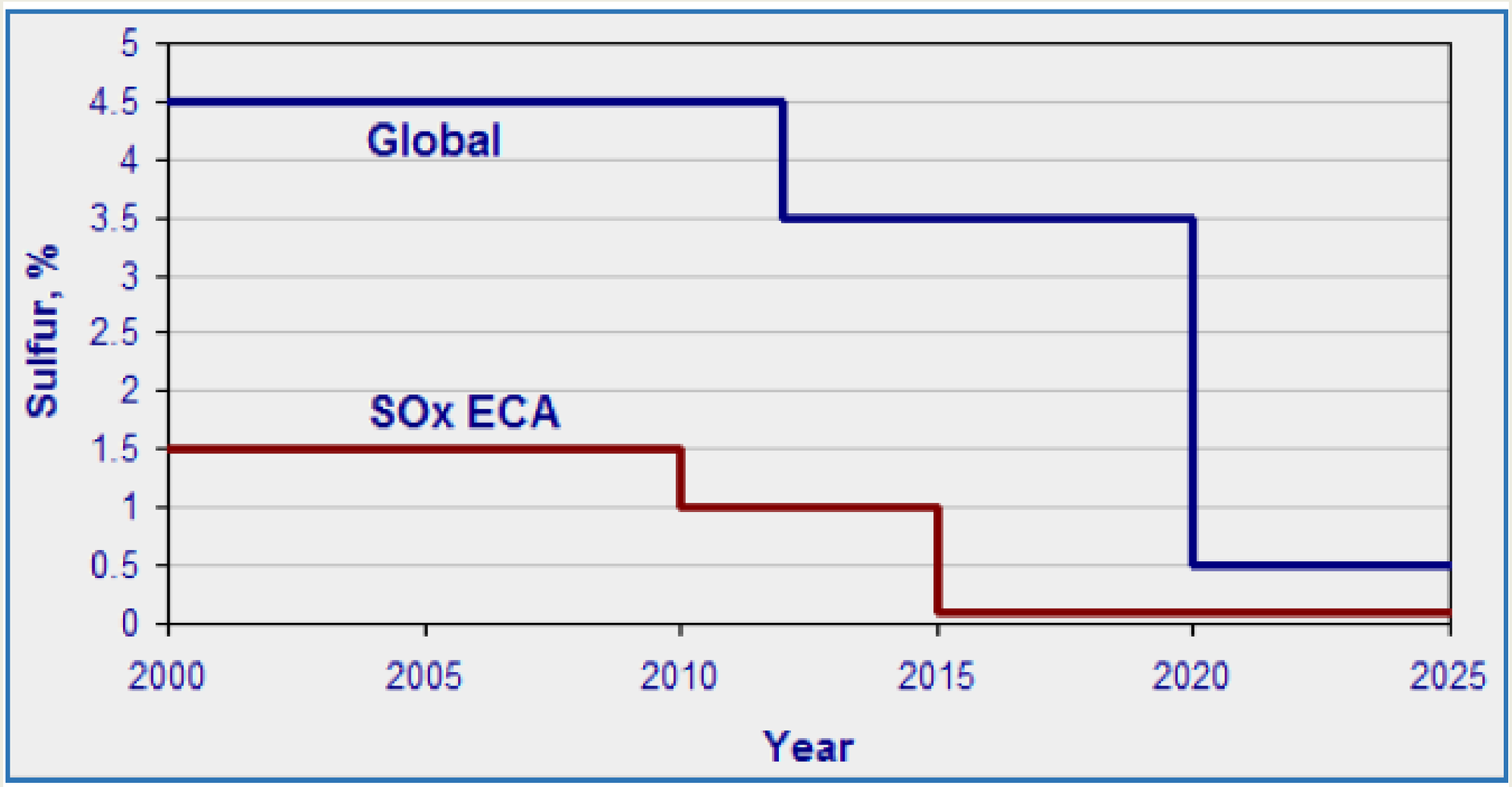
Fuel used on ships would have a global sulphur cap of 0,50% m/m

2

Implementing Sulphur 2020 limit

IMO adopted **Sulphur Emission Control Areas**

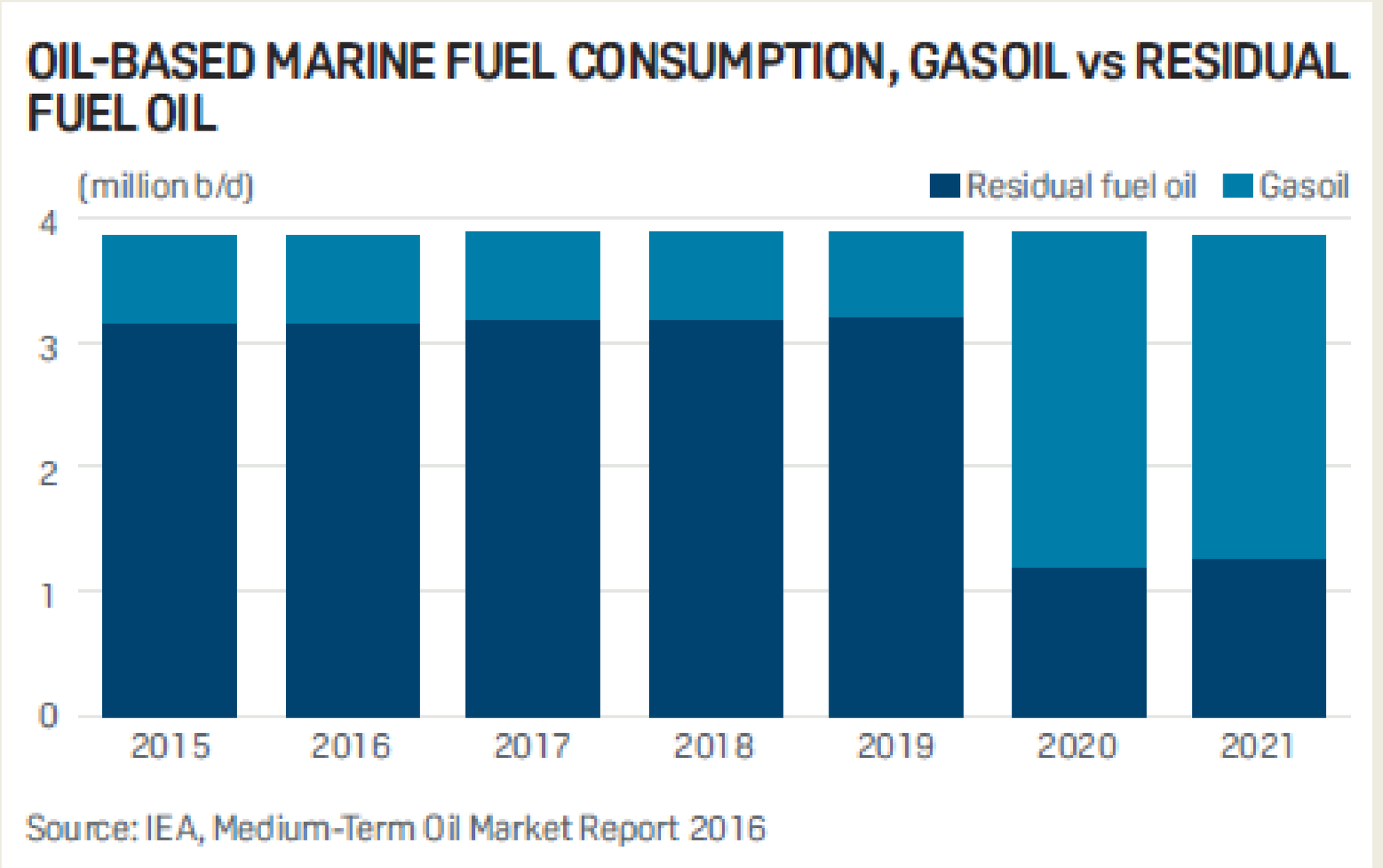
SECAs



Outside a SECA established to limit SOx	Inside a SECA established to limit SOx
4.50% m/m prior to 1 January 2012	1.50% m/m prior to 1 July 2010
3.50% m/m on and after 1 January 2012	1.00% m/m on and after 1 July 2010
0.50% m/m on and after 1 January 2020*	0.10% m/m on and after 1 January 2015

Baltic Sea area (2006)
North Sea area (2007)
North American area (2012)
US Caribbean Sea area (2014)
+
Feasibility assessment for
Mediterranean Sea area & others

GLOBAL IMPACT



How the sulfur cap works?

- New ships built with advanced fuel options

- Existing ships paying more for fuel or installing equipment to reduce sulfur emissions.

- Options to meet the 2020 requirements:

  1.- using low-sulfur compliant fuel oil

  2.- implementing new practices when traveling

  3.- use alternative fuels

https://www.platts.com/IM.Platts.Content/InsightAnalysis/IndustrySolutionPapers/SR-IMO-2020-Global-sulfur-cap-102016.pdf

IMPACT ON REFINING SECTOR

- Substantial investment in upgrading fuel oil residues to gasoil grades reducing refining margins
- Residue destruction
- Global capacity

COSTS TO SHIPPING INDUSTRY

- extra annual costs to shipping globally are only $5.85 billion

TRADE FLOWS

- Exports and bunkering regions

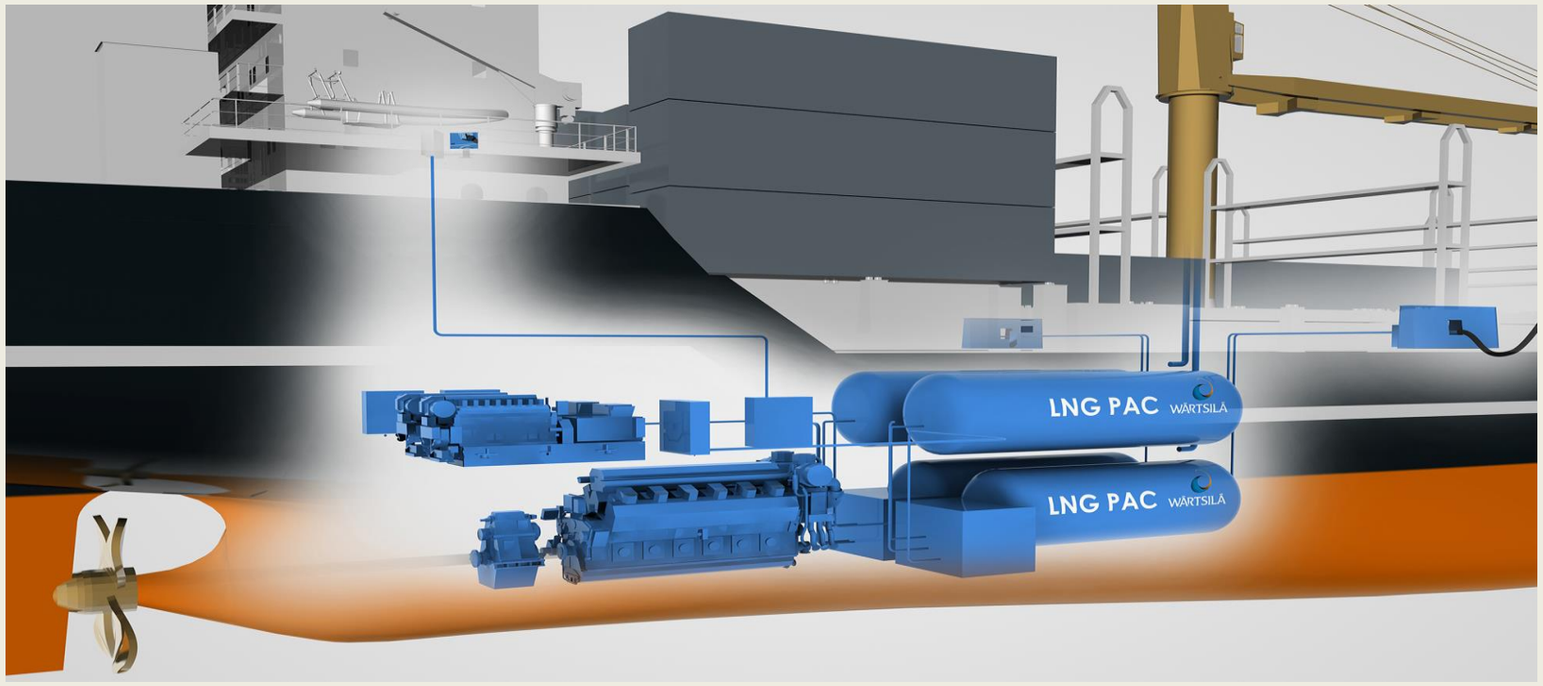
ENFORCMENT

- Non-compliant fuel, non-compliant ships

Alternative fuels

“The share of gross tonnage from liquefied natural gas-capable ships on the order book for delivery in 2018 and beyond currently stands at **13.5 per cent**. This is more than **twice the value of 2017** and more than **three times that of 2015**. By promoting liquefied natural gas-powered ships, the industry can reduce costs and use a cleaner source of energy, in line with energy and climate-related targets under **SDG-7** (on energy) and **SDG-13** (on climate change)”.

REVIEW OF MARITIME TRANSPORT 2017, UNCTAD



HEALTH IMPACT

- SOx + NOx = tiny airborne particles linked to premature death
- Air pollution from shipping accounts for about 50.000 premature deaths per year at an annual cost of more than €58 billion
- A 2020 global 0.5% sulfur cap may mean we all pay slightly more for imported consumer goods passed on through higher freight costs, in exchange for many of us living longer and for health costs to governments and individuals via insurance premiums being less than they otherwise would be.

https://www.platts.com/IM.Platts.Content/InsightAnalysis/IndustrySolutionPapers/SR-IMO-2020-Global-sulfur-cap-102016.pdf

SDG14

CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES

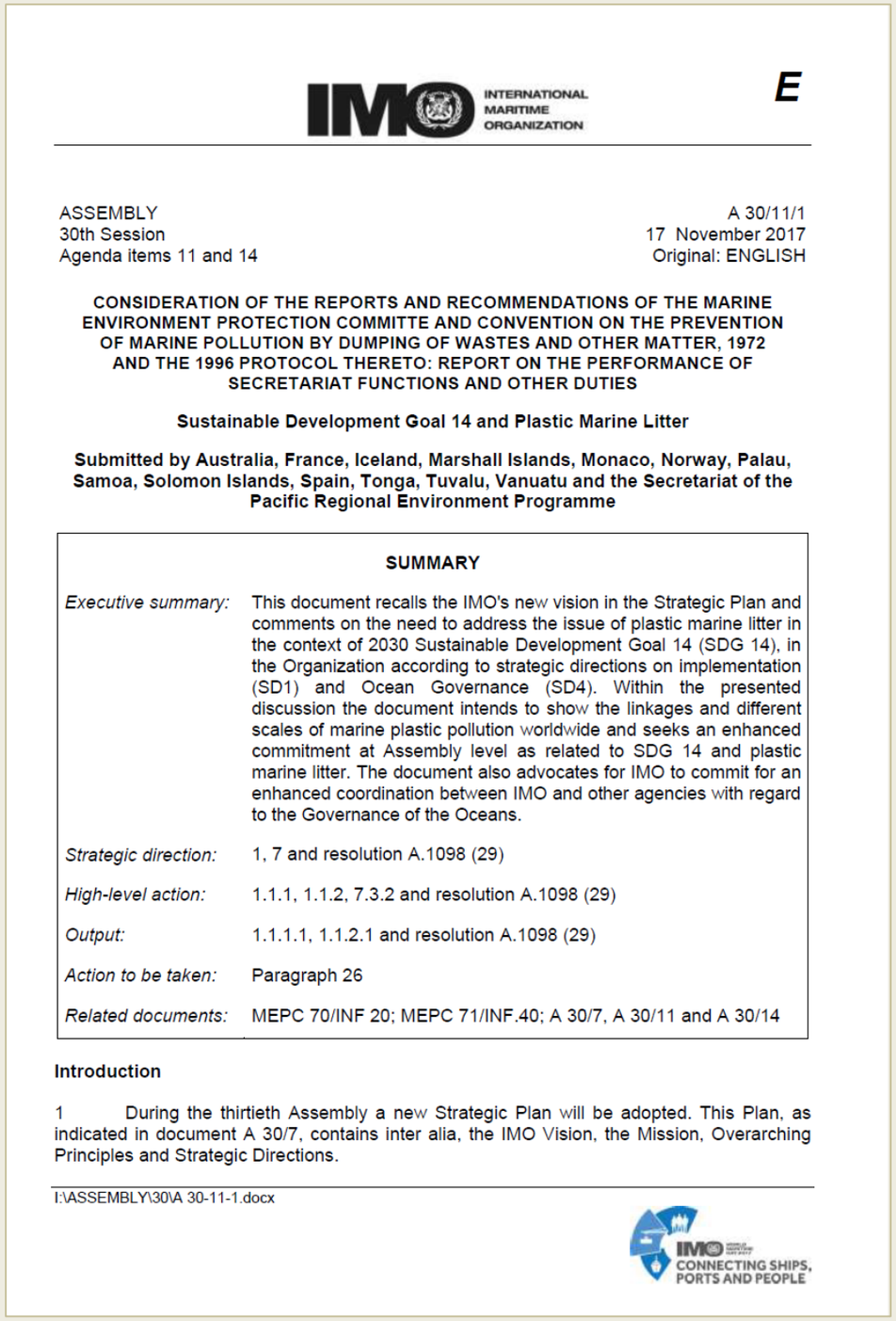
SDG 14 is central to IMO through implementation and enforcing the main conventions addressing marine pollution

4

Sustainable shipping and sustainable use of the oceans

Marine Plastic Litter

New output to address the issue of marine plastic litter from shipping ADOPTED @IMOHQ #mepc72 on **13 April 2018** for completion in 2020



IMO INTERNATIONAL MARITIME ORGANIZATION

E

ASSEMBLY
30th Session
Agenda items 11 and 14

A 30/11/1
17 November 2017
Original: ENGLISH

CONSIDERATION OF THE REPORTS AND RECOMMENDATIONS OF THE MARINE ENVIRONMENT PROTECTION COMMITTE AND CONVENTION ON THE PREVENTION OF MARINE POLLUTION BY DUMPING OF WASTES AND OTHER MATTER, 1972 AND THE 1996 PROTOCOL THERETO: REPORT ON THE PERFORMANCE OF SECRETARIAT FUNCTIONS AND OTHER DUTIES

Sustainable Development Goal 14 and Plastic Marine Litter

Submitted by Australia, France, Iceland, Marshall Islands, Monaco, Norway, Palau, Samoa, Solomon Islands, Spain, Tonga, Tuvalu, Vanuatu and the Secretariat of the Pacific Regional Environment Programme

SUMMARY

Executive summary: This document recalls the IMO's new vision in the Strategic Plan and comments on the need to address the issue of plastic marine litter in the context of 2030 Sustainable Development Goal 14 (SDG 14), in the Organization according to strategic directions on implementation (SD1) and Ocean Governance (SD4). Within the presented discussion the document intends to show the linkages and different scales of marine plastic pollution worldwide and seeks an enhanced commitment at Assembly level as related to SDG 14 and plastic marine litter. The document also advocates for IMO to commit for an enhanced coordination between IMO and other agencies with regard to the Governance of the Oceans.

Strategic direction: 1, 7 and resolution A.1098 (29)

High-level action: 1.1.1, 1.1.2, 7.3.2 and resolution A.1098 (29)

Output: 1.1.1.1, 1.1.2.1 and resolution A.1098 (29)

Action to be taken: Paragraph 26

Related documents: MEPC 70/INF 20; MEPC 71/INF.40; A 30/7, A 30/11 and A 30/14

Introduction

1 During the thirtieth Assembly a new Strategic Plan will be adopted. This Plan, as indicated in document A 30/7, contains inter alia, the IMO Vision, the Mission, Overarching Principles and Strategic Directions.

I:\ASSEMBLY\30\A 30-11-1.docx

IMO CONNECTING SHIPS, PORTS AND PEOPLE

Spain at IMO Assembly 30

Spain+others proposal to enhance IMO's commitment with SDG 14, in particular reducing marine plastic litter from international shipping.

United Nations Intergovernmental Conference on **Marine Biodiversity of Areas Beyond National Jurisdiction** (4-17/09/18)

- UN GA Resolution 69/292 of 19 June 2015
- Ongoing negotiations on an international legally binding instrument under UNCLOS, on the **conservation and sustainable use of the marine biological diversity of areas beyond national jurisdiction.**
- International cooperation; marine genetic resources; measures such as area-based management tools and marine protected areas; environmental impact assessments; and capacity-building and the transfer of marine technology.
- Second session 25/3 to 5/4 2019; Third session 19-30/8/2019.

International shipping and the maritime community also contribute to other SDGs

Most elements of the 2030 Agenda will only be realized with a sustainable transport sector supporting world trade and facilitating global economy

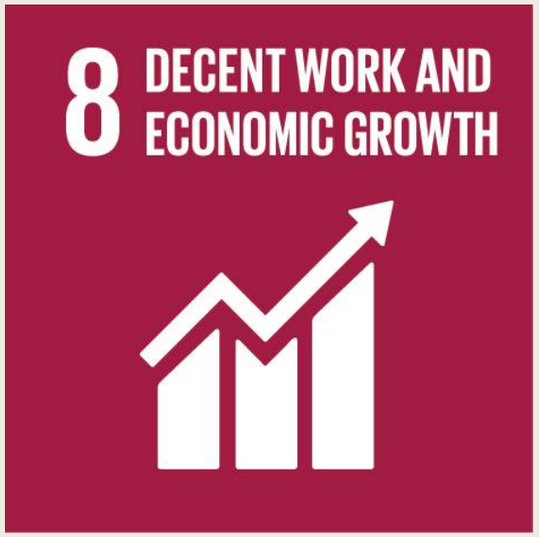
http://www.imo.org/en/MediaCentre/HotTopics/Documents/IMO%20SDG%20Brochure.pdf

IMO's 2030 Agenda
National Maritime Transport Policies

NMTPs

- Providing assistance to Member States in formulating and adopting their National Maritime Transport Policies (NMTPs) through the development of a training package and the delivery of related training events.

- Providing knowledge and skills which are necessary to prepare such policies that will in turn enhance the implementation of their obligations as flag, port and coastal States and lead to better development and regulation of the maritime transport sector.



- IMO’s regulatory framework facilitates a global maritime transportation system that connects markets and moves 80% of global trade.

- The efficient functioning of the maritime sector enables trade of food and energy to be delivered cost-effectively through the globe.

- Maritime transport plays a central role, in particular for SIDS that are 100% dependent on it.

- The maritime community contributes to quality of life and employment, particularly in developing countries, employing 1,5 million seafarers and many more land-based personnel, enhancing economic prosperity in local communities.

- IMO promotes the seafaring profession through educations and human element policies, including, working conditions and welfare.

- IMO promotes sustainable production and consumption patters, as well as the sustainable use and management of resources.

- IMO contributes to achieve maximum efficiency of maritime transport. FAL Convention enables ships, cargo and passengers to transit smoothly from port to port, facilitating sustainable connexions between cities through maritime corridors.

- IMO's contributes to reduce waste generation, both operational waste from ships (MARPOL Convention) and dumping of waste to the oceans (London Convention)

- IMO promotes sustainable consumption and industrial waste reduction through the Hong Kong Ship Recycling Convention

A lot to do !!

MAKE

YOUR CONTRIBUTION TO ACHIEVE SDGs

VISIBLE

Spain’s 2030 Agenda
Grupo de Alto Nivel para la Agenda 2030

OBJETIVO 2030
Grupo de Alto Nivel para la Agenda 2030

Ministerios,
Comunidades Autónomas,
Federación Española de Municipios y Provincias
Sociedad civil,
Sector empresarial y profesional, sindicatos y universidades

Alto Comisionado para la Agenda 2030

http://www.exteriores.gob.es/Portal/es/SalaDePrensa/Multimedia/Documents/20171030_AGENDA%202030%20infografia.pdf

GOBIERNO DE ESPAÑA
MINISTERIO DE FOMENTO

Urbanismo y Sostenibilidad Urbana

Lograr que las ciudades y los asentamientos humanos sean inclusivos, seguros, resilientes y sostenibles: Agenda Urbana Española.

- Marco europeo de referencia para la ciudad sostenible (RFSC)
- Estrategia española de sostenibilidad urbana y local (EESUL)
- Libro Blanco de la Sostenibilidad en el Planeamiento Urbanístico Español
- Guía Metodológica para los sistemas de Auditoría, Certificación o Acreditación de la Calidad y Sostenibilidad en el Medio Urbano
- Informe de situación de las principales actuaciones e iniciativas en materia de sostenibilidad urbana en España
- Libro Verde de sostenibilidad urbana y local en la era de la información Red de redes de desarrollo local sostenible (RDR/DLS)
- Sistema Municipal de indicadores de sostenibilidad urbana y local Estrategia española de movilidad sostenible (EEMS)

https://www.fomento.gob.es/arquitectura-vivienda-y-suelo/objetivos-desarrollo-sostenible

THANK YOU FOR GETTING INVOLVED WITH SDGs

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