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EU Emissions Trading System

Impact on transhipment and alternative fuels

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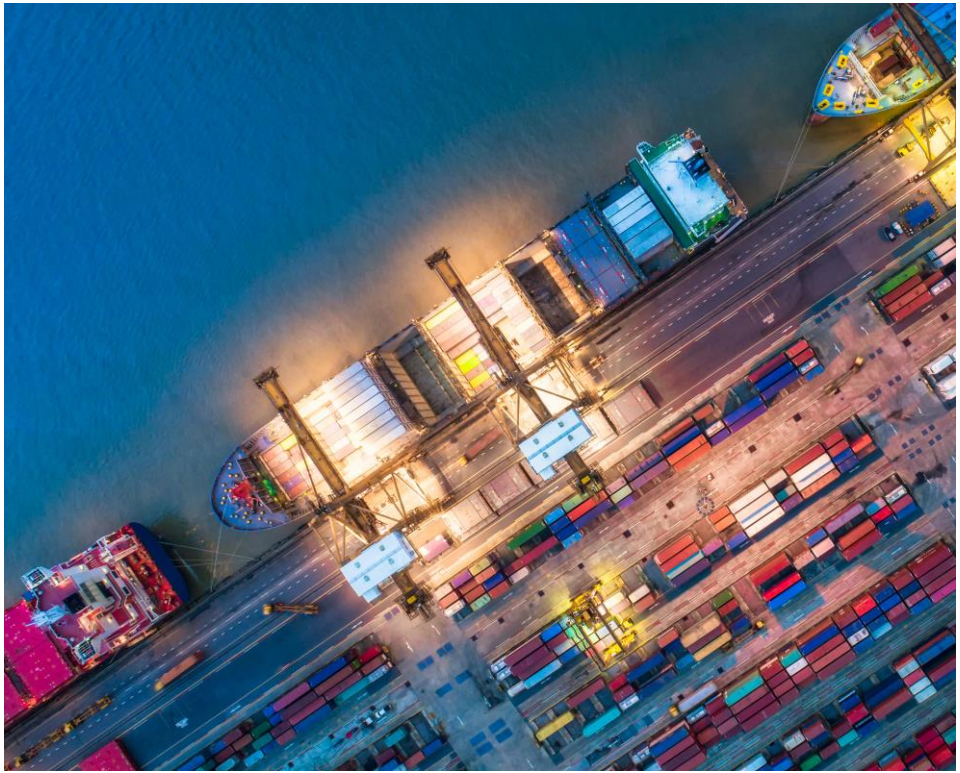

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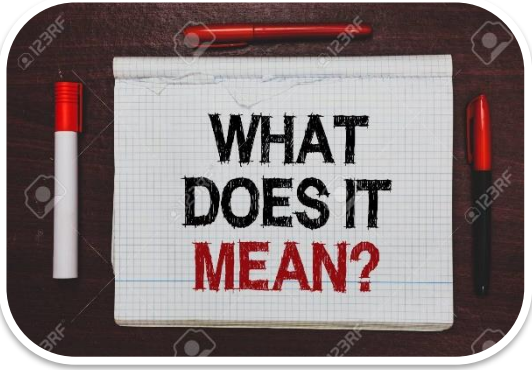
Key messages

EU ETS might lead to shifts in European transshipment routing

EU ETS price should be much higher to stimulate alternative fuels



Ports and ESPO should monitor market distortions and develop a strategy for offering green fuels

Background

What

- Shipping emissions included under EU ETS

When

- Gradual phase in from 2024

Why

- Boost decarbonisation of the maritime sector

How does EU ETS work?

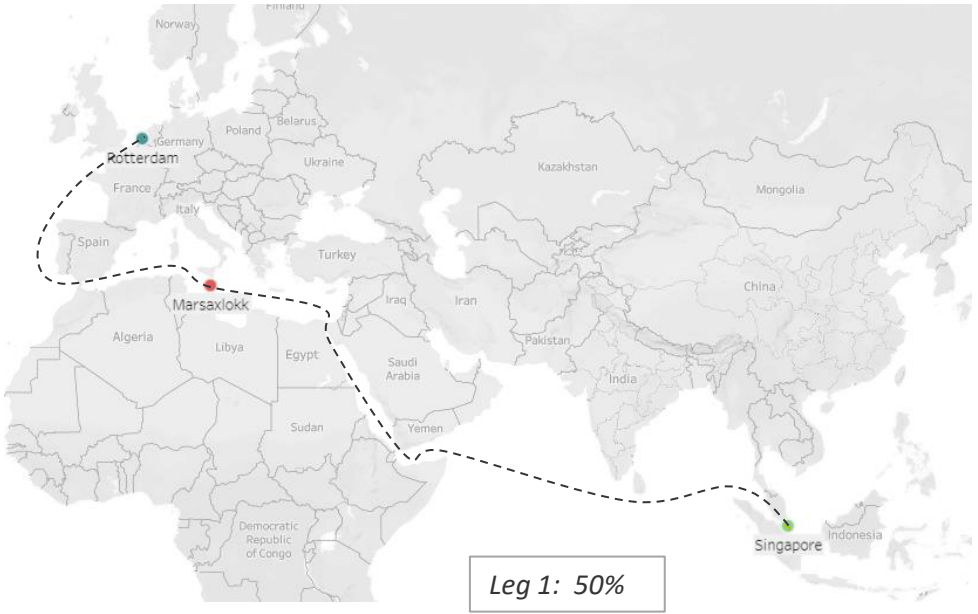
Application

- EU <> EU (100%)
- EU <> Non-EU (50%)
- Non-EU <> Non-EU (0%)

Clause for 'neighbouring' hubs

- Tanger Med
- East Port Said

Review by end 2025



It is still cheaper to call in a non-EU port

Route 1

- Leg 1: Singapore > Marsaxlokk (50%)
- Leg 2: Marsaxlokk > Rotterdam (100%)
- ETS cost: **550k EUR**

Route 2

- Leg 1: Singapore > Port Said (50%)
- Leg 2: Port Said > Rotterdam (50%)
- ETS cost: **429k EUR**

Route 3

- Leg 1: Singapore > Damietta (0%)
- Leg 2: Damietta > Rotterdam (50%)
- ETS cost: **169k EUR**

Will container liners change their transshipment services?

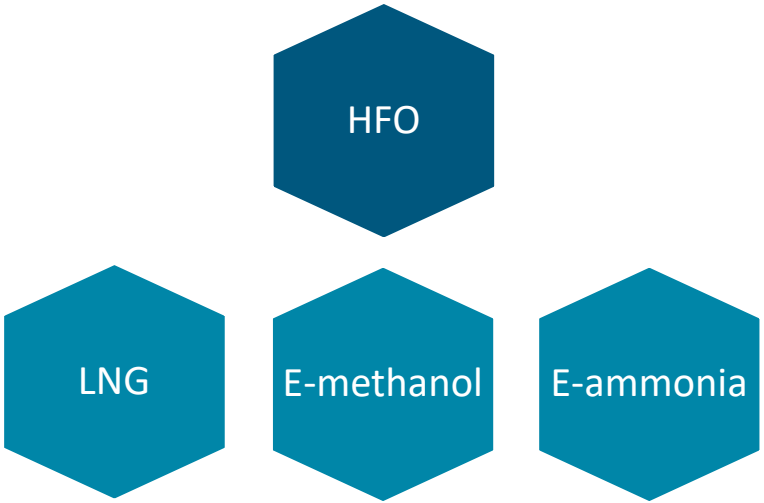
Liners will not change volumes:

- Capacity constraints at hubs
- Additional feeder cost/time

Liners might optimize their routing:

- Hamburg-Le Havre range:
  - via UK ports (e.g. Southampton)
- West Med
  - via North Africa ports (e.g. Tanger Med)
- East Med
  - via North Africa and Middle East ports (e.g. Jeddah)

Will EU ETS lead to uptake of alternative fuels?



Fuel costs
- Fuel price
- Energy density

Charter costs
- Recent newbuilds
- Order book

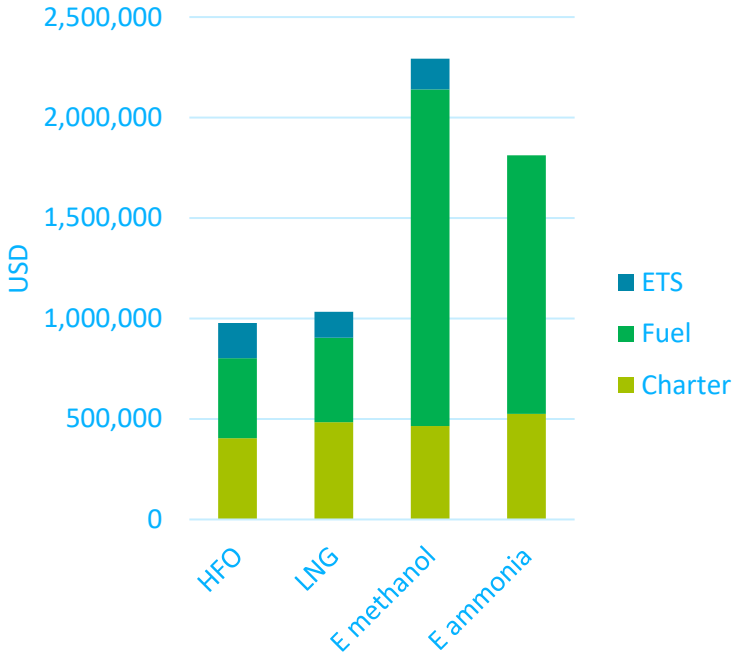
ETS costs
- CO_2 factor
- EU ETS price

No incentive to shift based on current market prices

E-methanol and e-ammonia

- Either fuel price too high
- Or EU ETS price too low

Operational costs example case: Marsaxlokk - Rotterdam



Going forward less need for subsidies

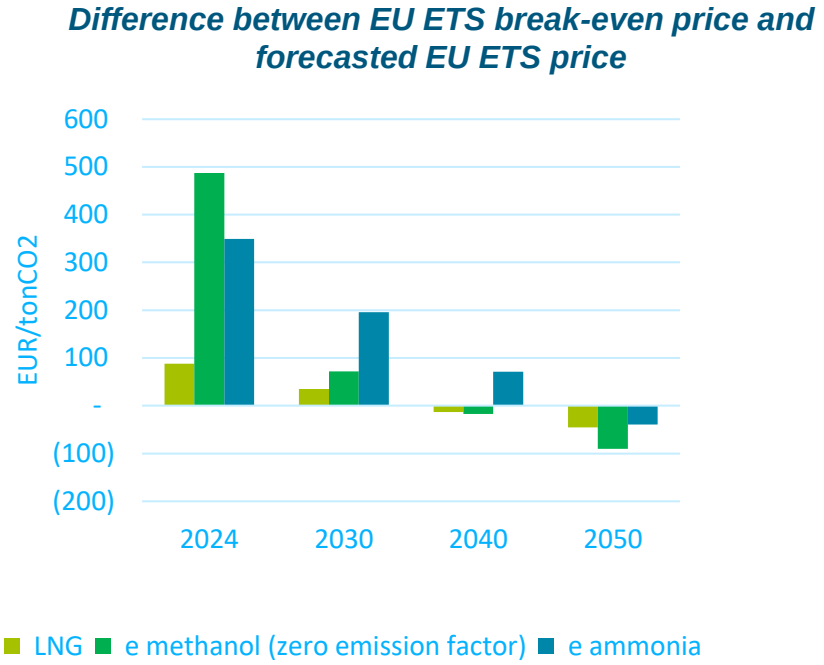
Example e-ammonia in 2040

Fuel price:

- From $875/ton to $600/ton

ETS price:

- From €73/ton to €175/ton



So, are alternative fuels not forthcoming? Not necessarily

EU

- FuelEU Maritime
- AFIR

IMO

- Mid-term measures

Public and private initiatives

- Price subsidies
- Supply/demand alignment

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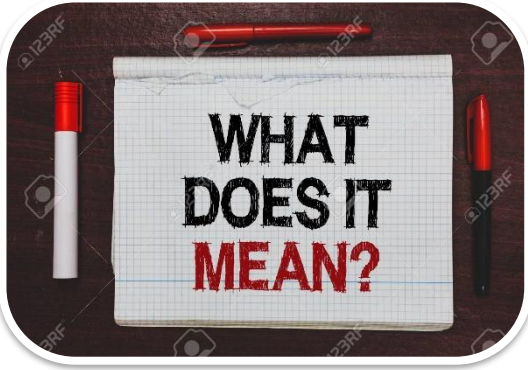
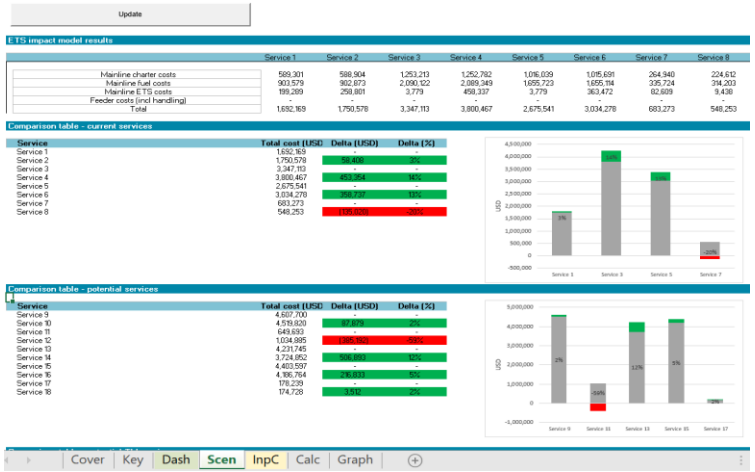


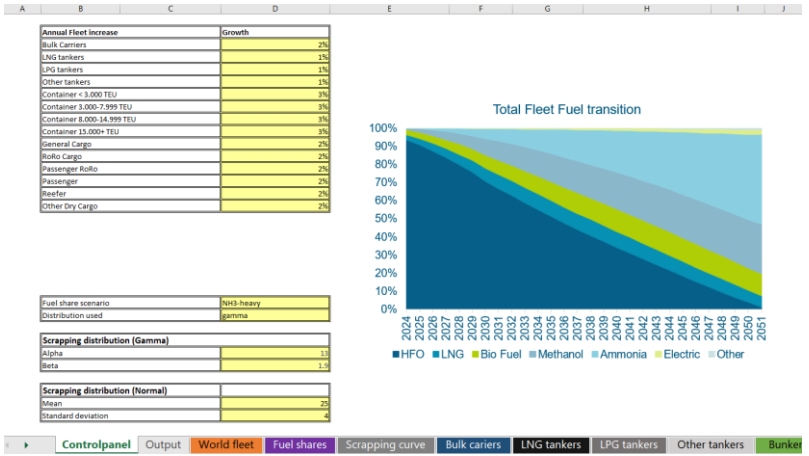
Ports and ESPO should monitor market distortions and develop a strategy for offering green fuels

Royal HaskoningDHV has developed own models to assist port authorities prepare for the future

Print screen of EU ETS model



Print screen of global bunker demand model



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Thank you for your attention

QR code to publication on EU ETS

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