

# Regulatory Aspects in the transition to Shipping Decarbonization

## Candidate short-term measures

EEXI

CII

Enhancement of Initial Strategy set up in MEPC.304(72)

## Candidate mid-term measures

Uptake of alternative low- and net zero-carbon fuels

National actions plans

Operational energy efficiency measures for both new and existing ships

New/ innovative emission reduction mechanism(s),

Net zero-carbon fuels and technologies

Technical cooperation

Feedback mechanism to enable lessons learned

## Candidate mid-term measures

Pursue the development and provision of net zero-carbon or fossil-free fuels

Encourage and facilitate the general adoption of other possible new/innovative emission reduction mechanism(s).



# MEPC 72

Initial Strategy

MEPC 304 (72)

Short-term

Mid-term

Long-term



# MEPC 76

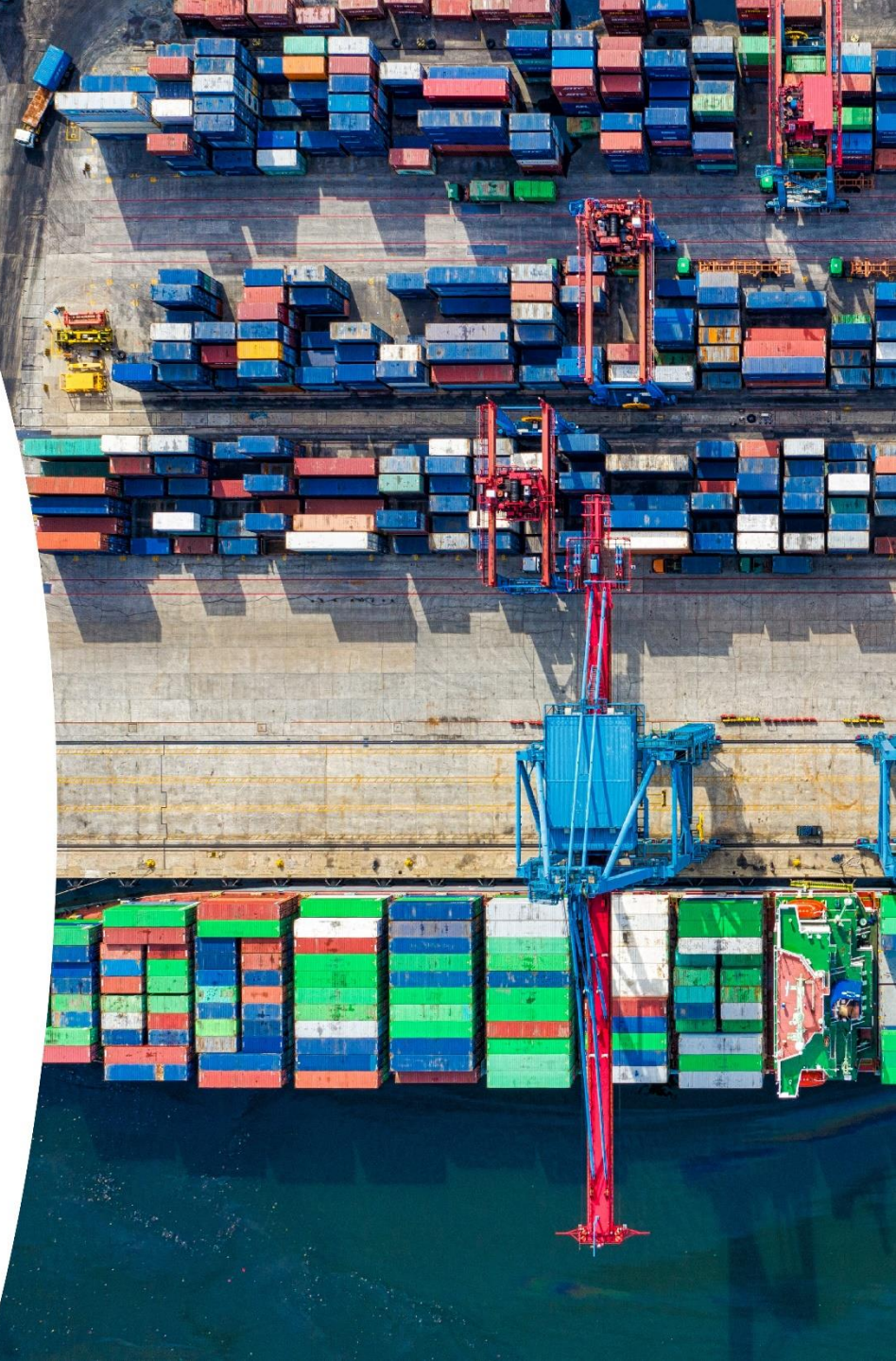
2021 Revised MARPOL Annex VI

MEPC 328 (76)

SEEMP enhancement

EEXI

CII



# MEPC 78

Revised & Additional regulations  
MEPC 355 (78) Correction factors  
& Voyage adjustments G5



# MEPC 79 December 2022

Adoption of amendments MARPOL annex VI

Revision of initial IMO GHG Strategy

Development of Mid-term measures

Adoption of the Revised Procedure of assessing possible impact on States of candidate measures

Development of Lifecycle GHG intensity of marine fuels guidelines

Proposals related to onboard CO<sub>2</sub> capture

Revision of IMO-DCS



COP 26

Urgent reduction of  
GHG outcome

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**Next to come**





## ISWG-GHG 14. March 2023

Initial Strategy will continue  
to be discussed

## MEPC 80. July 2023

Revised Strategy is expected  
to be adopted at



## IMO's short-term measures



Technical

Operational



Newbuilds

EEDI



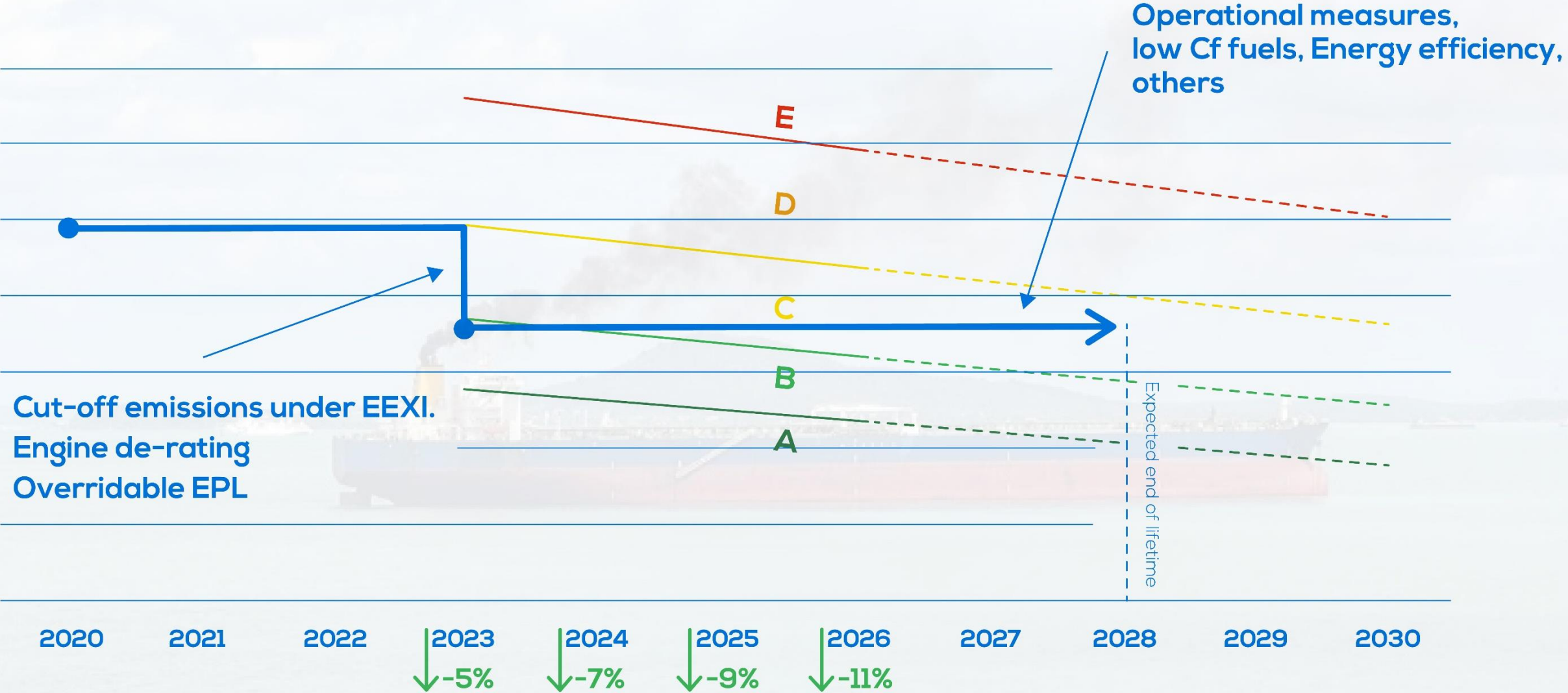
Ships in  
operation

EEXI

CII rating

Enhanced  
SEEMP

# EEXI & CII expected Impact



# What to expect related to GHG in International Shipping?

2023

## Short-term measures

-Adoption of Revised  
Initial Strategy for GHG



# What to expect related to GHG in International Shipping?

**2023**

**2030**

## Short-term measures

-Adoption of Revised Initial Strategy for GHG

## Mid-term measures

-The carbon intensity of international shipping to be reduced by at least 40-60%.

-The Lifecycle GHG emissions from international shipping to be reduced by at least 40%

-The energy used in international shipping to comprise at least 5 - 35% of zero/net - zero emissions

# What to expect related to GHG in International Shipping?

**2023**



## Short-term measures

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**2040**



## Mid-term measures

-Energy used by international shipping to comprise at least 50-75% of zero or near-zero emissions

-Reduce CO2 and/or lifecycle GHG emissions of international shipping by 50 and 88%.

# What to expect related to GHG in International Shipping?

**2023**

## Short-term measures

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**2030**

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**2040**

## Mid-term measures

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**2050**

## Long-term measures

-Phase out to zero/net zero GHG/CO2 emissions at the latest and aim for a neutral fleet;

-Energy used by international shipping to comprise of at least 90% from alternative fuels.

# Basket of Measures to Reduce GHG from international shipping

- 1 Short-term measures already agreed (EEXI and CII)
- 2 Voluntary measures already agreed (Development of National Action Plans on GHG)
- 3 Global fuel standards and support for uptake of low-carbon and zero-carbon fuels
- 4 Market-based measures implementing a mandatory GHG Contribution



# GHG Fuel Standard (GFS)

A standard methodology to quantify both  
Well-to-Tank (WtT) emissions  
and Tank-to-Wake (TtW)

Life Cycle Assessment Guidelines (LCA)  
& Fuel Lifecycle Label (FLL)



## WELL-TO-TANK

Emissions from  
production and  
transportation

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## WELL-TO-TANK

Emissions from  
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## TANK-TO-WAKE

Emissions from  
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**WELL-TO-TANK**

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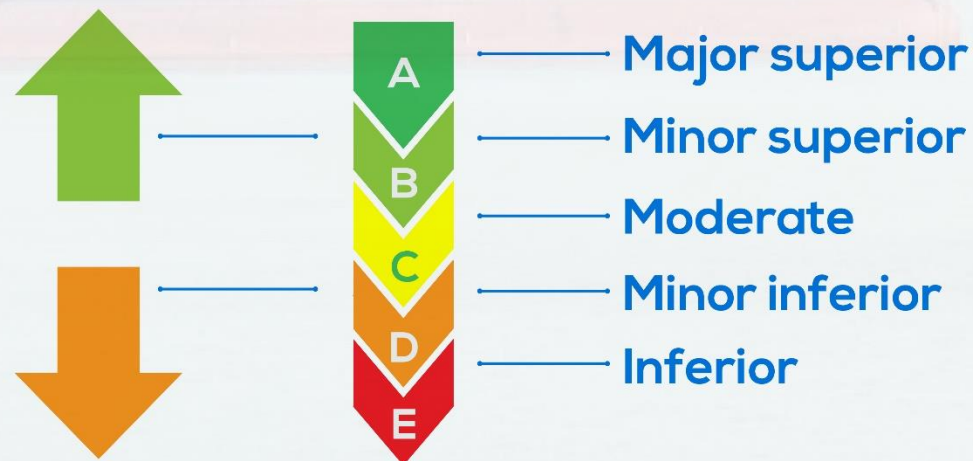


**WELL-TO-WAKE**

Not emissions impact

# Revenue raising concept candidate mid-term measures / IMSF&R (F&R)

- MBM: Emission Cap-and-Trade System (ECTS) or the funding/reward system based on ships performance
- The funding/reward benchmarking proposal establishes financial costs on ships rated as E or D under the CII framework and a variable reward for ships receiving A and B ratings under the CII
- **GHG contribution, establishes a carbon/GHG price from emissions of international shipping. Flat rate contribution.**





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