

The continuing saga of shipping decarbonization

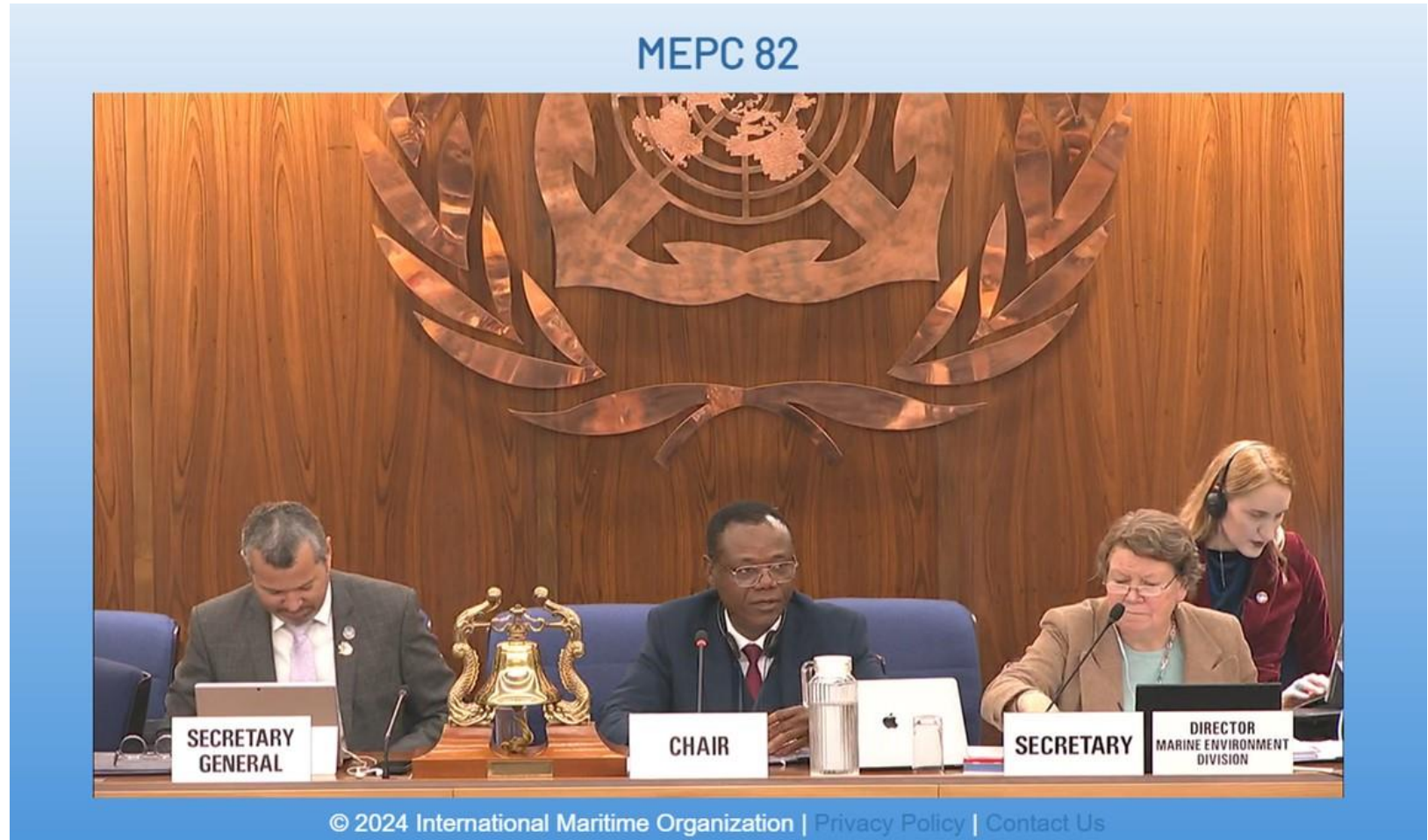
Harilaos N. Psaraftis
Professor Emeritus
Technical University of Denmark



Purpose

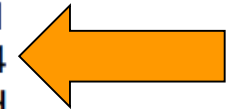
- Takes stock of recent developments on shipping decarbonization, both at IMO and EU levels
 - Attempts to assess future prospects
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- Note: treatment is not encyclopedic!

Perfect timing? MEPC 82 held last week



MARITIME ENVIRONMENT PROTECTION
COMMITTEE
82nd session
Agenda item 17

MEPC 82/WP.1
4 October 2024
Original: ENGLISH



DISCLAIMER

As at its date of issue, this document, in whole or in part, is subject to consideration by the IMO organ to which it has been submitted. Accordingly, its contents are subject to approval and amendment of a substantive and drafting nature, which may be agreed after that date.

**DRAFT REPORT OF THE MARINE ENVIRONMENT PROTECTION COMMITTEE
ON ITS EIGHTY-SECOND SESSION**

1 INTRODUCTION – ADOPTION OF THE AGENDA

1.1 The eighty-second session of the Marine Environment Protection Committee was held from 30 September to 4 October 2024, chaired by Dr. H. Conway (Liberia). The Vice-Chair of the Committee, Mr. H. Tan (Singapore), was also present.

MEPC 80

- The “historic” 80th session of IMO’s Marine Environment Protection Committee (MEPC)
- July 2023

- Revised IMO 2023 strategy



New target: net-0 by \approx 2050

- to peak GHG emissions from international shipping as soon as possible and
- to reach net-zero GHG emissions **by or around, i.e., close to, 2050, taking into account different national circumstances,**
- Intermediate checkpoints: reductions of at least:
 - ❖ 20% (strive for 30%) by 2030, vs 2008
 - ❖ 70% (strive for 80%) by 2040, vs 2008

Recall **Initial** IMO strategy (2018)

CENTRAL AMBITION

- Reduce annual GHG emissions **by $\geq 50\%$ by 2050** (vs 2008 levels)
- Reduce annual CO₂ emissions per transport work **by $\geq 40\%$ by 2030**, pursuing efforts towards **70%** by 2050 (vs 2008 levels)



Revised IMO strategy (2023)

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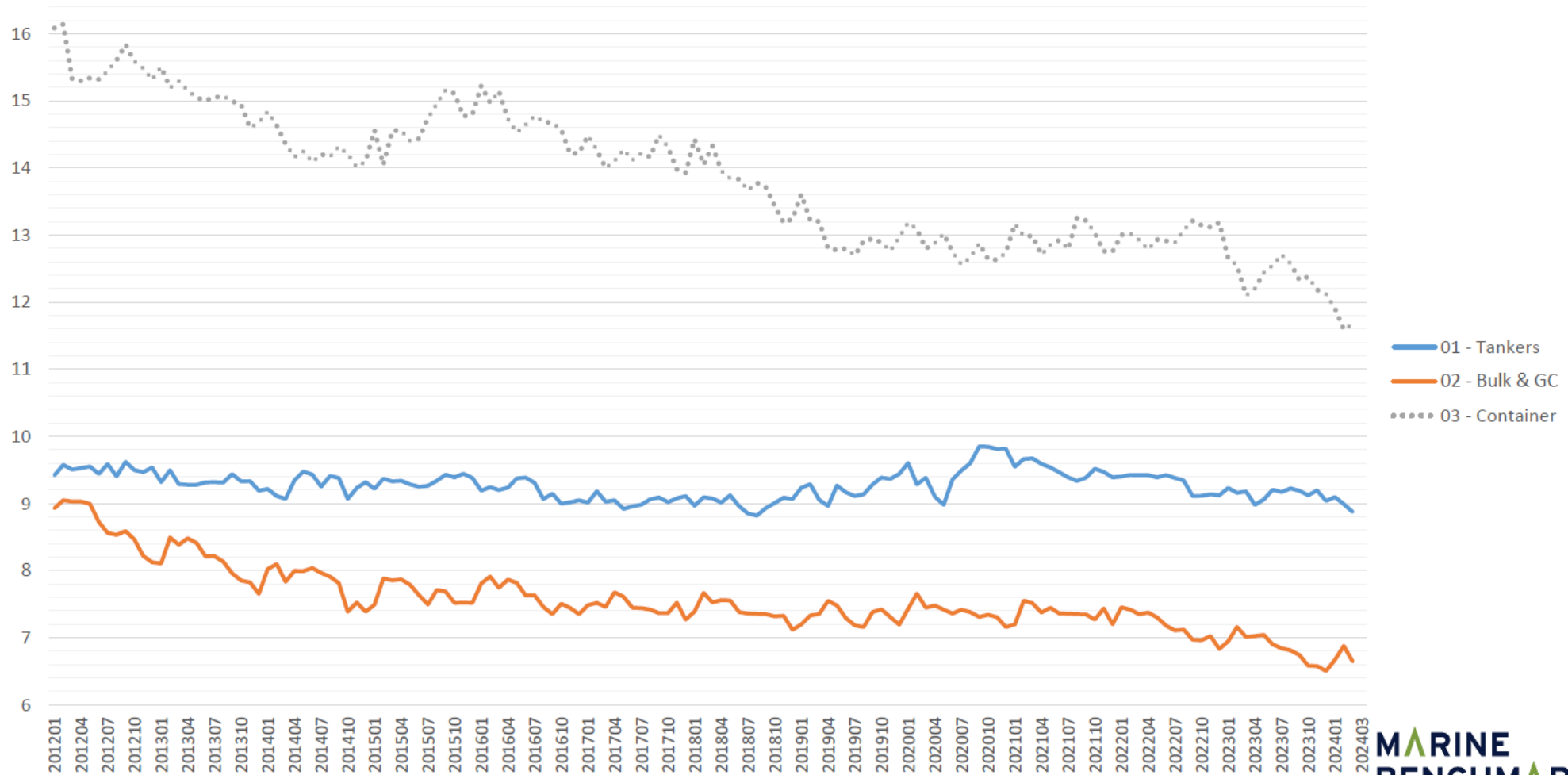
SUPERSEDED BY NET-ZERO

KEPT



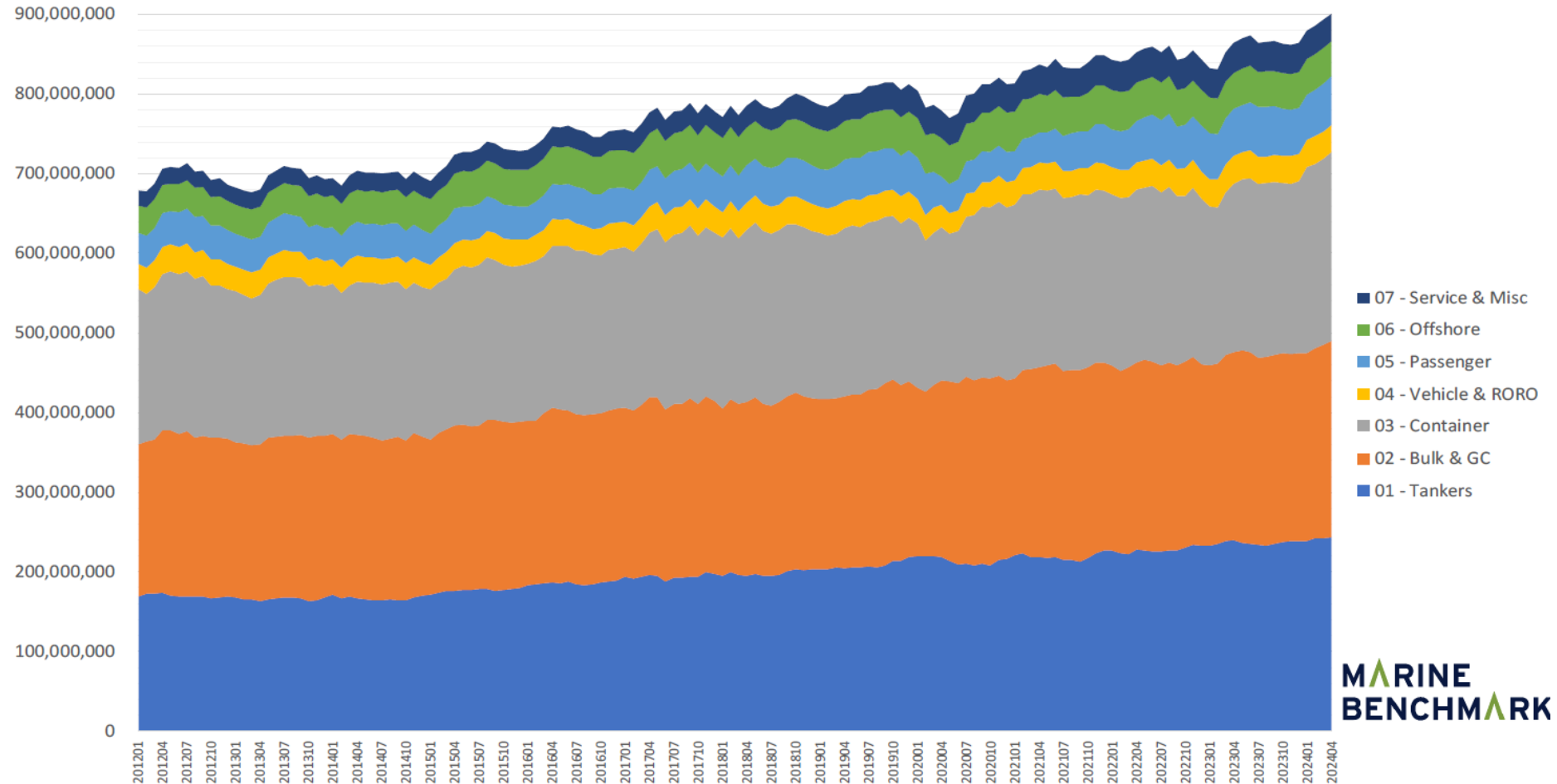
The overall picture: CO₂/tonmile

World fleet - Monthly CO₂ emissions per ton mile (g/(ton*nm)), Jan 2012 to Mar 2023



The bad news: CO2 growth >0

Monthly annualized ton CO2 per vessel type, Jan 2012 to Apr 2024



Why the failure?

- (this can be a long discussion)
- Politics leads to non-effective measures, or to no measures

Basket of measures

- Technical element (green fuel standard)
- Economic element (levy)



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NO CONVERGENCE

SOME CONVERGENCE



For and against a levy

For a levy

- Pacific island states (Marshall Islands, Solomon Islands, Fiji, Tuvalu, Vanuatu, etc)
- EU-27+EC (+Japan) ← Most recent
- Canada
- International Chamber of Shipping
- Other shipping associations

Against a levy

- China, India, Saudi Arabia, South Africa, Brazil, Argentina, other South American countries
- Russia
- Norway (was for ETS)
- USA (not in favor of any economic measure)

MEPC81:
Norway
joins China
et al on a
proposal

NO CONSENSUS YET

The EU-27 + EC (+Japan!) proposal

- Fuel standard + **LEVY**



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INTERSESSIONAL MEETING OF THE
 WORKING GROUP ON REDUCTION OF
 GHG EMISSIONS FROM SHIPS
 17th session
 Agenda item 2

ISWG-GHG 17/2/2
 9 August 2024
 ENGLISH ONLY
 Pre-session public release:

**FURTHER CONSIDERATION OF THE DEVELOPMENT
 OF CANDIDATE MID-TERM MEASURE(S)**

Proposal on a combination of a GHG fuel standard and a universal GHG contribution

Submitted by Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, Netherlands (Kingdom of the), Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the European Commission

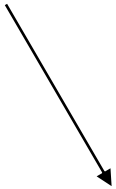


An EU paradox?

EU at the IMO

- Levy + Green Fuel Standard (GFS)
- GFS allows for trading on Carbon Intensity (scheme is rather complex **and involves a separate economic element**)

EU at the EU

- ETS + FuelEU Maritime
- 
- A different MBM: cap and trade

Enter the EU!

- Upon taking office (summer 2019), the new European Commission President Ursula von der Leyen said that **she wants shipping into the EU ETS**



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- Upon taking office (summer 2019), the new European Commission President Ursula von der Leyen said that **she wants shipping into the EU ETS**
- **This is the elephant in the IMO room**



July 2021: proposal for a Directive

- (581 pages)



Brussels, 14.7.2021
COM(2021) 551 final

2021/0211 (COD)

Proposal for a


DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union, Decision (EU) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas **emission trading scheme and Regulation (EU) 2015/757**

2022 paper

- Switch to non-EU transshipment hubs close to the EU just to avoid paying into the EU ETS
- **Risk of carbon leakage**
- **Risk of lost ETS revenue**


Maritime Transport Research 3 (2022) 100059



Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Maritime Transport Research

journal homepage: www.elsevier.com/locate/martra





Implications of the EU Emissions Trading System (ETS) on European container routes: A carbon leakage case study

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2023: EU ports protest EU ETS



Newsletter – September 2023

When fears start to materialize...



On several occasions, FEPORT has warned about the risks of [cargo diversion^{\[1\]}](#) resulting from the entry into force of ETS for maritime shipping.

While FEPORT is supportive of the ETS, it has underlined the high risk of evasion which will soon threaten the integrity of the ETS, leading to higher emissions from longer voyages whilst failing to push shipping companies to green their fleets.

Fewer allowances being auctioned will also mean less revenues available for the decarbonization of the sector. Finally, evasive port calls will negatively affect employment and business activity in certain ports in the EU, and undermine their strategic role as hubs for transport, renewable energy, and connectivity.



In its recent [reply to the consultation](#) held by the EU Commission on the list of non-EU neighbouring ports that would fall under the “transshipment clause”, FEPORT expressed its serious concern about the materialization of fears when it comes to carbon and business leakage due to the limited scope of the current legislation.

More is needed to ensure monitoring and effective prevention of carbon and business leakage from EU ETS Maritime.

FEPORT fully supports the inclusion of Tanger Med and East Port Said in the list of neighbouring container transshipment ports as they both exceed the share of 65% transshipment containers and are located less than 300 nautical miles away from the EU. Even more importantly, both ports are important competitors to EU ports when it



2023: EU Member states protest EU ETS

(Cyprus, Croatia, Greece, Italy, Malta, Portugal and Spain)



The image shows a screenshot of a Financial Times article. At the top, the 'FINANCIAL TIMES' logo is centered. Below it is a navigation bar with links for HOME, WORLD, US, COMPANIES, TECH, MARKETS, CLIMATE, OPINION, WORK & CAREERS, LIFE & ARTS, and HTSI. The article is categorized under 'EU trade' with a '+ Add to myFT' button. The main headline reads 'EU states call on Brussels to rethink shipping emissions charge'. Below the headline is a sub-headline: 'Southern European shipping nations say measures risk diverting business away from European ports'. On the left side of the article, there are social media sharing icons for X, Facebook, LinkedIn, and a 'Save' bookmark icon. The main image of the article depicts a busy port with a large cruise ship docked at a pier, surrounded by numerous colorful shipping containers and several gantry cranes.

EU trade [+ Add to myFT](#)

EU states call on Brussels to rethink shipping emissions charge

Southern European shipping nations say measures risk diverting business away from European ports

X
f
in
Save





FuelEU Maritime Regulation

- A parallel instrument to EU ETS
- Aims to increase the use of sustainable alternative fuels in European shipping and ports by addressing:
 - market barriers that hamper their use
 - uncertainty about which technical options are market-ready
- Is based on a **Well To Wake** approach
- Not limited to CO₂, includes all GHGs
- Will start 1.1.2025

Status as of MEPC 82

- Technical element (green fuel standard)
- Economic element (levy)

**STILL NO
CONVERGENCE**

SOME CONVERGENCE



Plan ahead

- Basket of measures -to be agreed by 2025
- Measures -to be implemented by 2027

2025:

- 2 intersessional meetings before MEPC 83
- MEPC 83
- An extraordinary MEPC after MEPC 83



Prospects

- No sign of a GHG peak (let alone reduction) any time soon
- Wide divergence of views
 - ❖ Many support a levy or variant
 - ❖ But some others disagree
- Matter highly political
- Interface IMO-EU: ????

- ALL IN ALL: Road to full decarbonization foreseen to be a long one

Name ONE measure that is absolutely necessary

- IN MY OPINION:
- **A substantial carbon levy (>100 USD/tCO₂e)**
- ONLY WAY to incentivize the development of low or zero carbon fuels, and bridge the price gap vs conventional fossil fuels

THANK YOU

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