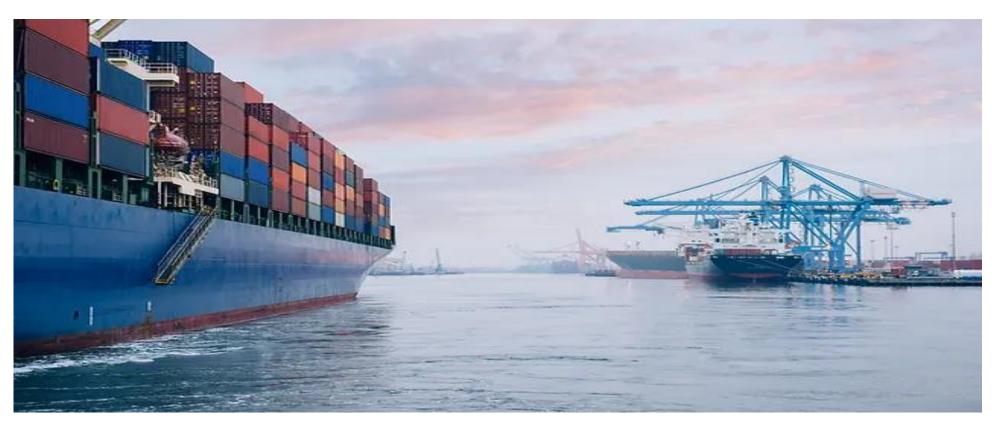


The importance of a level playing field on environmental compliance to new regulations



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Agenda

- Shipping Decarbonization at the local and global level
- Lessons learned (?) from Desulphurization
- What is a level-playing field
- Environmental compliance
- Data sharing examples
- Moving forward

The revised IMO Strategy (July 2023)

- Total annual international shipping GHG emissions targets (compared to 2008 levels)
 - 20% reduction (striving for 30%) by 2030
 - 70% reduction (striving for 80%) by 2040
- **2050**: Net-zero emissions from international shipping by or around 2050
- Pursuing efforts towards phasing them out

MEPC 72/17/Add.1 Annex 11, page 1

ANNEX 11

RESOLUTION MEPC.304(72) (adopted on 13 April 2018)

INITIAL IMO STRATEGY ON REDUCTION OF GHG EMISSIONS FROM SHIPS

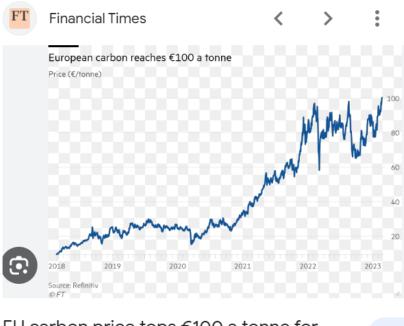
- .1 carbon intensity of the ship to decline through implementation of further phases of the energy efficiency design index (EEDI) for new ships
- .2 carbon intensity of international shipping to decline
- .3 GHG emissions from international shipping to peak and decline

EU ETS for shipping

- It will involve:
 - 100% of CO₂ emissions from all intra-EU trips
 - 100% of CO₂ emissions in EU ports
 - 50% of CO₂ emissions from trips between non-EU and EU ports
- CO₂ emissions allowances to be purchased at EU carbon price
- Phase-in period 2024-2026
- Extends to other greenhouse gases from 2026
- Price uncertainties on carbon price

EU carbon price tops €100 a tonne for first time





Local vs Global environmental regulations

- What is better?
- Economic and Environmental trade-offs emerge for every decision
- Local regulations are susceptible to evasion options
- Regulations with even the best intentions can result in the opposite effect
- Enforcement of compliance is not crystal clear, leading to protests over a level playing field

Lessons learned (?) from Emission Control Areas and the global Sulphur cap

- Clear compliance mechanisms (fuel-switching vs use of exhaust gas cleaning systems)
- Dilemma on what to select
- Speed and route optimization to reduce operating costs
- Successful in cutting SO_x emissions, but resulted in increased CO₂ emissions
- Additional shipper costs Bunker Adjustment Factors
- Resulted in (some) modal shifts towards other transportation modes
- Hard to enforce in open seas, unclear enforcement mechanisms in different areas

A level-playing field

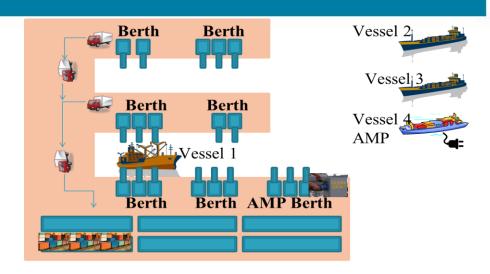
- A situation that is fair for all players, because no competitor has an advantage over another
- Operators in the North and Baltic Sea were complaining on their increased costs vs South Europe
- EU ETS is susceptible to carbon leakage, reduction of port calls in EU, increased transshipment outside
- CBDR issues globally
- Uncertainties over fuel prices, market-based measures, alternative fuel availability, global disruptions, lack of clarity

Securing Compliance

- All about data collection
- Need for a clear enforcement mechanism (what data, when, who verifies, what are the penalties)
- Challenge to compare against benchmarks of previous years
- Disruptions may affect emissions
- Too many stakeholders!

Data sharing

- Data is power
- Much better data today, than 16 years ago
- AIS gives power to all players
- Low-hanging fruits via improved Berth Scheduling, Virtual Arrival
- Inspection data
- Best practices sharing (e.g., ports)



Moving forward

- Too many players that need to come together:
 - Ship operators
 - Ship owners
 - Shippers
 - Ports
 - Technology providers
 - Society
 - Academia and R&D
 - Policy makers
- Many funding opportunities
 - Green Deal
 - IRA
 - Revenues from MBMs (and fair distribution)
- Setting realistic targets

US will push IMO to adopt target of absolute zero emissions by 2050

The policy position of the US will add considerable pressure on the IMO to adopt the target when it revises its strategy in 2023

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US special presidential envoy for climate John Kerry announces the US wants the International Maritime Organization to adopt a zero emissions target, which means full decarbonisation, and will work to help develop appropriate measures





Preparing for future disruptions and placing contingency measures





Thank you - Questions/Comments

Thank you for your attention

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