



International maritime emissions and emissions trading – a European perspective

SEAaT Seminar

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Structure

1. **Overview of EU position**
2. **ETS for shipping**
3. **Regional action**
4. **Preparation of EC measures**
5. **Comments and conclusions**



Overview of European position

Part I



Key background

- **Preference for global measures**
- **No decision on European action (under evaluation)**
- **Strong political support for action**
- **Package of measures necessary**
- **Environment and Transport Council
Conclusions – agree measures in 2010, adopt
measures in 2011, entry into force 2013**



‘Climate and Energy’ Directives (December 2008)

- The European Council has made a firm commitment to reduce the overall greenhouse gas emissions of the Community by at least 20% below 1990 levels by 2020, and by 30% provided that other developed countries commit themselves to comparable emission reductions and economically more advanced developing countries contribute adequately according to their responsibilities and respective capabilities. By 2050, global greenhouse gas emissions should be reduced by at least 50% below their 1990 levels.
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‘Climate and Energy’ Directives (December 2008)

- All sectors of the economy should contribute to achieving these emission reductions, including international maritime shipping and aviation.
- Aviation is contributing to these reductions through its inclusion in the Community scheme.



‘Climate and Energy’ Directives (December 2008)

- In the event that no international agreement including international maritime emissions in its reduction targets through the IMO has been approved by the Member States and/or no such agreement through the UNFCCC has been approved by the Community by 31 December 2011, the Commission should make a proposal to include international maritime emissions according to harmonised modalities in the Community reduction commitment with the aim of its entry into force by 2013. Such proposal should minimise any negative impact on EU competitiveness, taking into account the potential environmental benefits .



UNFCCC discussions

- **Need for financing for a Copenhagen agreement**
 - **Mitigation potential**
 - **Ad Hoc Working Group on Long-Term Co-operative Action (AWG-LCA)**
 - **Levies on emissions from international maritime transport**
 - **Tax on maritime transport**
 - **US to include maritime Bunker Fuel sales - 42 million tonnes (domestic) 56 million tonnes (international).**
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ETS for shipping - issues

Part II



Design features

- **Cap**
- **Exemptions**
- **Legal entity**
- **Accounting unit**
- **Allocation/auctioning**
- **Port state / Flag State / Classification societies**
- **Monitoring, Reporting and Verification rules**
- **Trading periods**



Issues for ETS shipping

- **Legal framework**
- **Changing – destinations, owners, operators..**
- **Legal evasion**
- **Scale**
- **Diversity**
- **Lack of data**
- **Free allocation vs 100% auctioning**
- **Traditions of enforcement / compliance**



Impacts on Developing Countries

- **Very low elasticity**
 - Very small reduction in demand
 - Very small increase in costs
 - Cost pass through to ultimate consumer
- **Increased demand for CDM**
 - How much?
 - Relative to Developing Country compliance costs?
- **Auctioning of allowances creates revenues should be used to adapt to the impacts of climate change**
 - How much?
- **De-minimus rules**
 - e.g. small ships disproportionately benefit LDC's
 - e.g. exclusions for certain routes/products



Single 'big bang' global ETS for shipping?

- Time for agreement and 'entry into force'?
 - Global registry?
 - Harmonised enforcement (Port States and Flag States)?
 - Management of funds?
 - Auctioning procedures/fairness?
 - Appeals procedures?
 - Transparency/mutual confidence?
 - System audit / penalties / solidarity?
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Single 'big bang' global ETS for shipping?

- **Problems of agreeing and managing implementing by 'consensus'**
- **Different enforcement capacities**
- **Democratic oversight**
- **Transparency**



Problem of timing – e.g. single global maritime ETS through IMO

- **Negotiations and adoption = 2 to 3 years**
 - **Diplomatic conference = + 1 year**
 - **Ratification = + 5 to 8 years**
 - **Entry into force = + 1 year**

 - **MARPOL Annex VI**
 - Adopted in 1997**
 - Entry into force in 2005 (+8 years)**
 - Revised 2006-2008 (+2 years)**
 - Revision entry into force 2010 (+1 year)**
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Reality – linked regional schemes

- **Linked regional schemes**
 - Built on existing legal/administrative systems
- **Harmonised procedures for ships**
- **Progressive start (CBDR?)**
- **Compatible schemes (and manage in compatibilities)**
- **Quality and sanctions**
- **From in compatibilities towards compatibility**



Developing schemes

- New Zealand – will cover national maritime transport (upstream)
- USA Cap and Trade (includes maritime bunker fuels) – -80% by 2050 (from 1990 levels)
Revenues included in budget from 2012.
- EU measures entry into force by 2013 – possibly inclusion in EU-ETS
- OECD wide market by 2015?
- Extension to other Developed Countries 2020?



Linking of schemes

- **Administrative simplicity for ships**
- **Low administrative cost for ships**
- **Exposure to global carbon price**
- **Harmonised ‘experience’ for ships**
- **Clarity of ‘climate impact’ of ships**
- **Use of existing systems/procedures**
- **Liquidity of allowances**



European regional action

Part III



EU-ETS - Overview

- **Applicable since 1 January 2005, for EU 25**
- **Permit requirement for CO₂**
- **Mandatory caps on absolute emissions from around 10,000 installations across EU**
- **Energy intensive sectors covered**
- **Covers currently around 2 billion tonnes of CO₂ emissions, around half of EU's total CO₂ emissions!**
- **Linking with other emissions trading systems**
- **Credits from emission-reducing projects in 178 parties of KP useable**



EU-ETS - Overview

- **Market-based instrument which allows for most cost-effective and targeted environmental policy - no market intervention!**
- **EU ETS is driver for carbon market: in 2007 valued at around €40 billion (EU ETS: € 28 billion)**
- **Cornerstone of Europe's strategy to implement Kyoto Protocol - major structural element for the post-2012 climate strategy**
- **EU ETS will contribute to reaching more than 40% of the EU's 15 Kyoto commitment 2008-2012 (i.e. 3.4% of - 8% below 1990)!**
- **Flexibility to link to other mandatory schemes**



Aviation in the EU-ETS (1 of 3)

- Legislation covers all flights to and from EU airports (plus Norway, Iceland and Lichtenstein)
- Excluded (de minimis) provision:
 - operators operating on average less than 2 flights per day and;
 - operators with total annual emissions of less than 10,000 tonnes p.a.
 - Small aircraft and certain flights excluded
- Scheme can be amended to take into account equivalent measures taken by other countries
- Allowances can be freely traded
- Aircraft operators can buy and use allowances from other sectors
- Limited use of CDM credits



Aviation in the EU-ETS (2 of 3)

- Airlines will be required to monitor emissions from 2010
- Airlines can apply for a free allocation of allowances in 2011
- Airlines will be fully included in the scheme from 2012
- Total quantity of allowances allocated to the aviation sector equivalent to 97% of average annual emissions 2004-6 = ‘cap’
- From 2013 the total quantity of allowances to be allocated will be equivalent to 95% of average annual emissions 2004-6 = ‘cap’



Aviation in the EU-ETS (3 of 3)

- **15% of allowances auctioned**
- **Auctioning proceeds should be spent on tackling climate change in the EU and third countries (including ‘low emission transport’)**
- **Aircraft operators must monitor and report emissions to competent authority**
- **Reports must be verified by an independent verifier**
- **Guidelines for the monitoring, reporting and verification of emissions from aviation being prepared**



Preparation of EU measures

Part IV



Comprehensive action on transport

- **All sectors need to make a contribution**
- **Comprehensive (and fair) approach**
- **EC action on transport GHG**
 - **Aviation proposed 2006, agreed 2008**
 - **Fuel Quality Directive proposed 2007, agreed 2008**
 - **CO₂ and cars proposed 2007, agreed 2008**
 - **Car Labelling (under preparation)**
 - **Heavy Duty Vehicles (under preparation)**
 - **Maritime Transport (if required)**



Regional action

- **Sub optimal solution – preference for global measures**
- **Boundary issues add complexity**
- **Less effective**
- **Legal evasion**
- **No distortion of competition – ‘flag neutral’**
- **Must not disadvantage EU maritime interests**



Current status of EC work

- **External technical support**
 - **Contract started October 2008**
 - **12 months lead by CE Delft (NL)**
 - **Scope of work:**
 - Policy options,
 - MAC,
 - Impact analysis,
 - Some stakeholder involvement (2009)
- **Mode shift issue (separate contract)**
- **Formal Inter Service Group (ISG) within EC**



EU Policy Options selected for further development

Selection:

- **Emissions trading, either (1) inclusion of shipping in the EU ETS or (2) emissions trading for shipping under a separate directive but linked to the EU ETS**
- **(3) An emission tax with hypothecated revenues.**
- **Mandatory (4) operational efficiency index or (5) design index.**
- **(6, 7) A baseline and credit system, (8,9) including differentiated harbour dues, based on an operational efficiency indicator or a design index.**
- **A mixed 'package' of measures including operational improvements, technical improvements, speed reduction, voluntary actions, R&D funding and subsidies to improve maritime infrastructure, ships and innovation.**



European Commission - planning

- **Formal consultation of stakeholders (2009/2010)**
- **Impact assessment (2010)**
- **EC proposal (for new European Commission e.g. 2010)**
IF NECESSARY
- **EP and Council Decision + 2 years**
- **Entry into force + 1 year (e.g. 2013)**



Comments and conclusions

Part V



Comments (1/2)

- **GHG reductions are possible (many lead to cost savings)**
- **Win / win solution**
 - Cost effective
 - Image
 - No alternatives
 - Cost pass through
 - Transparency
 - Energy efficient mode
 - Customers want action
- **Possible regional mode shift (to be avoided)**
- **Very marginal impact on demand**



Comments (2/2)

- **Emissions need to peak in next decade**
- **Fairness - other EU sectors reducing since 2005**
- **Cost – whatever target is agreed, starting late costs more**
- **Complexity – designing and participating in multiple schemes**
- **EU shipyards, EU equipment manufacturers – leaders in related technology/systems**
- **EU commitment to global carbon market / EU/US trans Atlantic carbon market**



Conclusion

- Preference / need for global measures
- Compatibility of MBM with technical / operational measures – package of measures
- All that is required is a fair contribution
- Prepare for a mixed solution – UNFCCC / EU / IMO / US
- Global = no action
- US position will be key
- EC action being prepared
- No decision taken on EC measures



Thank you for your attention

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