




Norwegian Ministry
of Climate and Environment

The IMO Strategy - Reconciling different views and interests

Sveinung Oftedal

Specialist Director





Key question



At what time is it more important to solve the challenge than protecting negative consequences on the existing economy



What is a ship?

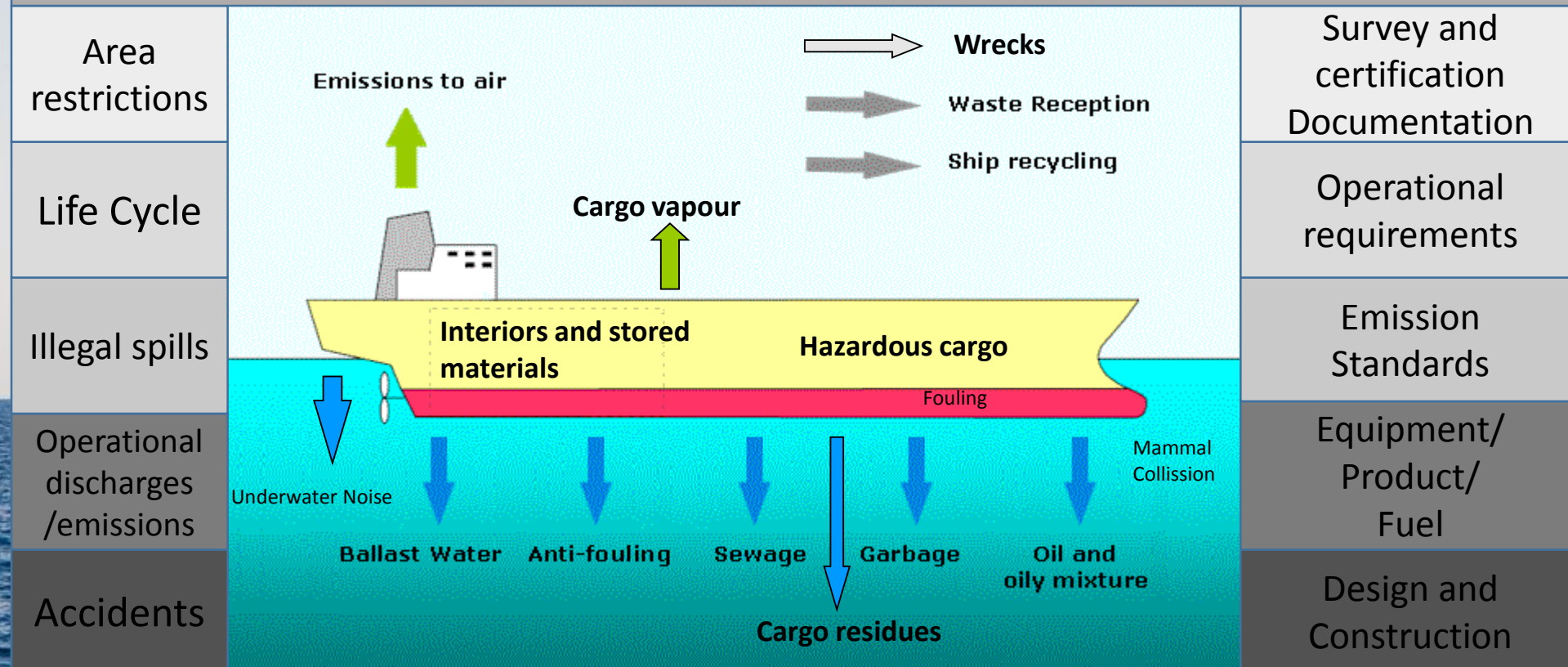


Souza Photography
raffic.com

Mandatory Audits of Member States

Port State Rights

Flag State Obligation



Environmental Challenges of shipping

The regulatory framework for shipping

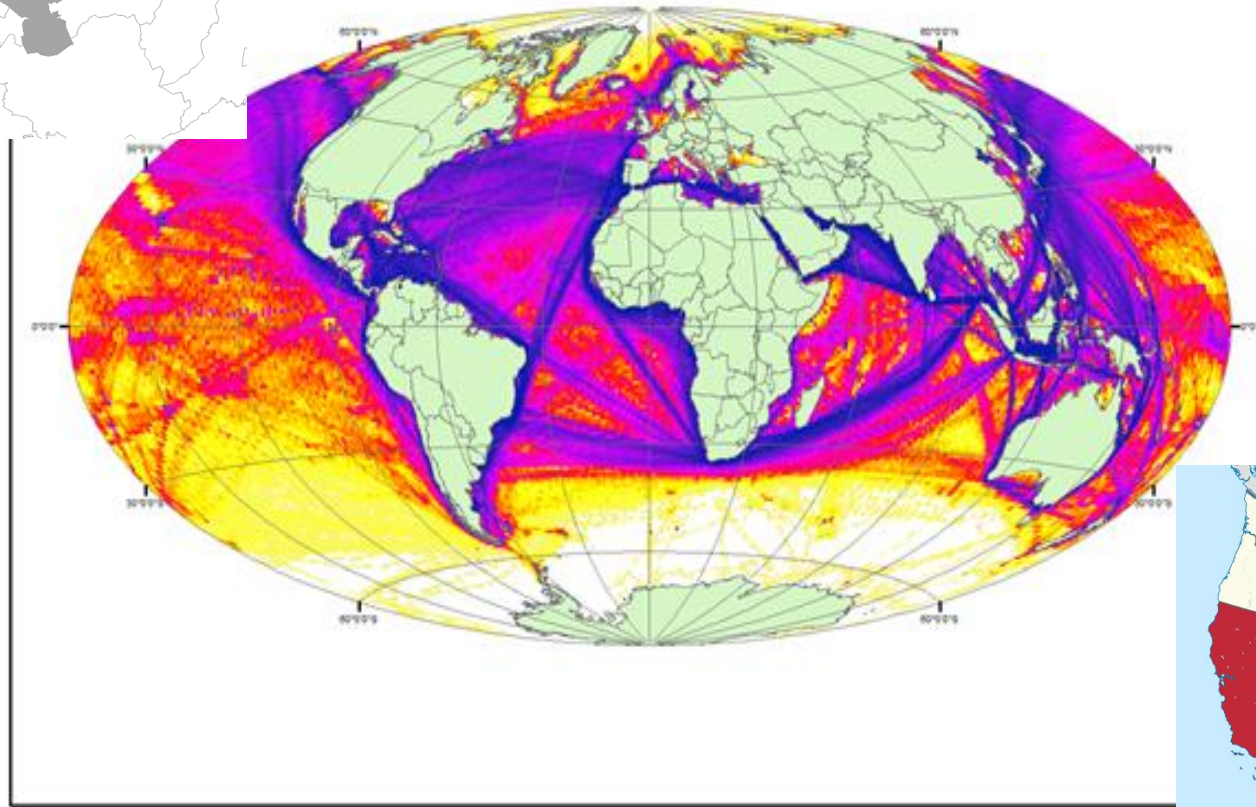
Global



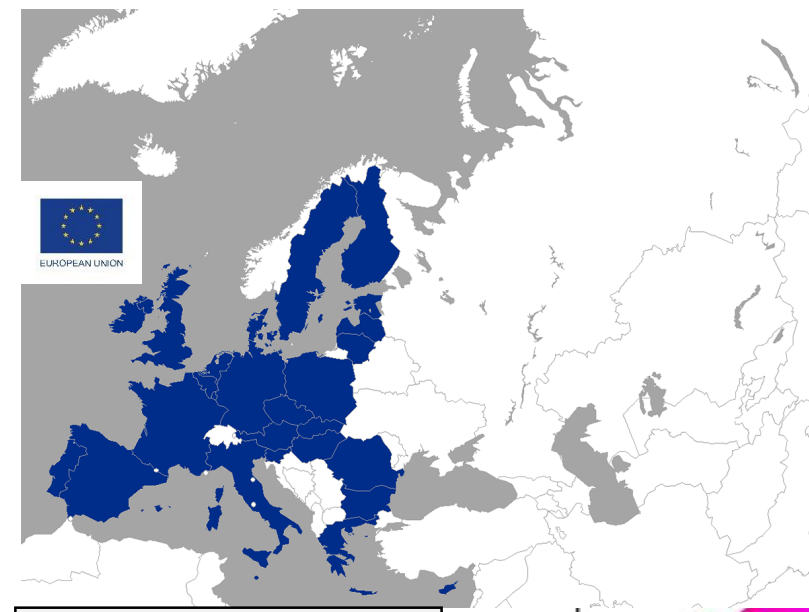
IMO's role in global solutions



Local



Regional





GOVERNANCE AT THE INTERNATIONAL MARITIME ORGANISATION: THE CASE FOR REFORM

A leading role in a society going through fast changes

Kyoto Protocol



IMOclimate

@IMOclimate

A global network of analysts tracking progress on a UN climate deal for the shipping industry, one knot at a time. We are "NOT" affiliated to the IMO.

Washington, DC

Registrerte seg februar 2017



Tweets
2 410

Følger
585

Følgere
1 088

Liker
87

Tweets Tweets og svar Medier



IMOclimate @IMOclimate · 14. sep.

Wow! @PortofHamburg @portofbarcelona @PortofAntwerp @PortofLA @portoflongbeach @PortVancouver and @PortOfRotterdam join forces on climate action, and call on govts, regulators to adopt CO2 pricing and funding support to green-tech R&D and pilot projects.
portofrotterdam.com/en/news-and-pr...



2 13 27



IMOclimate @IMOclimate · 14. sep.

One of most important steps to put world on track to meet #ParisAgreement is short-term action to get aviation and #shipping on 1.5 degrees pathway, says .@climateactiontr

.@IMOHQ leadership is needed on the international stage next month at #MEPC73

Different perspectives - also at the IMO

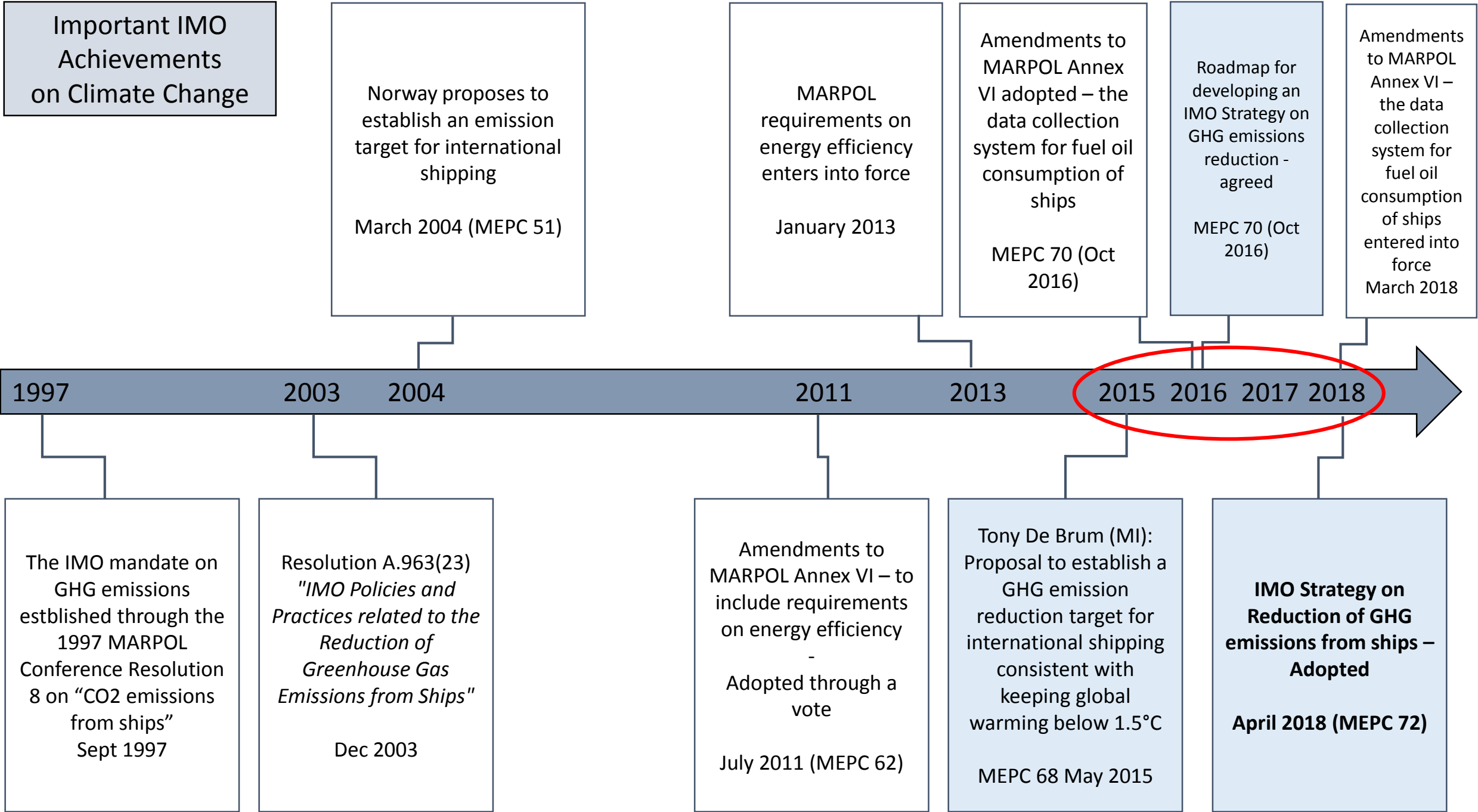
- Opinion A:
"Shipping is always a soft target"



- Opinion B:
"Shipping is always the last target"

Climate Change – Global change





Key Challenges

"Vision – levels of ambition – guiding principles"

Meaningful strategy – vs – meaningless strategy

Ambition:

High Ambition – vs – No Ambition

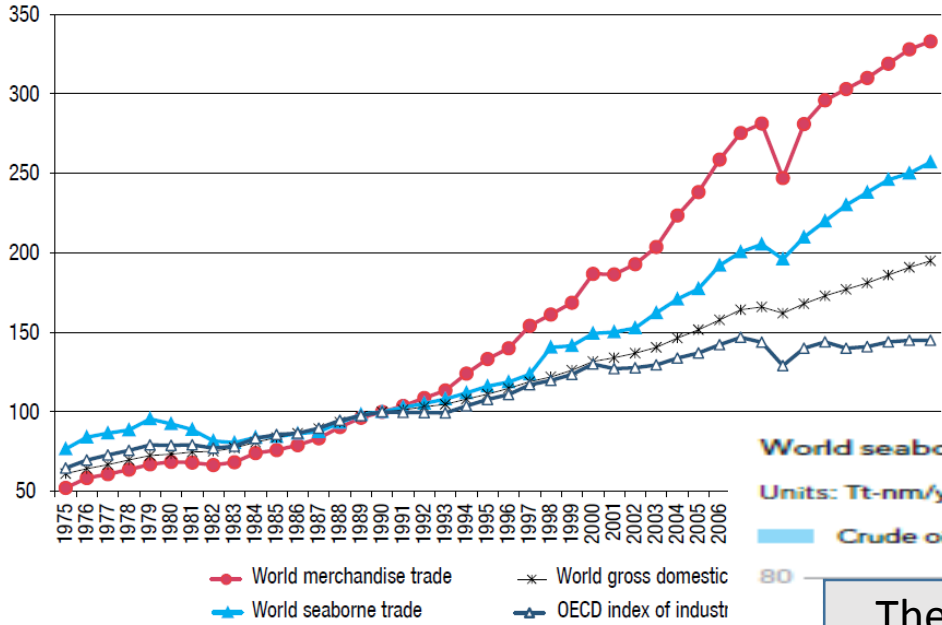
Efficiency only! – vs – efficiency for the ship and efficiency for the sector and reduction of total emissions

Numbers – vs – No numbers

Principles:

Differentiation – vs – No differentiation

Figure 1.1. Organization for Economic Cooperation and Development index of industrial production and world indices: Gross domestic product, merchandise trade and seaborne shipments, 1975–2016 (1990 = 100)



Sources: UNCTAD secretariat calculations, based on data from OECD, 2017; United Nations, Transport, various issues; World Trade Organization, 2012.
Note: Index calculations are based on GDP and merchandise trade in dollars, and seaborne trade

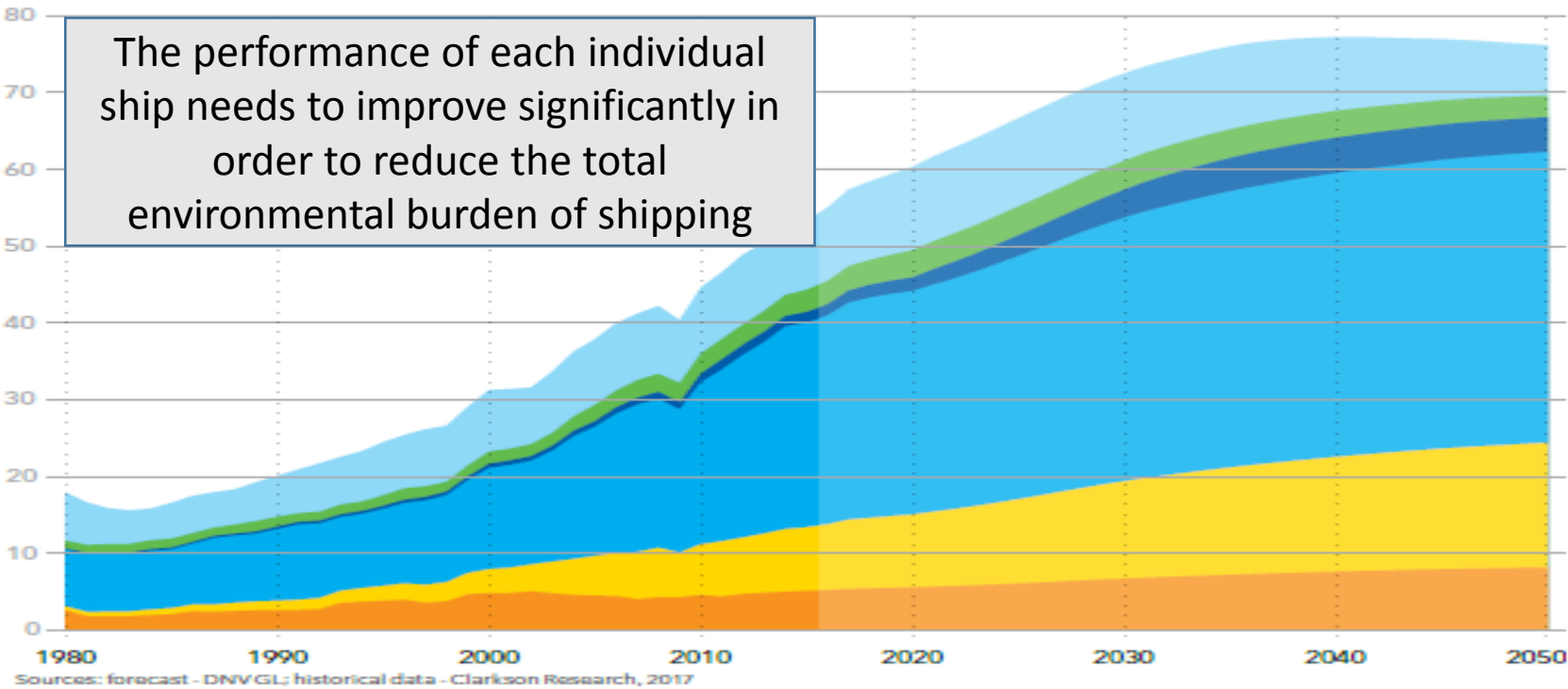


Demand for seaborne transport will grow 37% towards 2050

World seaborne trade: tonne-miles

Units: Tt-nm/yr

Crude oil Oil products Natural gas Bulk Container Other cargo

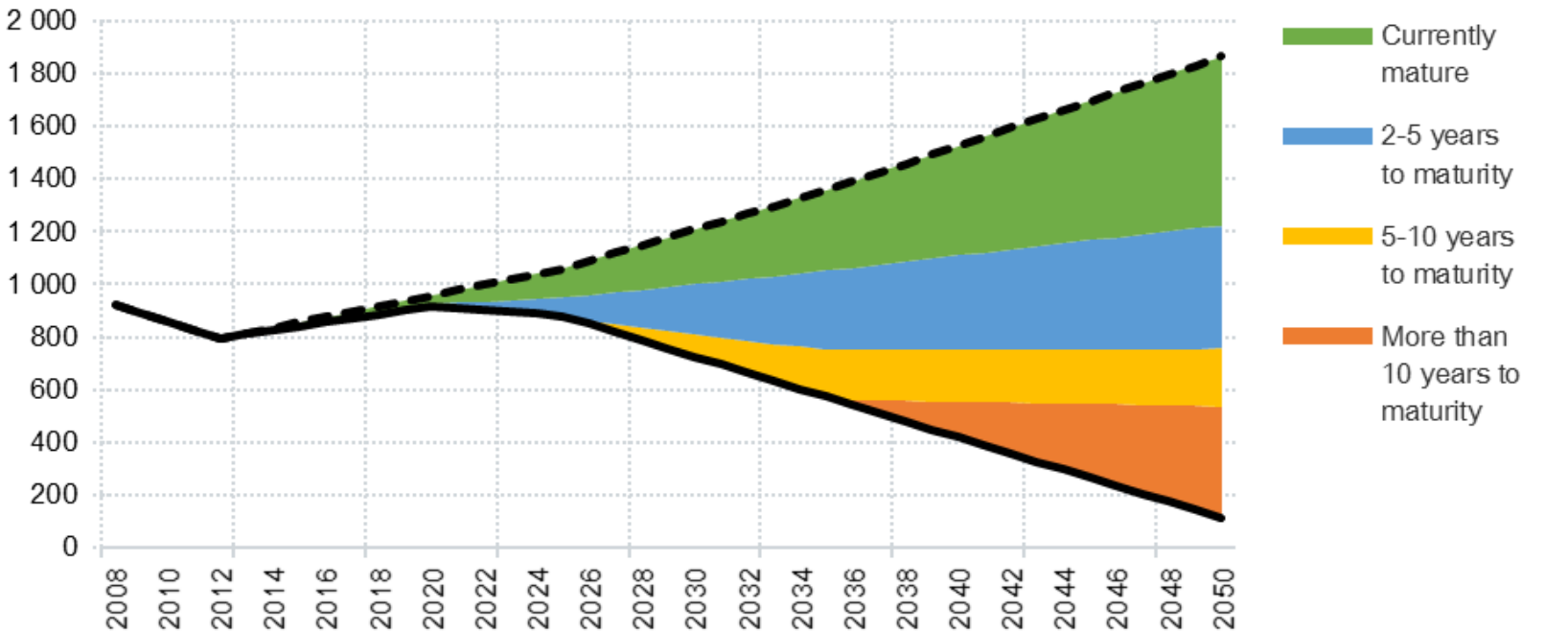


Average growth of 2%/yr to 2030, then 0.2%/yr towards 2050

Source: DNV GL

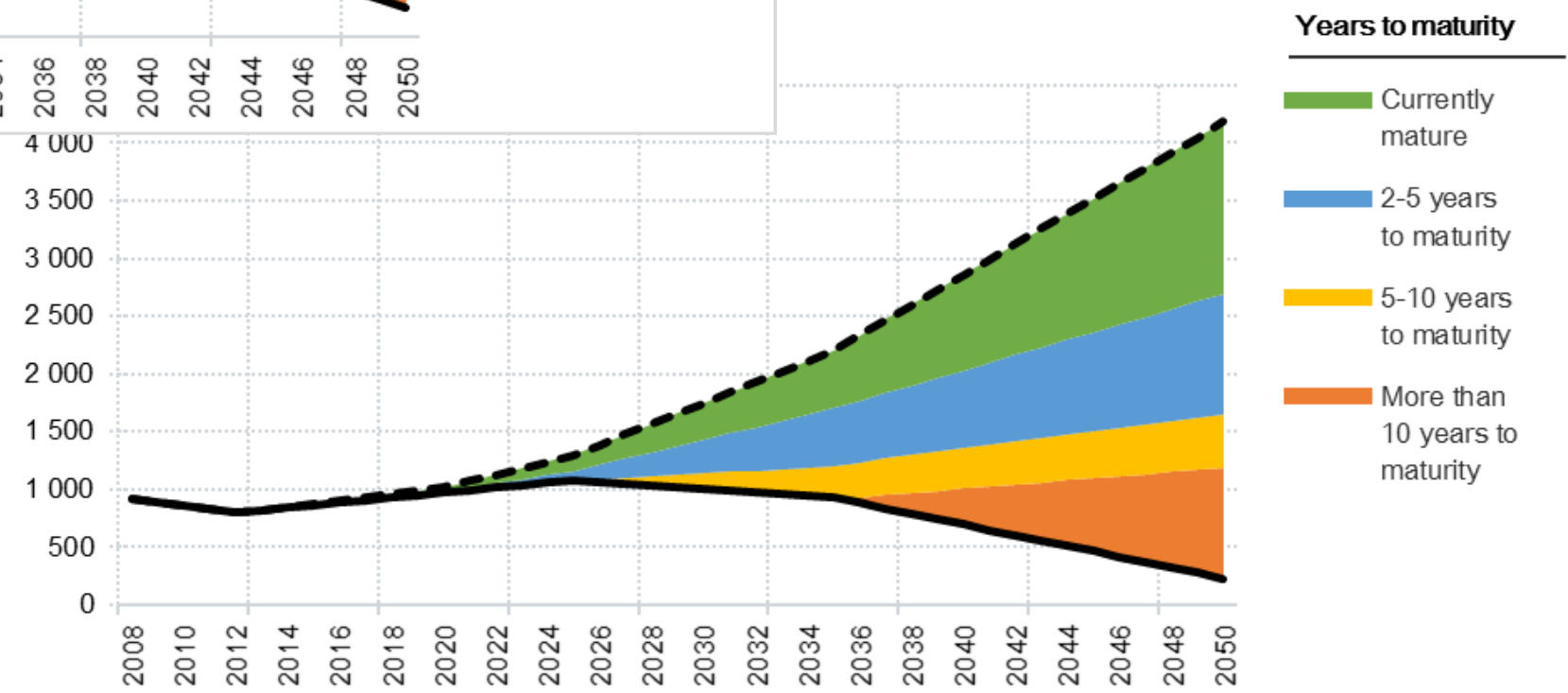
CO₂ EMISSION REDUCTION POTENTIAL 2008 TO 2050 - LOW GROWTH

Units: **Million tonnes CO₂**



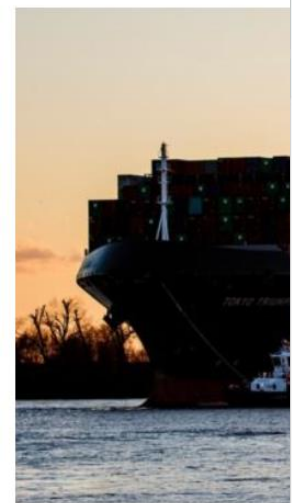
Norwegian IMO-document:

08 TO 2050 - HIGH GROWTH





13 April 2018



The global shipping industry is taking a significant step towards curbing greenhouse gas emissions.

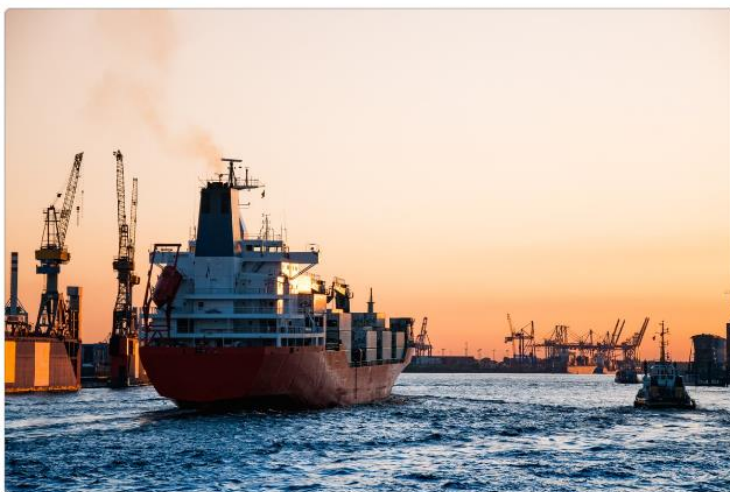
The move comes after talks between the International Maritime Organization (IMO) and the European Union (EU) in London.



Violeta Bulc
@Bulc_EU

Følg

#Shipping sector has delivered! The agreement reached this week at the @IMO HQ is a significant step forward in the global efforts to tackle #ClimateChange. Work must now continue on further steps. #MEPC72
europea.eu/!wC68RK



08:58 - 13. apr. 2018

48 retweets 82 liker



EU Transport, IMO og European Commission

1 48 82



Violeta Bulc @Bulc_EU · 13. apr.
Congrats to #IMO SG Lim, Chair Oftedal, and #EU Member States on their commitment to reach this deal.

1 1 13



Environment
Carbon emissions from shipping to IMO

going to cut its emissions. It's a big deal.

maritime, maillon faible

égocient les premiers objectifs chiffrés de réduction de gaz à effet de serre.



cette fois, au rendez-vous ? Réunis à Londres, l'Organisation maritime internationale (OMI) doivent définir des objectifs chiffrés de réduction de leurs émissions. Le sujet, inscrit au calendrier des

It's possible — but difficult — to halve shipping emissions, official says

• "Ambitions for 50 percent reduction by 2050 are definitely difficult, but it's achievable. And now we have a situation where we really have to start with developing green shipping that we need for the future," Norway's Minister of Climate and Environment Ola Elvestuen said.

Andrew Wong

Published 12:34 AM ET Fri, 27 April 2018



Climate-Changed Nations Strike Historic Deal to Curb Shipping Emissions

By Anna Hirtenstein and Jeremy Hodges
13. april 2018 16.11 Updated on 13. april 2018 17.00

- ▶ Industry agrees to cut emissions by at least 50% by 2050
- ▶ U.S., Russia and Saudi Arabia object to emissions proposals

LISTEN TO ARTICLE
▶ 2:59

Most of the world's nations agreed to an historic deal that for the first time will limit emissions from the global shipping industry.



Important elements of the Initial GHG Strategy

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.

Extract from the Ambition

.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;

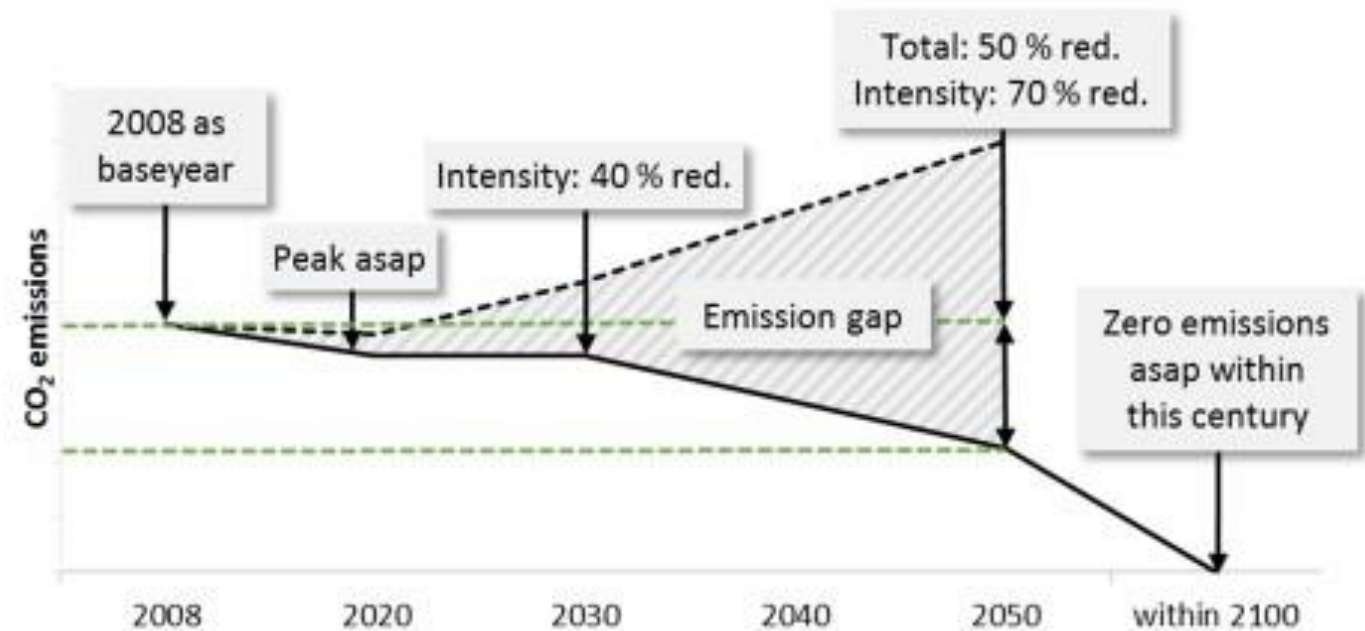
.2 carbon intensity of international shipping to decline

to reduce CO₂ 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 CO₂ emissions reduction consistent with the Paris Agreement temperature goals.

Initial IMO Strategy on reduction of GHG emissions: Vision and ambitions



IMO – Follow-up actions on Climate Change

2018-2023

Action plan

Initiate GHG-study

Approach to
Impact on States

Development of
measures such as:

- Energy efficiency
- Assess fuels
- Tech. Cooperation
- National Action Plans

Develop revised
GHG strategy

2023-2030

Development of
measures such as:

Energy efficiency

Implementation
programme for uptake of
low-carbon and zero-
carbon fuels

New and innovative
emission reduction
mechanism(s)

Develop revised
GHG strategy

2030 →

Development of
measures such as:

Provisions for low-
carbon and zero-carbon
fuels

Adoption of new and
innovative emission
reduction mechanism(s)

Develop revised
GHG strategy

PROGRAMME OF FOLLOW-UP ACTIONS OF THE INITIAL IMO STRATEGY ON REDUCTION OF GHG EMISSIONS FROM SHIPS UP TO 2023

ANNEX

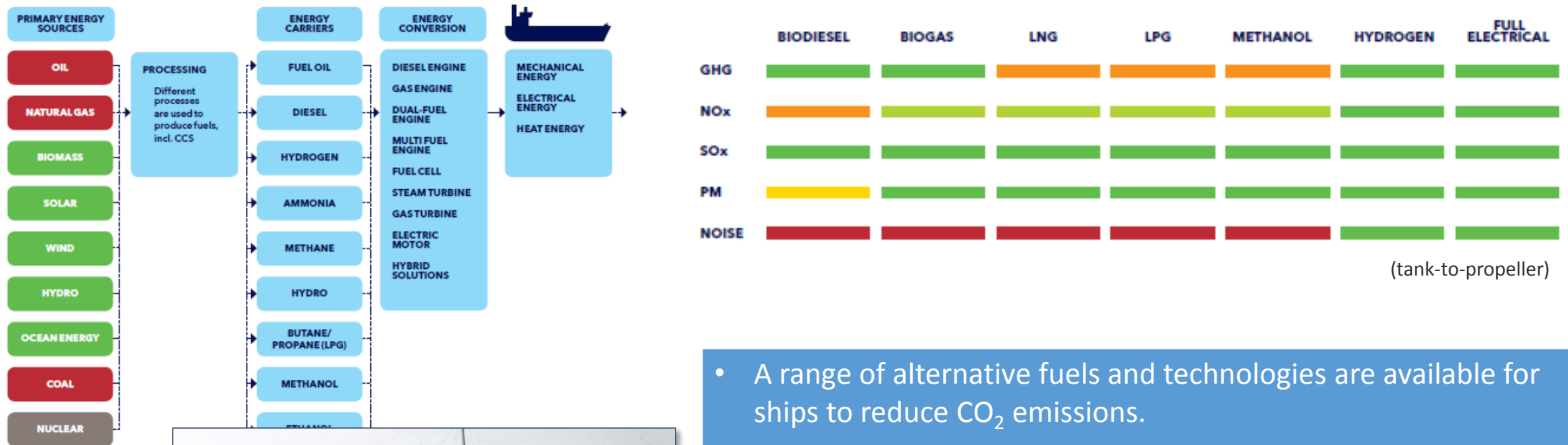
Streams of activity	2018	2019	2020		2021	2022		2023
	MEPC 73	MEPC 74	MEPC 75	MEPC 76	MEPC 77	MEPC 78	MEPC 79	MEPC 80
<i>Candidate short-term measures (Group A) that can be considered and addressed under existing IMO instruments²</i>	Invite concrete proposals	Consideration of proposals	Consideration and decisions on candidate short-term measures that can be considered and addressed under existing IMO instruments e.g. further improvement of the existing energy efficiency framework with a focus on EEDI and SEEMP, ITCP ³					
<i>Candidate short-term measures (Group B) that are not work in progress and are subject to data analysis</i>	Invite concrete proposals	Consideration of proposals	Consideration and decisions on candidate short-term measures that are not work in progress and are subject to data analysis, consistent with the Roadmap ³					
			Data analysis, in particular from IMO Fuel Oil Consumption DCS					
<i>Candidate short-term measures (Group C) that are not work in progress and are not subject to data analysis</i>	Invite concrete proposals	Consideration of proposals	Consideration and decisions on candidate short-term measures that are not work in progress and are not subject to data analysis e.g. National Action Plans guidelines, lifecycle GHG/carbon intensity guidelines for fuels, research and development ³					
<i>Candidate mid-/long-term measures and action to address the identified barriers</i>	Invite concrete proposals	Consideration of proposals including identification of barriers and action to address	Progress made and timelines agreed on the development of mid- and long-term measures					
<i>Impacts on States⁴</i>	Invite concrete proposals	Finalization of procedure	Measure-specific impact assessment, as appropriate, consistent with the Initial Strategy, in particular paragraphs 4.10 to 4.13					
<i>Fourth IMO GHG Study</i>	Scope	Initiation of the Study	Progress report	Final report				
<i>Capacity-building, technical cooperation, research and development</i>	Development and implementation of actions including support for assessment of impacts and support for implementation of measures							
<i>Follow-up actions towards the development of the revised Strategy</i>		Ship fuel oil consumption data collection pursuant to regulation 22A of MARPOL Annex VI (DCS)			Initiation of revision of the Initial Strategy taking into account IMO DCS data and other relevant information			Adoption of revised Strategy

² Includes ongoing work pursuant to regulation 21.6 of MARPOL Annex VI.

³ "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).

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

Reduction of greenhouse gas (GHG) emissions will be the main challenge for shipping in the next decades



(tank-to-propeller)



- A range of alternative fuels and technologies are available for ships to reduce CO₂ emissions.
- Their potential for this purpose varies widely, depending on the primary energy source, the fuel processing, the engine type/converter, and the supply chain.
- While focusing on GHGs, it is vital to recognize the footprint of other types of emission from alternative fuels and technologies; mainly NOx, SOx, and PM.

Alternative fuels insight platform (<https://afi.dnvgl.com>)



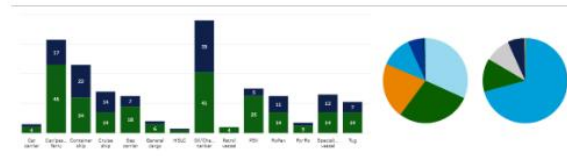
Welcome to DNV GL's Alternative Fuels Insight platform

Map



Explore the development of bunkering infrastructure for alternative fuels. You can also see where ships using alternative fuels and technologies are already operating.

Statistics



Get detailed insights to the uptake of alternative fuels and technologies on ships. Filter on ship types, region, technology and more to create your own graphs.

Supporters

Alternative fuels insight has been made possible by co-funding by our supporters.

Our supporters are industry pioneers and market leaders that see the importance of alternative fuels in the maritime industry. Here you can learn more about them and get in contact with their experts.

"To our advantage"

- The Planet is living!
- The institutional framework (IMO) is present
- Present resources, technologies and science is advancing rapidly

"Can be resolved"

- Air Pollution
- Ballast water / biofouling
- Ocean pollution
- Ship recycling
- Underwater noise

At what time is it more important to solve the challenge than protecting negative consequences on the existing economy

"New reality"

- Geopolitical changes
- Information and communication

"Major challenge – Major decisions"

- Climate change
- Microplastics
- Catch up with technology

IMO – leading on environmental challenges

Three pillar action

National spearhead policies

–
to introduce
low/zero
emission
technologies
and fuels

Development and implementation of the IMO legal framework

–
to ensure need
emission
reductions from
international
shipping

Technical Co-operation

–
to ensure the
required
progress at the
IMO and full
implementation

Thank you for your attention!