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The European Carbon Trading System and what Owners need to know

Marine Money – Panel Discussion

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The EU-ETS integrating the maritime sector

2005

Start of the EU-ETS
Covered only CO_2 from power generators and energy-intensive industries with mostly free allocated allowances.

2018

Start of the MRV-Regulation
From 2018 shipping owners have to monitor, report and verify carbon emissions of their ships.

2021

Proposal to extend EU-ETS to the Maritime Sector
Start of the 4th and final Trading-Period.

2024

Start with 40 percent of CO_2 emissions
To be surrendered in 2025.

The fundamental idea of the ETS is Cap & Trade

Cap
The cap on available emission allowances continues to decrease annually by **4.2 %**.

&

Trade
Trading brings flexibility that ensures emissions are cut **where it costs least to do so**.

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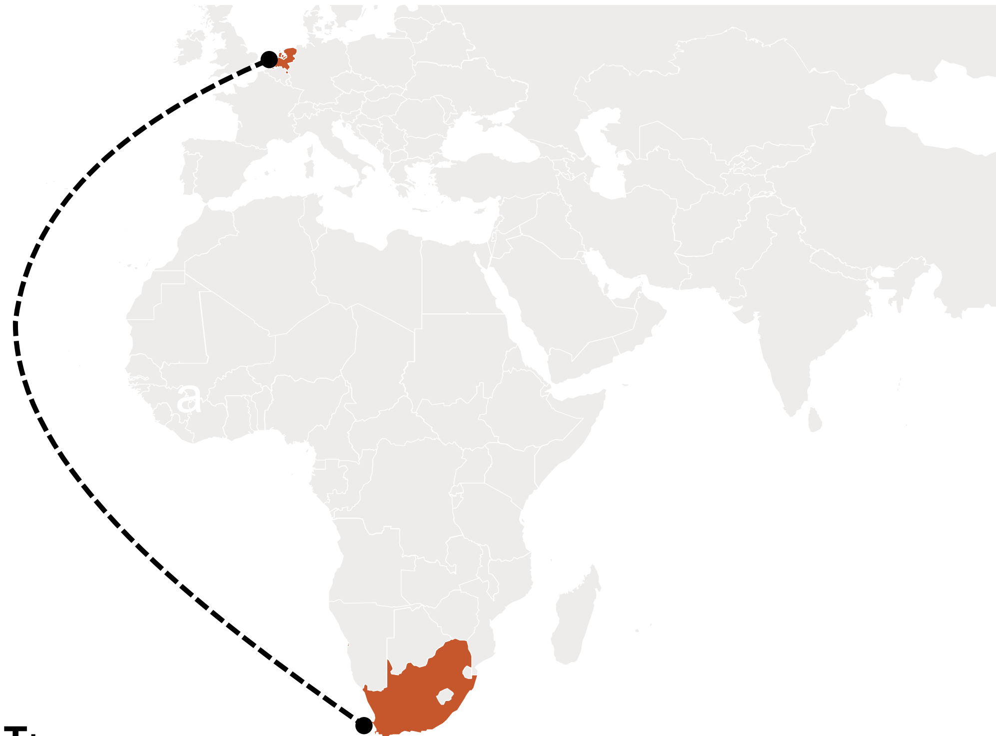
Characteristics of the ETS extension

- Phase in Period: 2024 – 2026 (40 % / 70 % / 100 %)
- All ports under the Juris-diction of an EU Member State
- Ships above 5000 gross tonnage
- 100 % of the emissions at berth in EEA ports
- 100 % of emissions from voyages between EEA ports
- 50 % of emissions from voyages to or from EEA ports

Impact on your cost calculations



Guideline:
One tonne bunker fuel =
approx. 3,15 tonne CO_2

Bunker Fuel = **375 EUR/mT**;
EUA for 3,15 tonne CO_2
(spot price) = **261 EUR**

At the current level, the energy consumption of a ship would cost 70 % more (only 50 % for extra EU voyage).

Panel Discussion

Philipp Niesing
Managing Director at MPC Containerships since Oct 2018 and in charge for its asset management and regulatory affairs. Additionally he is heading the Marine Decarbonization Solutions team of the MPC group.

Matthias Pechmann
Head of the Commodity Flow Desk of RWE Supply & Trading GmbH.

Arne Christian Rahner
Director at Berenberg and Head of its Finical Markets Division. Oversees all Sales and Trading activities in FX and FI Cash and Derivative products and has a deep background in hedging solutions for corporate treasurers.

Andrew Fischer
Director at Berenberg with more than 25 years of experience in capital markets research. He is covering both the global and pan-European sector as well as carbon and power markets.

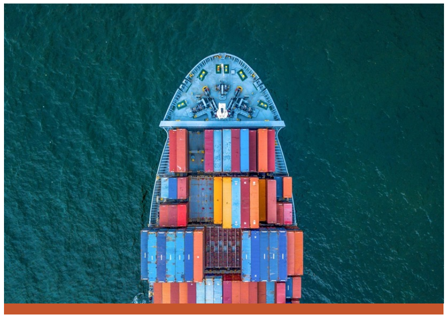
Three things to be ready

1. Increasing cost structure

The expenses for the Carbon Emission Allowances must be included in the cost planning from now on.

2. Technical set-up

Your company needs a national emissions trading account to trade emissions allowances. The booking of the allowances takes place from account to account. You can register as a company via the Union Register (DEHSt).



3. Business operation structures

Business procedures such as voyage routes, control processes and the like need to be reviewed and adjusted if necessary.