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Impact of the new IMO marine fuel regulations on transport in the Baltic Sea

- Comments on future policy on emission from ships

New IMO marine fuel regulations

Stena RoRo

Stena Bulk
INNOVATION & PERFORMANCE

Stena Drilling

Northern Marine
Management

Stena Line

Freight Lanemetres 5,500
Passengers 1,500

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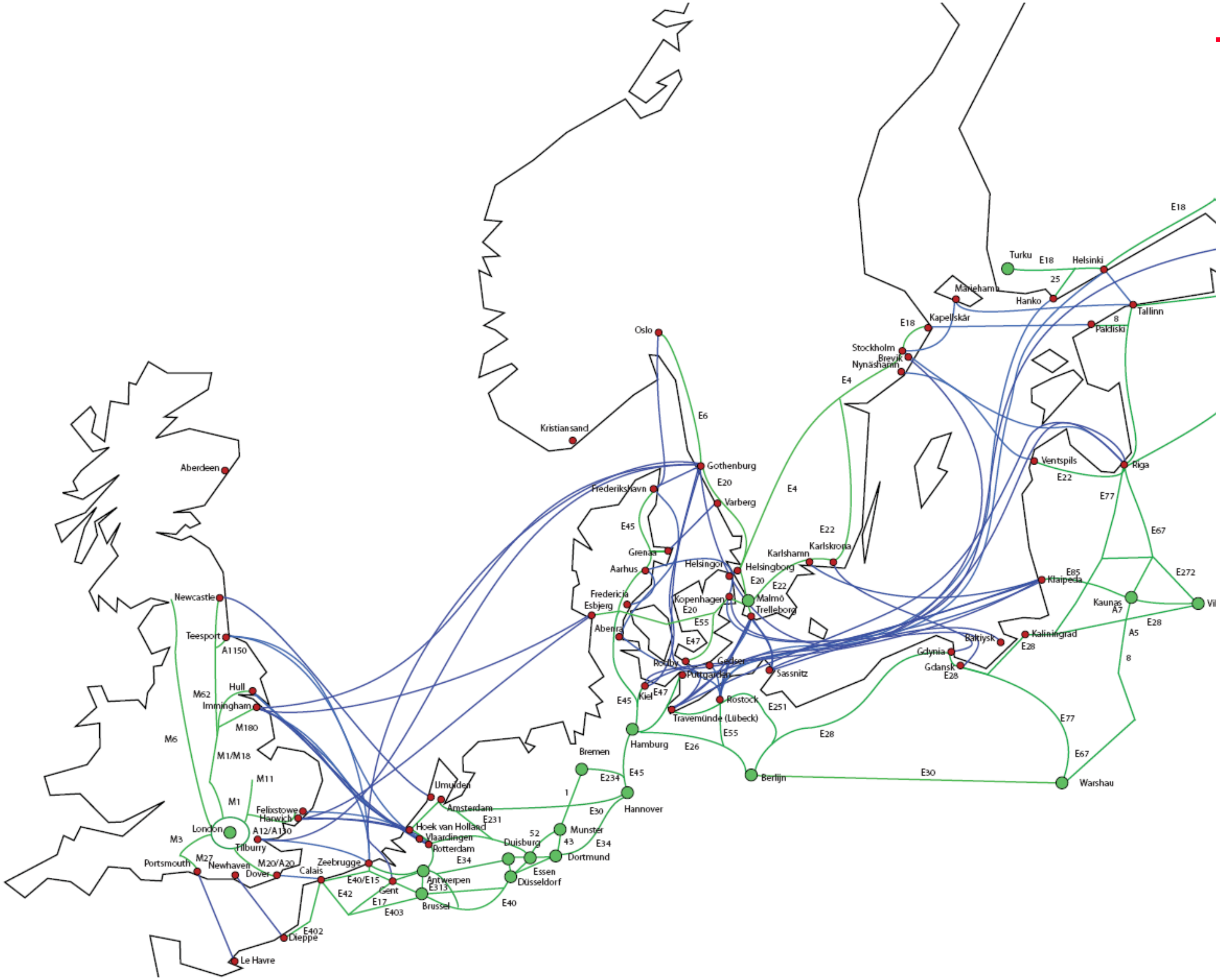

Source: map compiled by ITMMA

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New IMO marine fuel regulations

Key Messages:

1. Impact Assessments must be mandatory.

2. Consult the affected industry. Beforehand.

3. Be holistic. What is the net outcome?

4. Sentiment is a poor guide to wise decisions.

New IMO marine fuel regulations

- **Emissions of sulphuric oxides are detrimental to the environment and to human health.**
- **Consequently, it is correct to lower over all sulphur emissions from society, including those from marine fuels.**
- **New sulphur requirements will reduce shipping's environmental impact – but at what cost to society?**
- **Where were the impact assessments?**

New IMO marine fuel regulations

- **Where were the impact assessments?**
  - **There are fundamental differences between deep sea and short sea shipping.**
  - **Deep sea can generally pass on costs to the clients.**
  - **Short sea is to a great extent in competition with other modes of transport.**
  - **Why is it evident that further reductions in the current SECA:s, will yield more benefit to society than reductions elsewhere?**

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New IMO marine fuel regulations

- **Marginal cost of removed sulphur**

1997 – Application for North Sea SECA

Justification

Land based industries in EU-15 pay on average €1.5 per kg SOx removed. Going from global average (~3%) to 1.5% will cost €0.5 per kg SOx removed.

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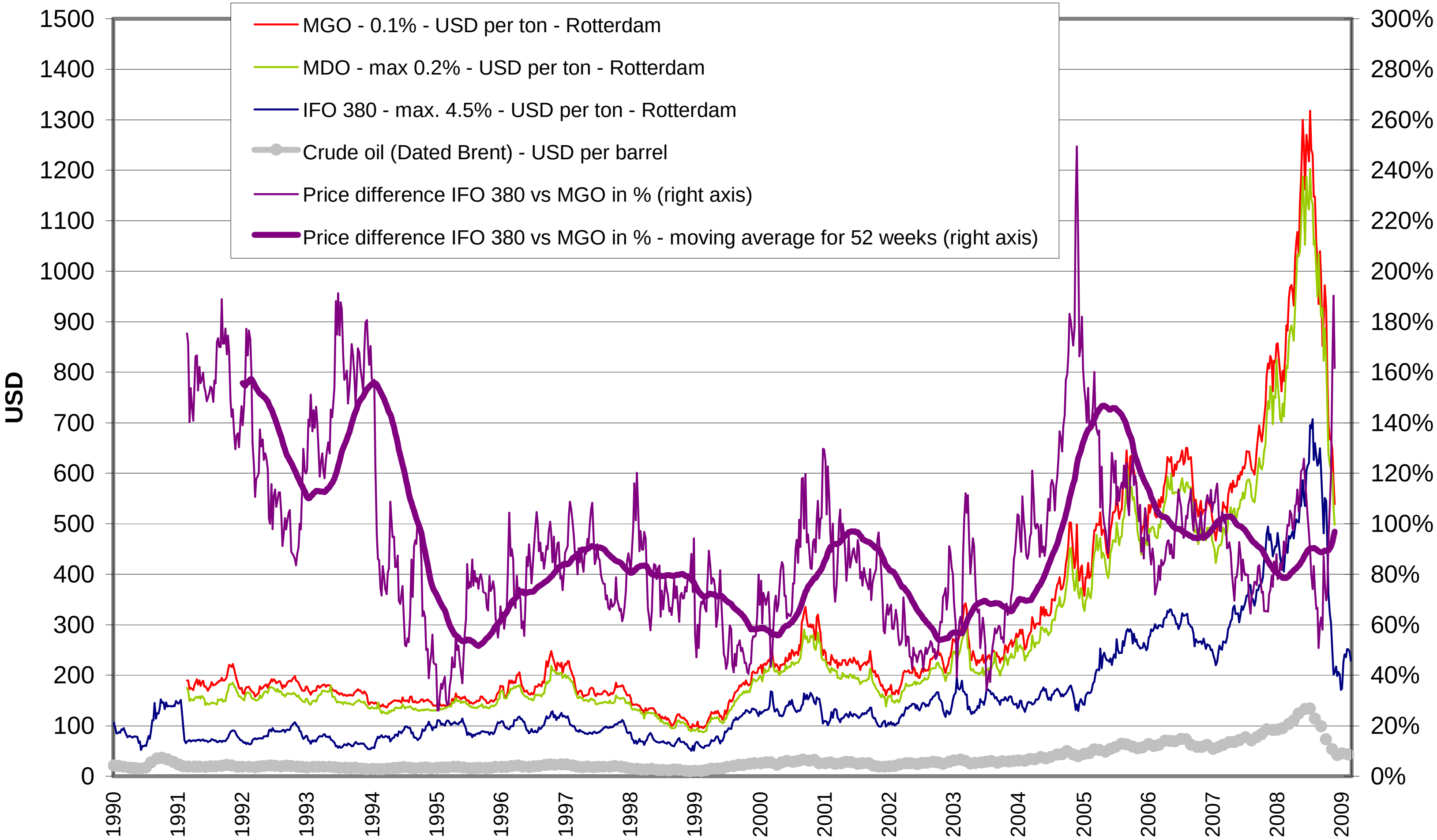
New IMO marine fuel regulations

- **Marginal cost of removed sulphur**

2008 – Revised sulphur limits

Justification ?

Fuel grade	$/mt	kg SOx/mt
HFO 3%	$500	60
LSFO 1%	$550	20
ULSFO 0.5%	$600	10
MGO (=HFO +93%)	$965	2



Source: ITMMA based on data Clarkson

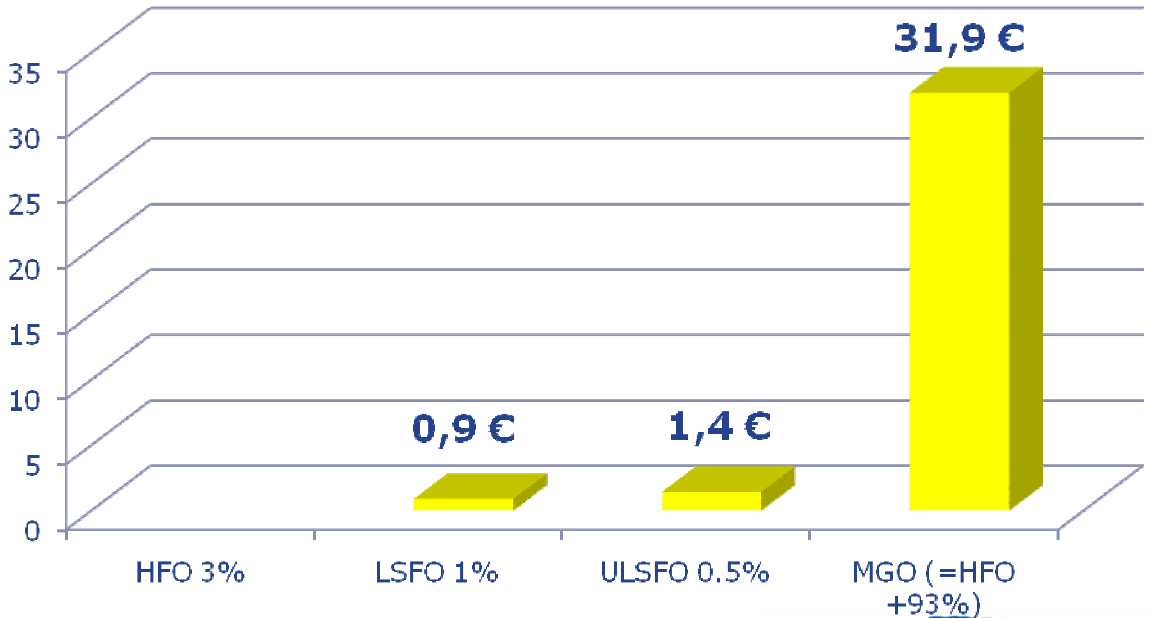
New IMO marine fuel regulations

- **Marginal cost of removed sulphur**

  2008 – Revised sulphur limits

  Justification ?

€/kg SOx removed



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New IMO marine fuel regulations

- **What are the financial implications?**
  - **Several studies ongoing; common result → structural change to the market.**
  - **With average 2008 prices, the additional cost within the existing (S)ECA:s is roughly 10 billion dollars per year.**
  - **How do we prevent modal back shift?**

New IMO marine fuel regulations

- **What are the trade implications?**

The additional regional requirements in IMO Marpol Annex VI, will lead to:

60-80% increase in cost of Marine fuel in Northern Europe:

↳ 20-40% loss of the number of trucks being shipped in short sea services today.

↳ Those trucks will be road borne instead.

↳ Modal back-shift in direct contradiction of EU policy.

↳ What is the net cost to the Community?

New IMO marine fuel regulations

- **What are the trade implications?**

Ro/Ro -route Gothenburg-Travemünde

- 100.000 freight units per year
- Sailing time 15 hrs
- Increased fuel cost 60% due to use of MGO 0.1%
- Rate increase 25-35% to cover for increased fuel cost
- Expected modal shift ”From Sea to Road” >50% as a consequence of increased fuel cost (>150 more trailers on the road every day with more noise, traffic jams, emissions, burden on infrastructure, frequency of accidents etc.)

- Route will have to close down due to lack of profitability

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Future regulations

- Now we can expect NOx ECA in the Baltic and eventually also in the North Sea.
- It was not self evident that there would be an Impact Assessment.

- North America is going for NOx, PM and SOx simultaneously; should we expect the EU to follow suit?
- If so, what will the impact be on short sea shipping?

Future regulations

- **Energy Efficiency**
  - The ongoing development of an Energy Efficiency Design Index in IMO is in itself genuinely positive.
  - Unfortunately, it takes its base solely in prevailing conditions for Deep Sea Shipping.
  - 1.8 round trips per day will not be very popular.
  - No impact assessments made.

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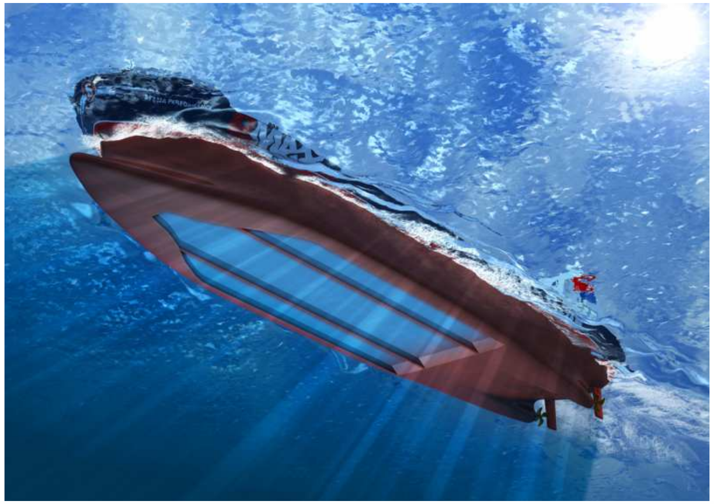
Future regulations

- **Effluents to water**
  - HELCOM will apply for the Baltic to be a special area.
  - Black and grey waters are to be treated with advanced technology or to be pumped ashore.
  - No special fee. Of course?
  - No impact assessments made.

Future opportunities

- **Technological development**
  - **Energy savings**
    Still untapped resource
    Do not forget the client's role!
  - **Air Cavity**
    Exciting, but still far to go
  - **Sails**
    Sure, if applicable
  - **Shore power**
    Absolutely, when applicable
  - **LNG**
    Not an obviously lower carbon footprint, and give us a price already!



Thank You!