



Centre for Transport Studies STOCKHOLM

Options for Europe when acting alone from

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Geographical coverage	Mt CO2	Share of global emissions
Intra-EU journeys	112	11%
Ships arriving in EU27	208	21%
Ships arriving and departing from EU27	311	31%
Intra-European journeys	198	20%
Ships arriving in Europe	277	27%
Ships arriving and departing from Europe	363	36%

Expansion to other countries

- Non-EU States may favor other MBMs, thresholds and coverage
- Restricting coverage to arrivals facilitates expansion
- Time-based liability complicates expansion
- Emission from last port increases risk for evasion
- Maybe liability for emissions from the port where most of the cargo was laden?

Choice of market-based measure

- Conditions are different in a regional scheme compared to global coverage
- Not possible to enforce legal obligations on non-participating Port States and Flag States
- A charge on CO₂ would be better than a bunker levy
- A cap/baseline would have to be adjusted in a case of expansion to additional countries
- Charges may differ between regions

Small ships and domestic navigation

- According to the national inventories, domestic navigation in EU27 emitted 22 Mt CO₂ in 2008
- Ships below 400 GT represent 2.7% of the overall international emissions in Europe
- Setting the threshold at 5,000 GT would leave 21% of the emissions un-targeted

A hybrid solution?

- In a hybrid scheme, the liability would be placed up-stream for small ships and down-stream for large – perhaps with the threshold at 5,000 GT
- A hybrid may be contemplated as a means for maximum coverage and minimal transaction costs
- Would work for emissions trading as well as for a charge on CO₂

A hybrid under emissions trading

- All allowances (shipping emission units) would be sold on auction
- Fuel suppliers would be liable for emissions caused by fuel sold to small ships
- Large ships would be liable for their own emissions but may buy the allowances from a fuel supplier
- Ships arriving from non-participating ports would have to submit allowances matching their emissions

A hybrid CO₂ charging scheme

- All suppliers of fuel in the participating States would pay an excise duty based on the fossil carbon content of the fuel
- A ship that bought fuel elsewhere would have to declare its emissions from the journey from its last port or alternatively pay the charge based on a relatively high default value

Potential problems with a hybrid scheme (I)

- An objection to an up-stream allocation might be that the reliable entity should be the one having influence over emission reduction measures.
- Split incentives are common in the shipping sector as a result of charter arrangements.
- A clear indication on the fuel bill of the cost associated to emission allowances or a CO₂ charge would provide the information needed.

Potential problems with a hybrid scheme (II)

- Keeping track of different types of deliveries may be a problem
- Evidence from existing taxation in the EU and the United States indicates that fuel suppliers are able to distinguish between deliveries with differing destinations and tax rates
- Fuel is taxed up-stream with a limited number of liable companies in an average Member State

Potential problems with a hybrid scheme (III)

- Most of the proceeds from taxation/charging would originate from taxation in the Member States and may be viewed as national revenue
- On the other hand, all proceeds of emissions trading would come from an EU auction (regardless of liability)
- Under EU ETS part of the revenue could be allocated to the individual Member States

Compensating the industry?

- Airlines get 85% of the EU ETS allowances for free
- From 2013 power producers have to buy all allowances on auction and will be able to pass on the cost to their customers, including electric trains
- Ships are mainly competing with land-based modes
- A charge/tax on CO₂ may be gradually phased in
- Some emission allowances can be “recycled” to the ships

CBDR under a limited scheme?

- Only a minor part of arriving ships would come from developing countries and they would typically carry goods intended for use in the industrialized countries
- A small part of the proceeds could be used for compensating, in particular, LDCs for the incidence on their economies

How could the revenue be used?

- In a hybrid model most of the proceeds of a charge would stay with the Member State
- Emissions trading and an EU-collected CO₂-tax (non-hybrid) would result in large revenues of which some might have to be distributed among the MS
- Counter-productive to spend more than a small part on mitigation/adaptation in developing countries
- Spend the surplus on R&D and support to clean ships

Europe acting alone

- Design the scheme so that it can gradually expand into global coverage
- Try to minimize evasion by making neighboring countries participate – start negotiations soon
- Perhaps start with intra-EU or intra-European emissions and be prepared to extend the scheme to all arrivals if IMO has not taken a decision on market-based measures by 2013 or 2014?



Thanks for your attention!

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