



Marpol Annex VI: the way forward

Hans Meijer
DG ENV Clean Air and Transport

European Commission

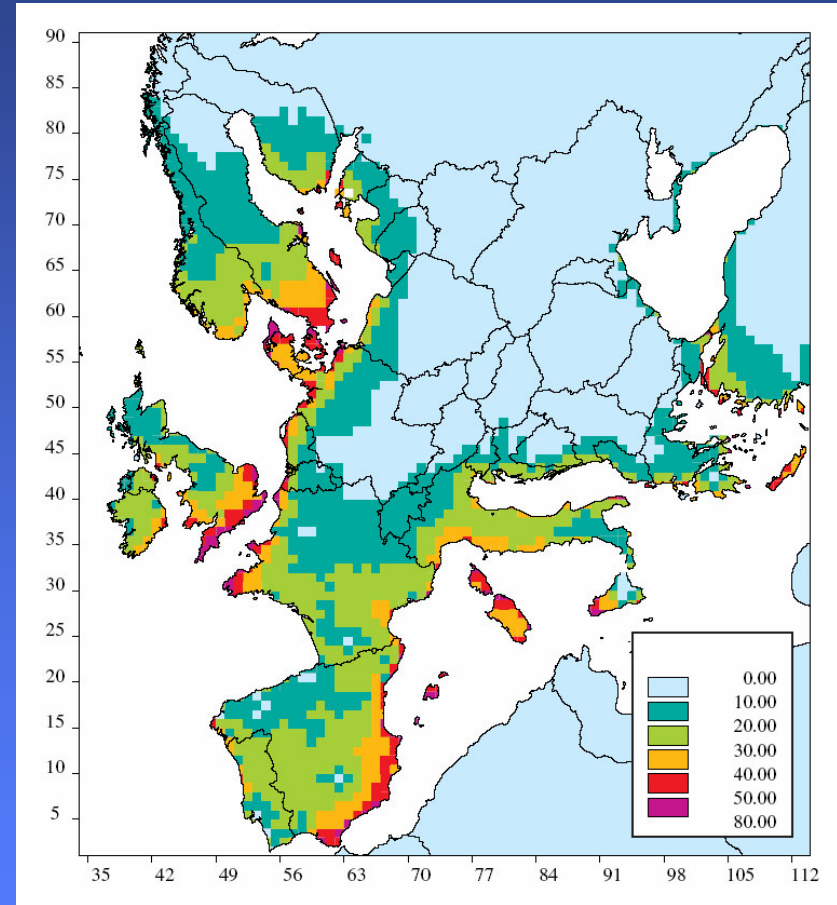
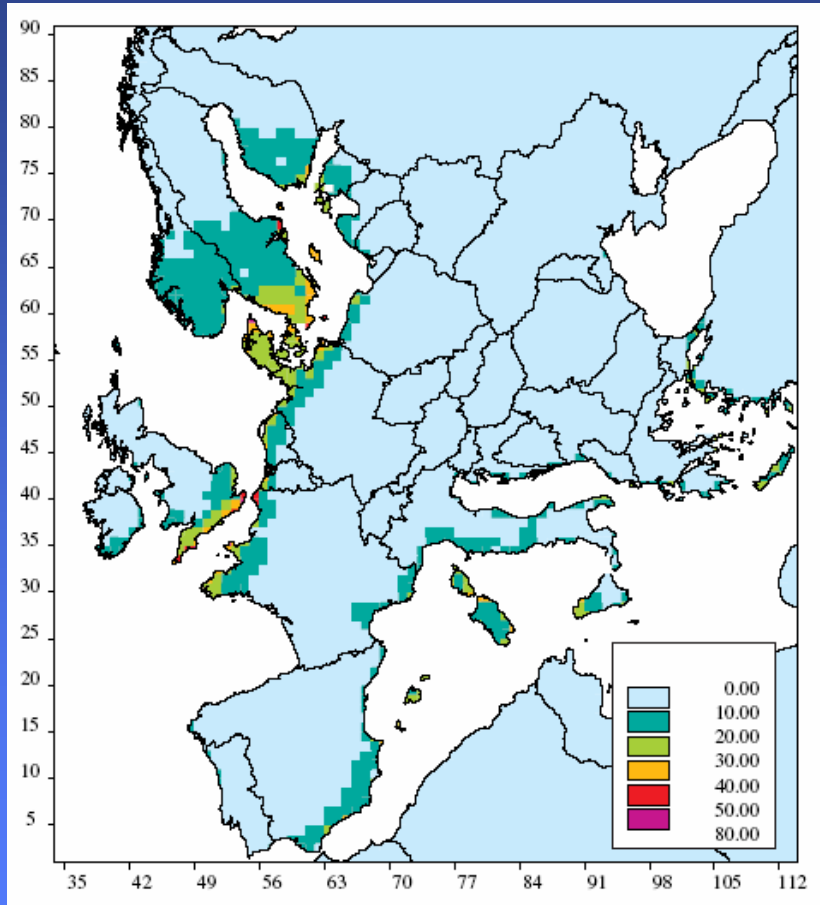


Impacts of ships emissions

- **Health: Fine Particles (PM_{2.5}) & Ozone (through NO_x and VOCs):**
 - Respiratory effects, premature death; also cardiovascular effects. No known thresholds for effects.
- **Acid rain (SO₂, NO_x)**
 - Leads to loss of flora & fauna; leaching of toxic metals into soil solution.
- **Eutrophication (NO_x)**
 - Excess nutrient leads to loss of biodiversity and increases susceptibility to other stresses such as drought.
- **Ozone (non-health, through NO_x and VOCs)**
 - Damages trees, plants buildings/materials.



Ships contribution to sulphur deposition in 2000 and 2020 (in percent)





Parliament's reaction to EC Com.

- **Communication on ship emissions 2002 & legislative proposal (*A5-0400/2003 final*)**
 - **Adopted Directive 2005/33/EC with sulphur level in SECAs less than 1.5%.**
 - **Feasibility of more ambitious levels of sulphur reduction requested (0.5%)**
 - **Proposals to reduce NO_x emissions from ships by the end of 2004**



Parliament's reaction EC TS Air

- **Thematic Strategy on air pollution (A6-0235/2006)**
 - **Establish NO_x emission standards for ships using EU ports**
 - **Designate the Mediterranean Sea and North East Atlantic as SECAs**
 - **Lower the maximum sulphur content in marine fuels used in SECA' and by passenger vessels from 1.5% to 0.5%**
 - **Establish Marine Fuel Quality specification (EU directive)**
 - **Fiscal instruments & shoreside electricity**



Reaction of the Council

- **Council Conclusions on Marine Emissions Communication (March 2003)**
 - **Tighter global sulphur cap for heavy fuel oils burned by ships**
 - **Tighter nitrogen dioxide emission standards for ships' engines**
 - **Invites the Commission to consider a proposal for tighter NOx standards by the end of 2006 if IMO has not made any proposals for tighter standards by that date**
-



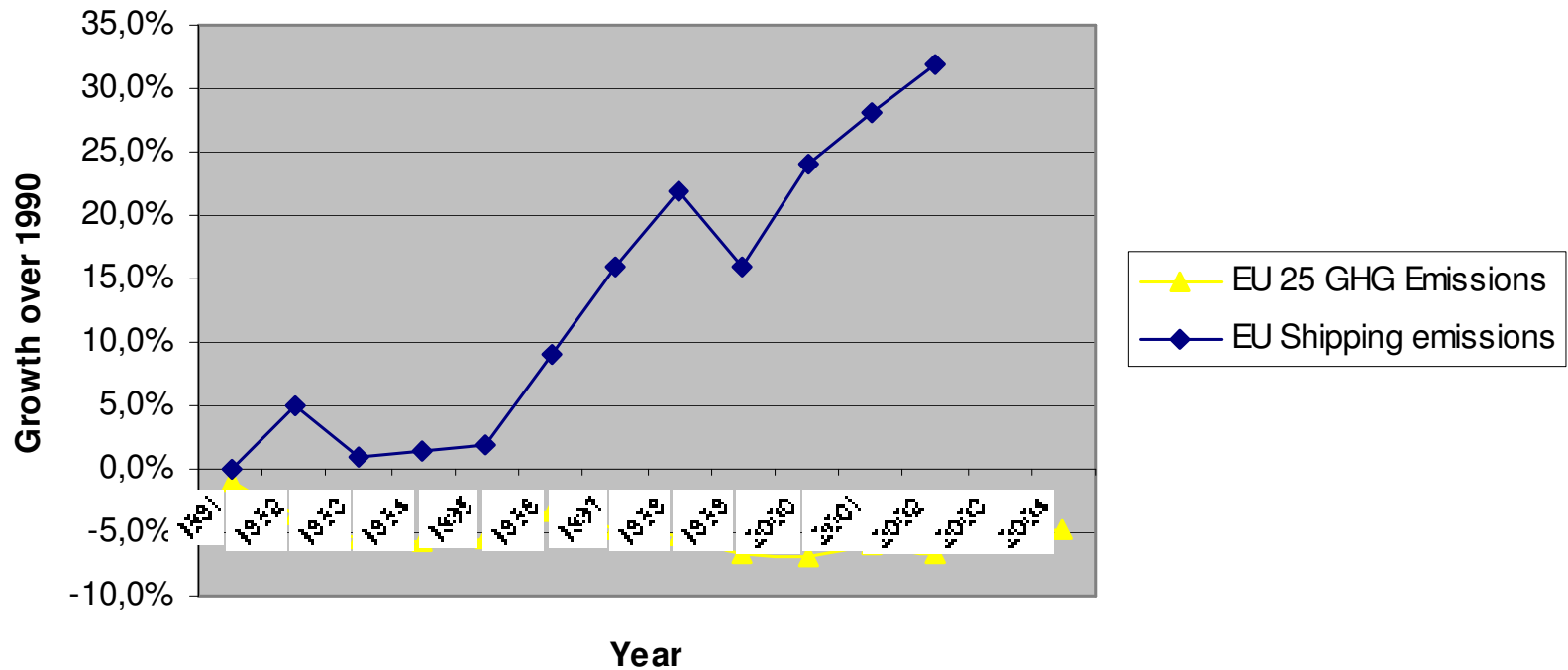
Current situation

- **Fuel quality**
 - Ships: 45.000 ppm sulphur (27.000)**
15.000 ppm sulphur control areas
 - Trucks: 50 ppm, going down to 10**
 - Ships (incl): 10 ppm (as of 2011)**
 - **NO_x: catalyst converter can reduce 95%**
in-engine technology can reduce 60%
 - **PM: partly linked to fuel quality, also reduction by scrubbing**
-



CO2 emissions ships (1)

Development of EU-25 GHG emissions





CO2 emissions ships (2)

- **European Council – March 2007: include shipping in post Kyoto agreement**
- **Working towards international solution in IMO – but progress is slow**
- **Evaluating policy options for EU action:**
 - Including shipping in ETS
 - Binding indicators
 - Differentiating harbour dues



Legal and procedural status EU

- **The EC only has observer status.**
- **MARPOL Annex VI has now been ratified by 41 countries, but not yet by 7 EU Member States: Austria, Czech Republic, Hungary, Ireland, Malta, Portugal and Slovakia, even though it was adopted in 1997 and entered into force on 19 May 2005.**
- **The fact that 7 EU MS still have not ratified the Annex continues to undermine the commitment of the EU to low-emission shipping, and now also weakens our hand in negotiating amendments to tighten the provisions of the Annex.**



Time frame

IMO planning:

- **MEPC 56, July 2007: discussion CO₂, study Air pollution**
- **MEPC 57, April 2008: decision Marpol Annex VI**
- **MEPC 59, June/July 2009: concluding work on (non binding) CO₂ indicator**

EU-planning

- **EC strategy Shipping 2002: 2003 (CO₂) + 2006 (NO_x)**
 - **Request for action NO_x, SO_x EP/Council: 2004/2006**
 - **Revision sulphur in fuel directive (2005/33/EC) 2008**
-



Conclusions and way forward

- **IMO action on air pollution and CO₂ preferable but further delay unacceptable**
- **Next year IMO needs to deliver agreement on, at least, lowering sulphur emissions in SECA's and on lowering NOx emissions for new ships**
- **IMO also need to deliver sight on substantial progress towards binding CO₂ reductions**
- **In absence of these: Commission proposals as requested by EP and Council (in 2003 and 2006!)**
- **Role EP???**