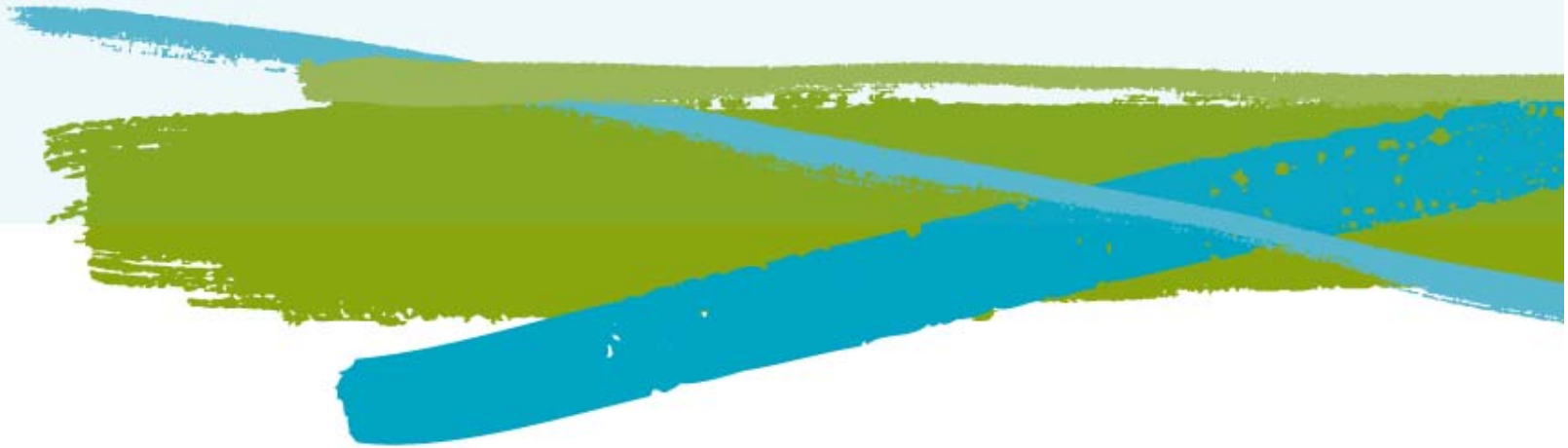
16 November 2011

Maritime GHG emissions – preparing for a potential EU measure



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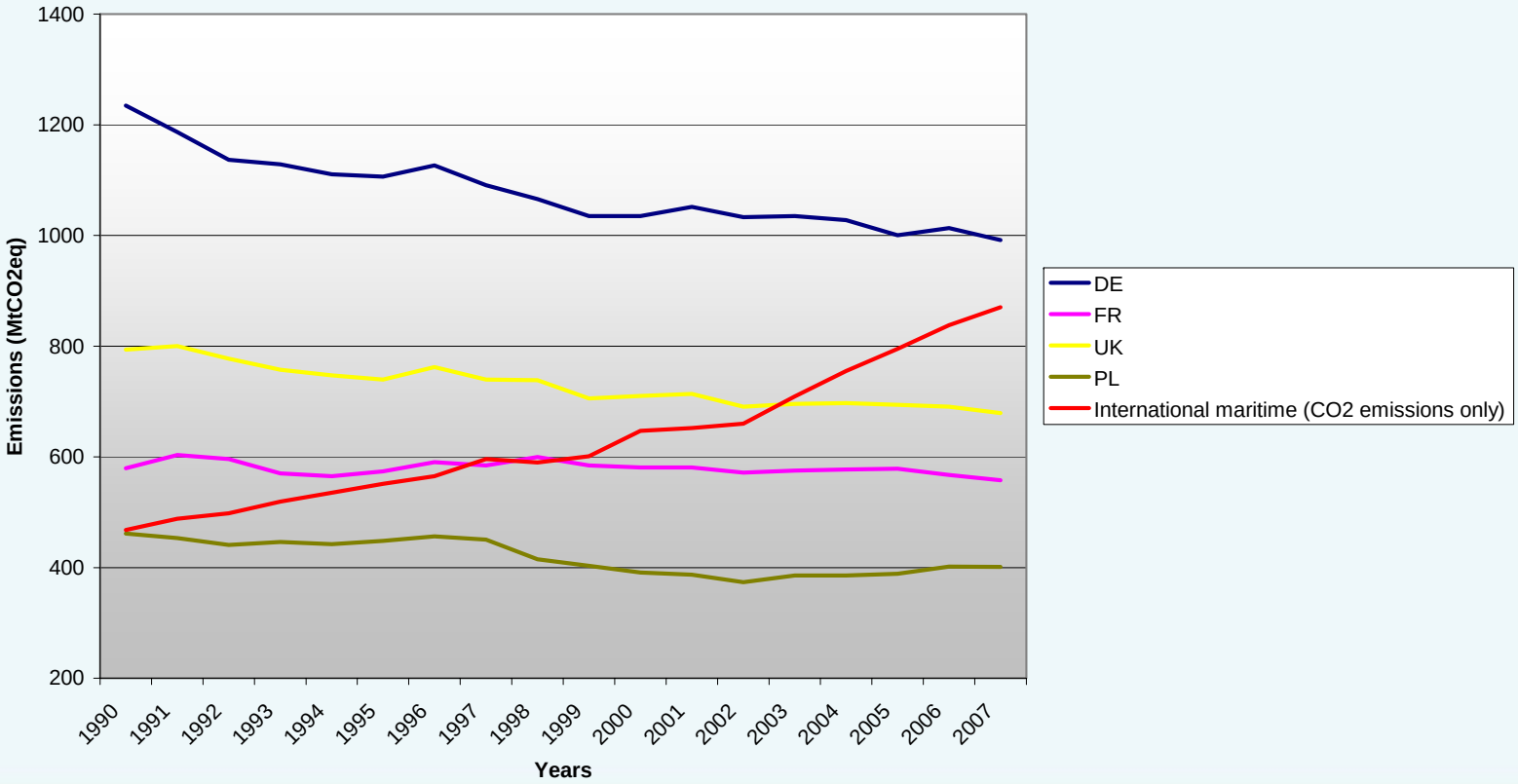
An increase of GHG emissions…

GHG emissions of various EU Member States (excl. international maritime) and of international maritime transport



Source: EU energy and transport in figures - Statistical pocketbook 2009, DG TREN

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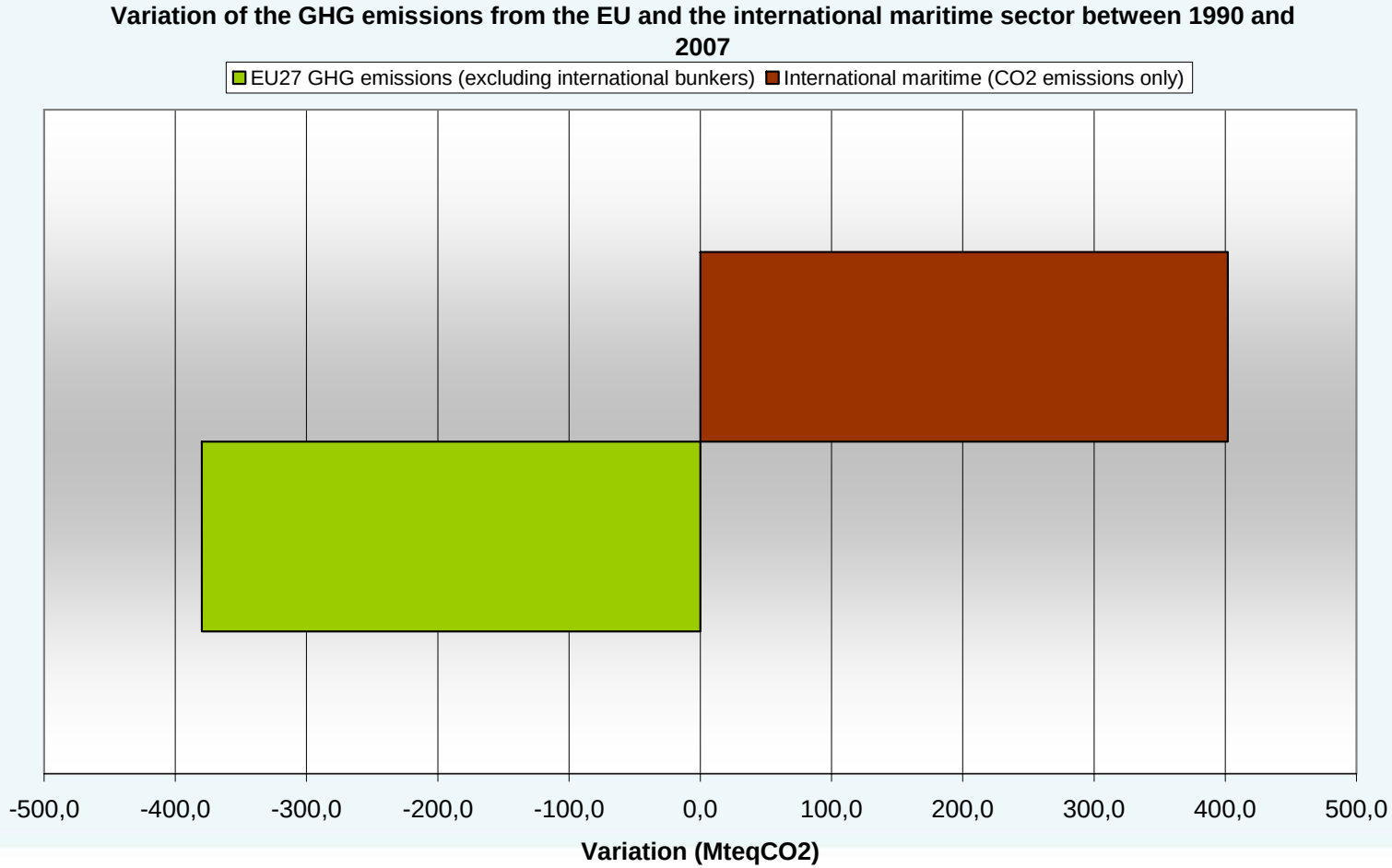
… which undermines the EU efforts



Source: EU energy and transport in figures - Statistical pocketbook 2009, DG TREN

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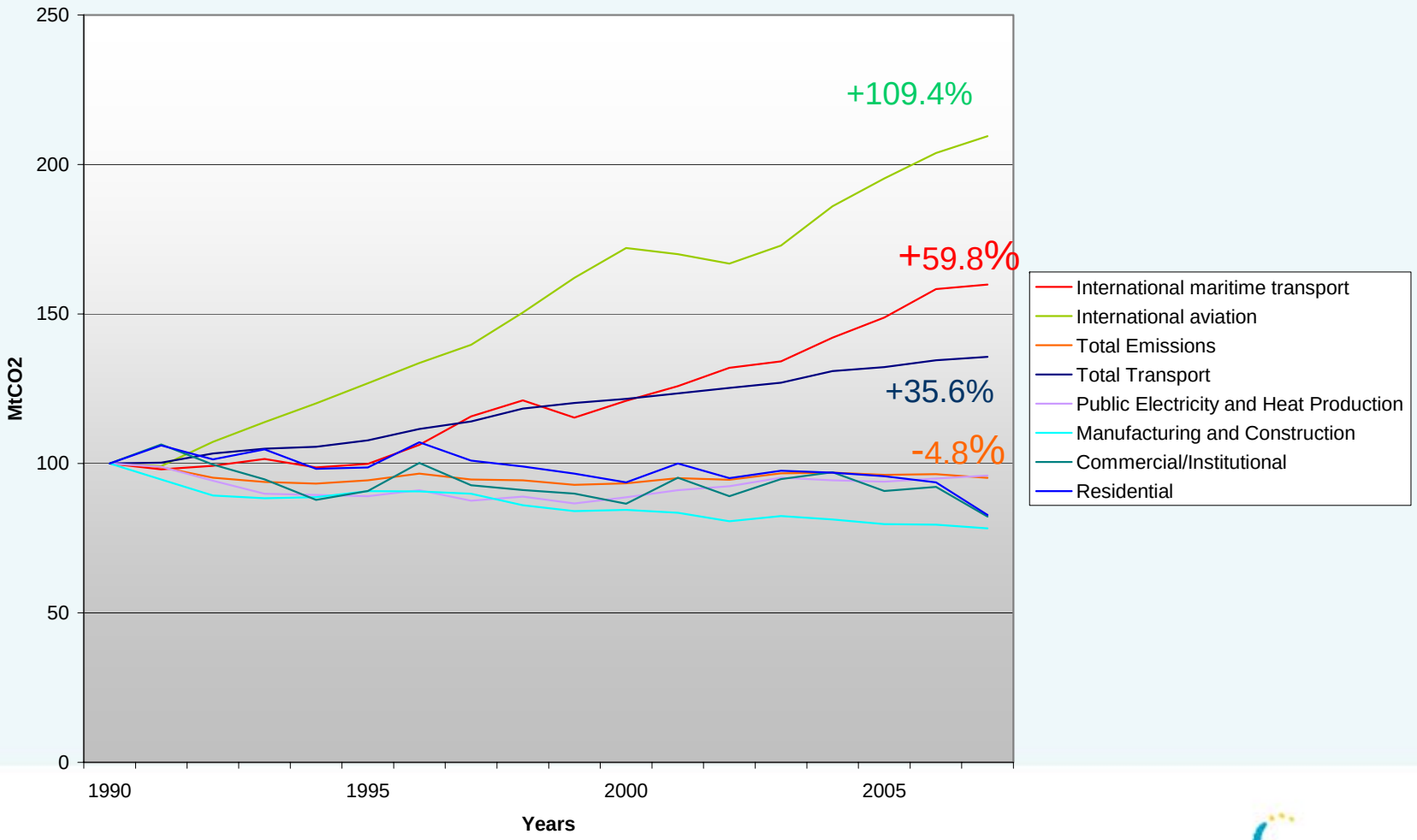
EU 27 CO2 Emissions by sector



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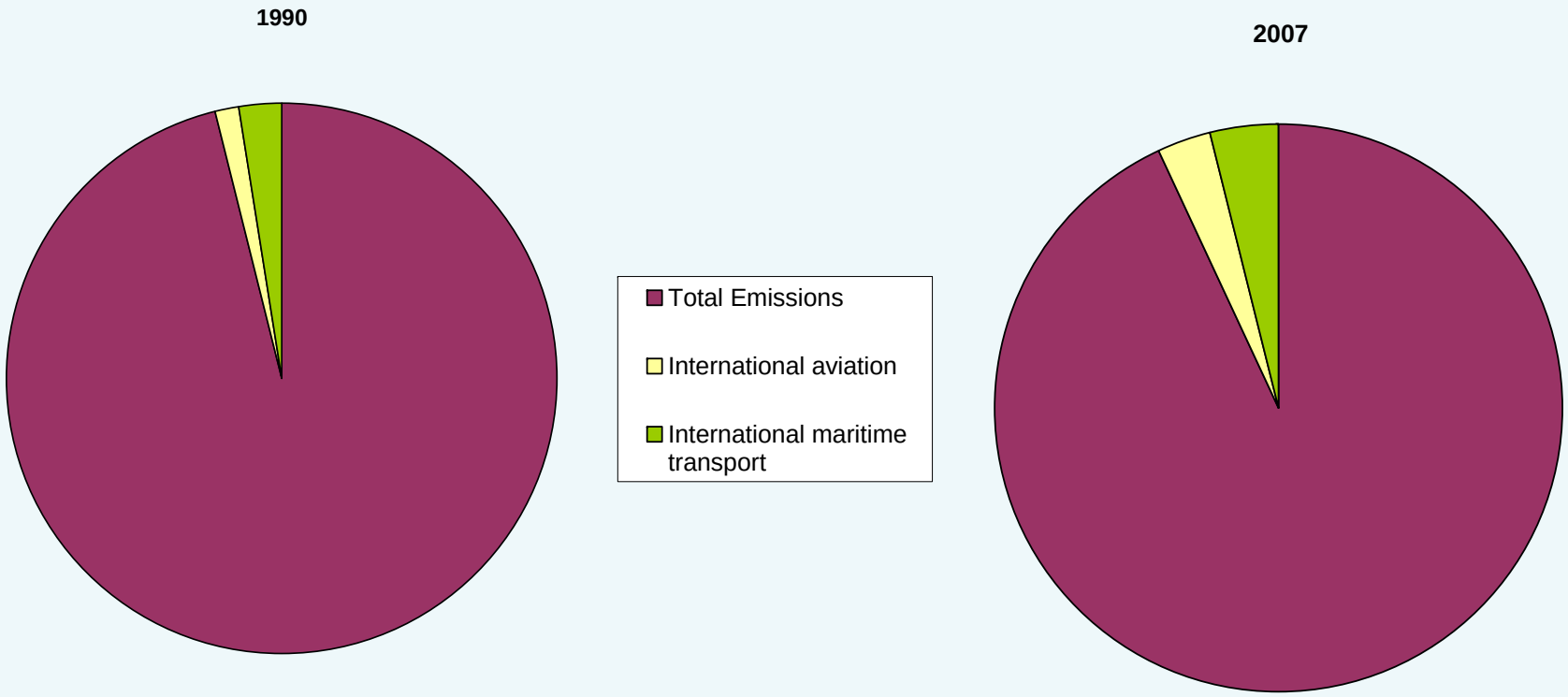
All sectors covered, except international shipping



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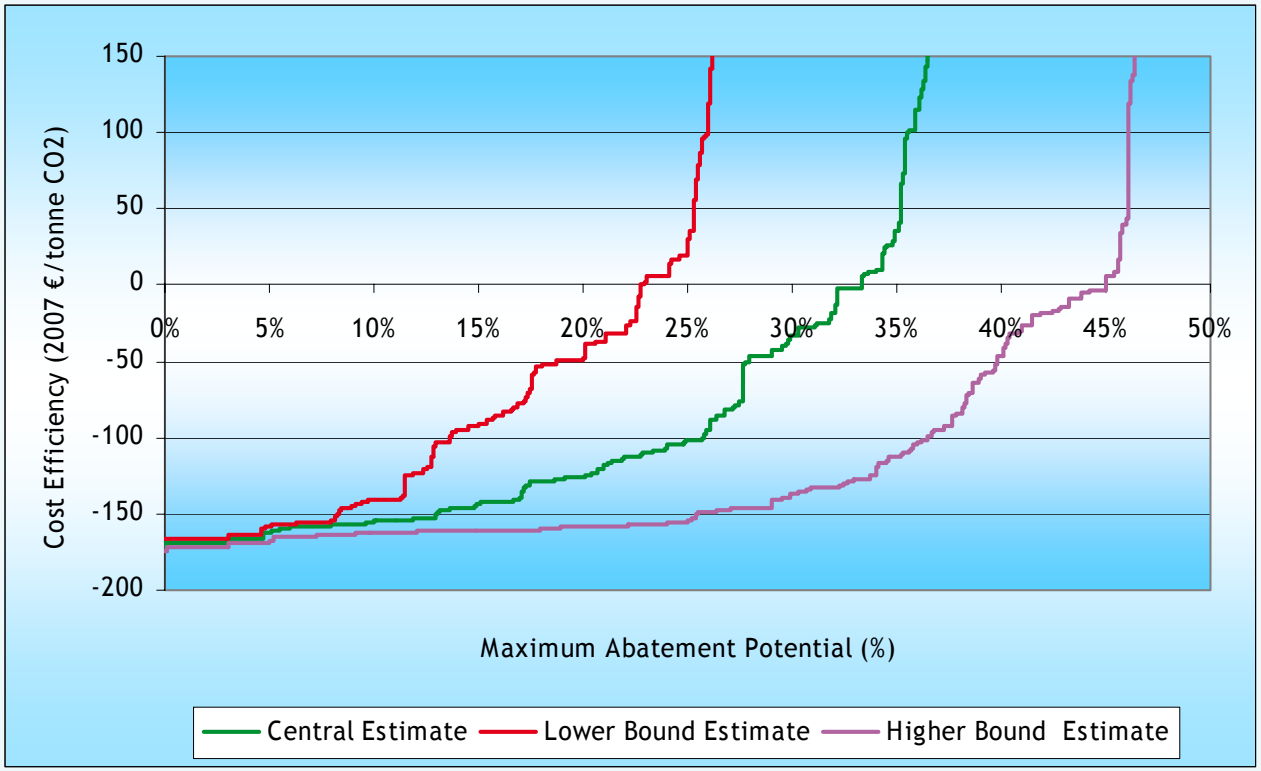
Several studies on MACC



Marginal CO_2 Abatement Costs for the Maritime Transport Sector in 2030 relative to frozen-technology scenario, Range of Estimates, US$ 700/tonne fuel, 9% Interest Rate
Source : 2009 CE Delft

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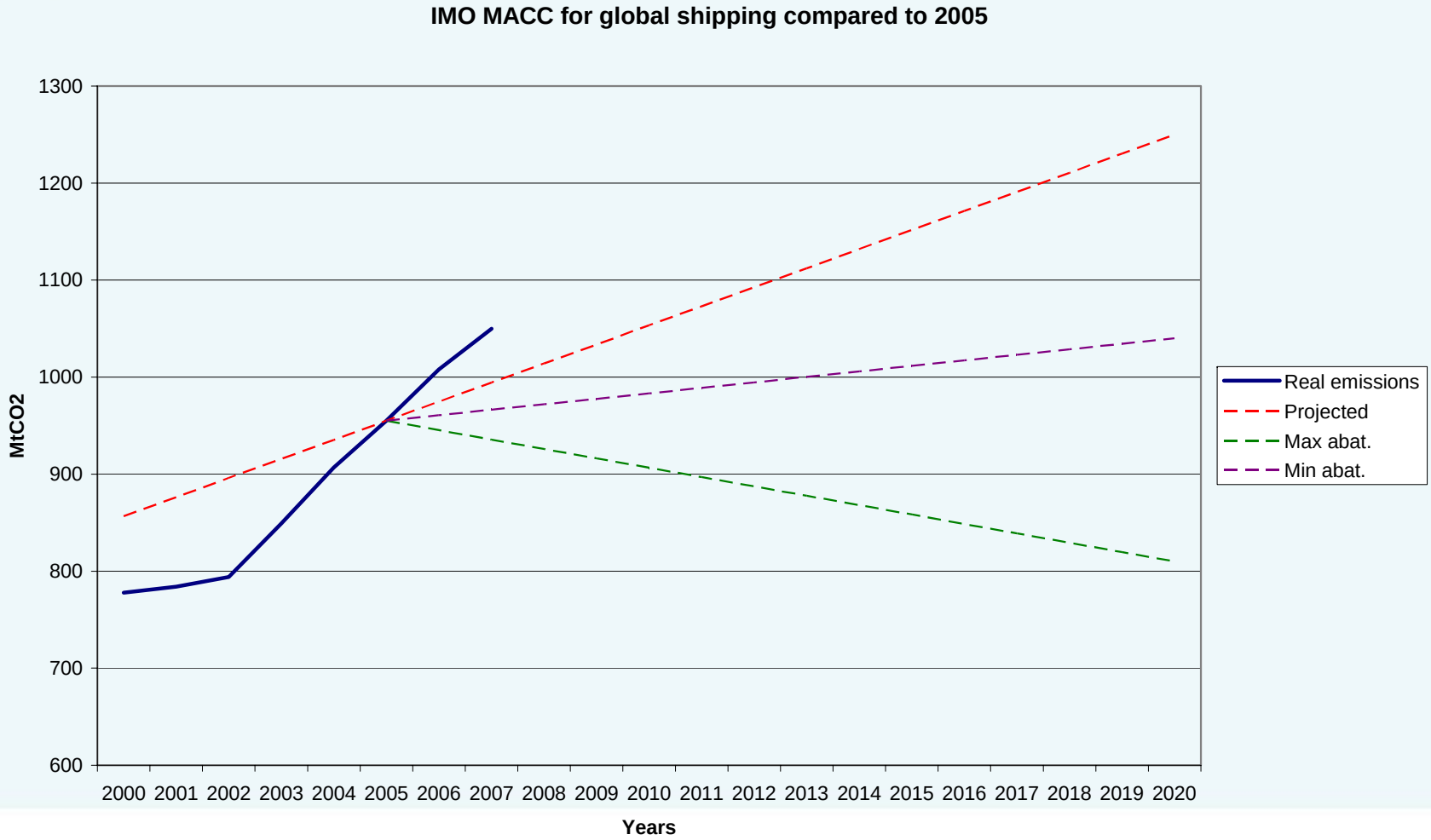
Impact of the IMO MACC



Source: Second IMO GHG Study 2009

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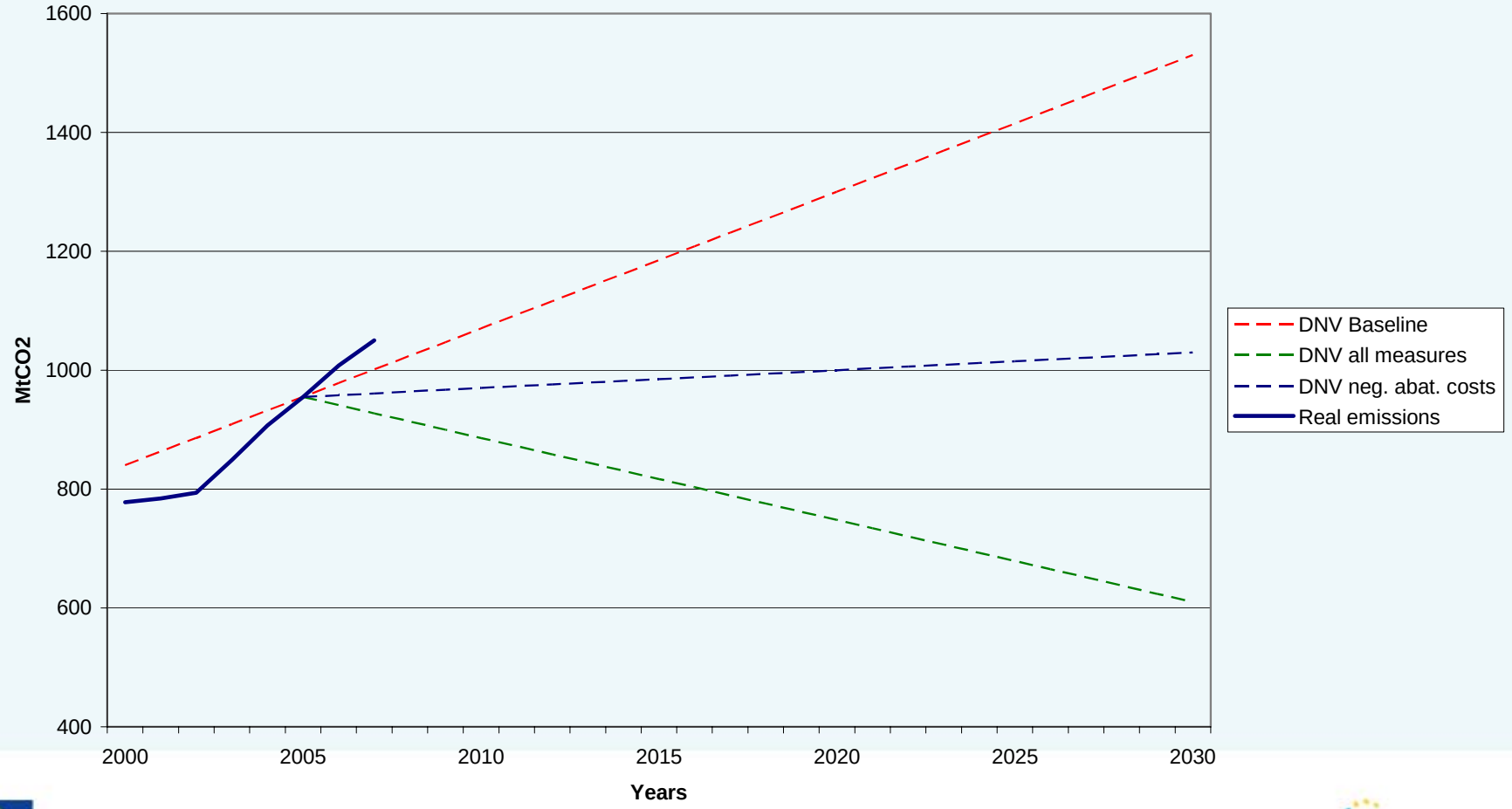
Impact of the DNV MACC

DNV MACC compared to 2005 global shipping emissions



Source: DNV, February 2010

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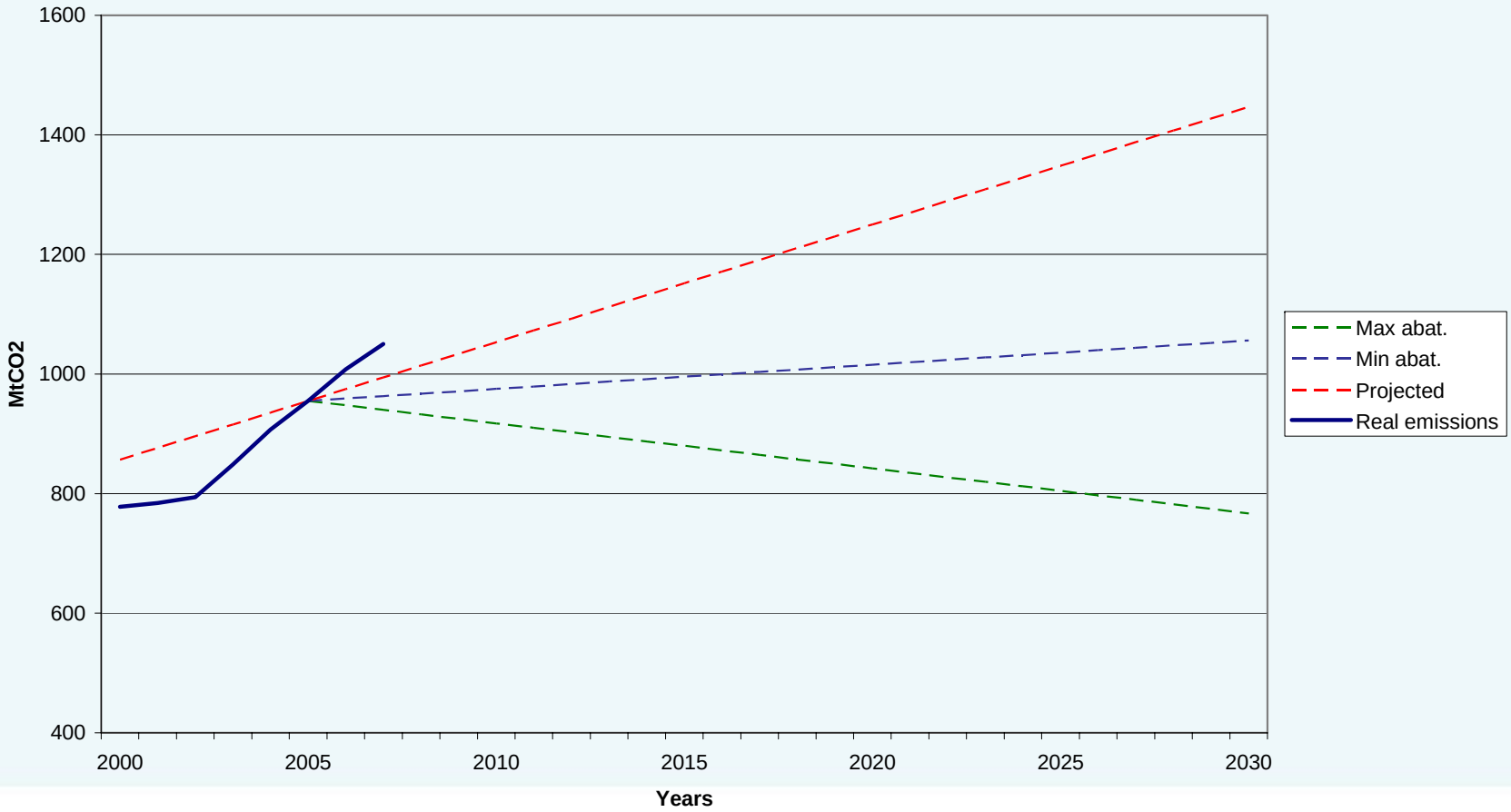
Impact of the CE Delft MACC

CE Delft MACC compared to 2005 emission for global shipping



Source: CE Delft, December 2009

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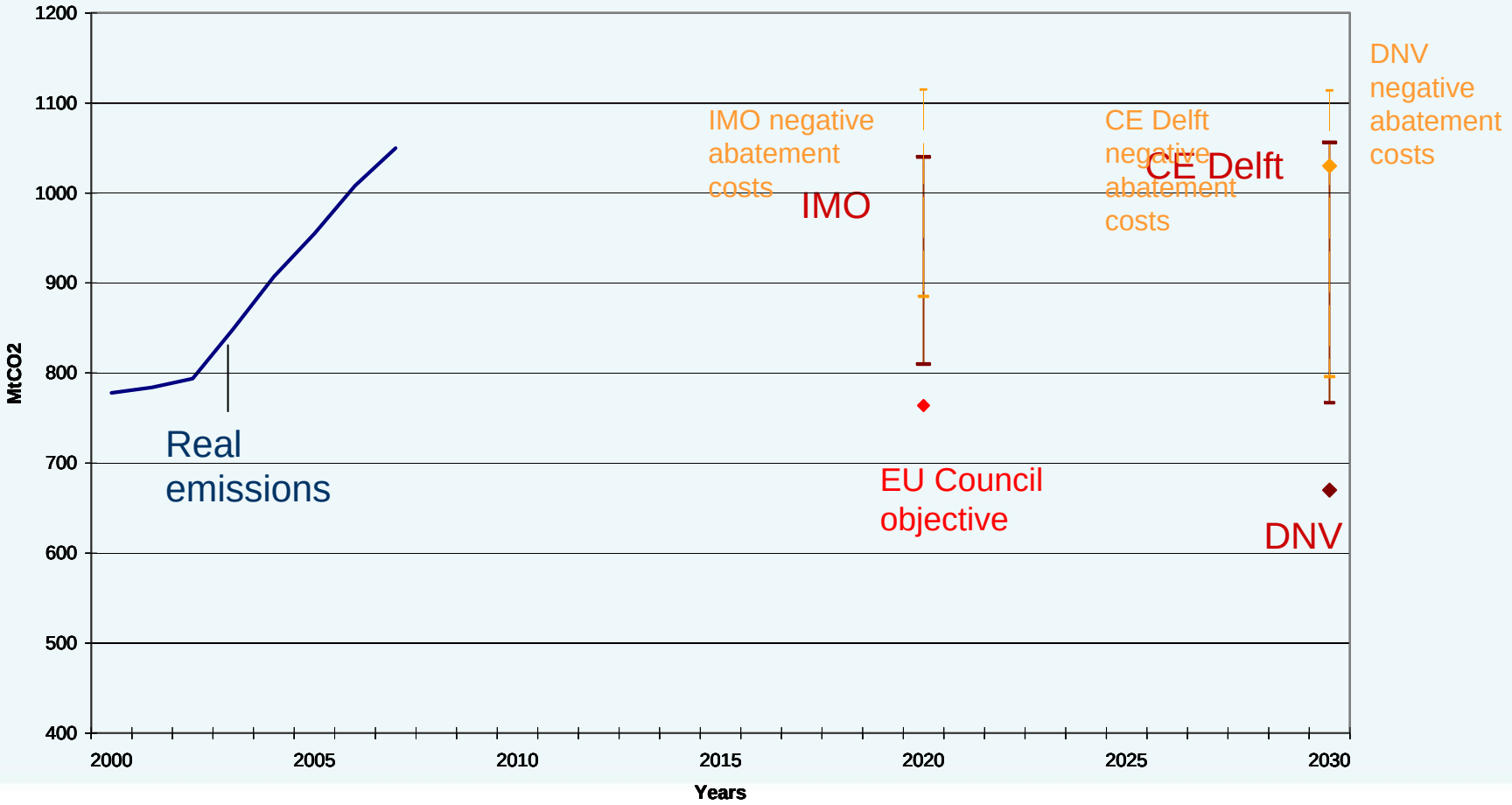
Summary at the global level



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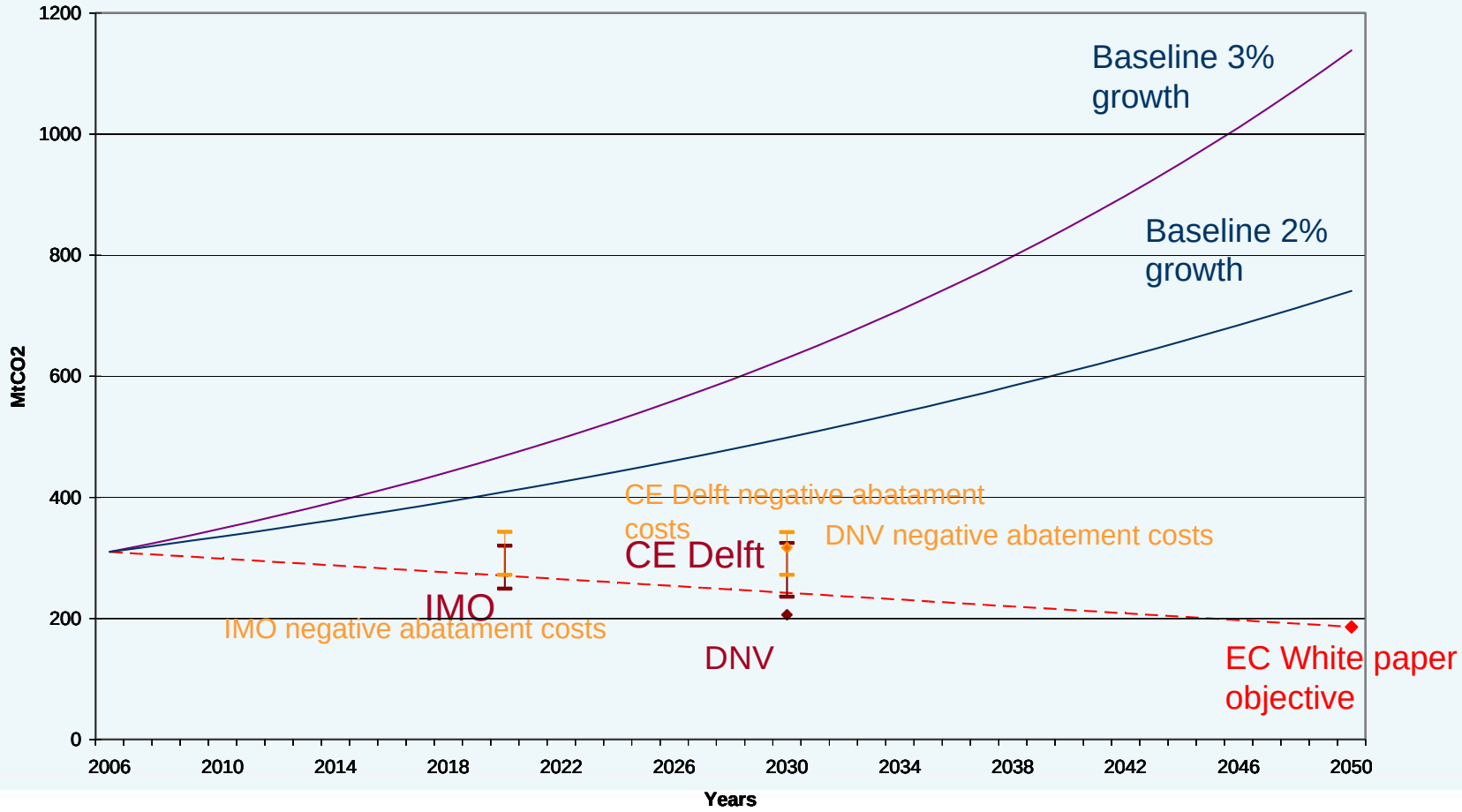
Extrapolation at the EU level



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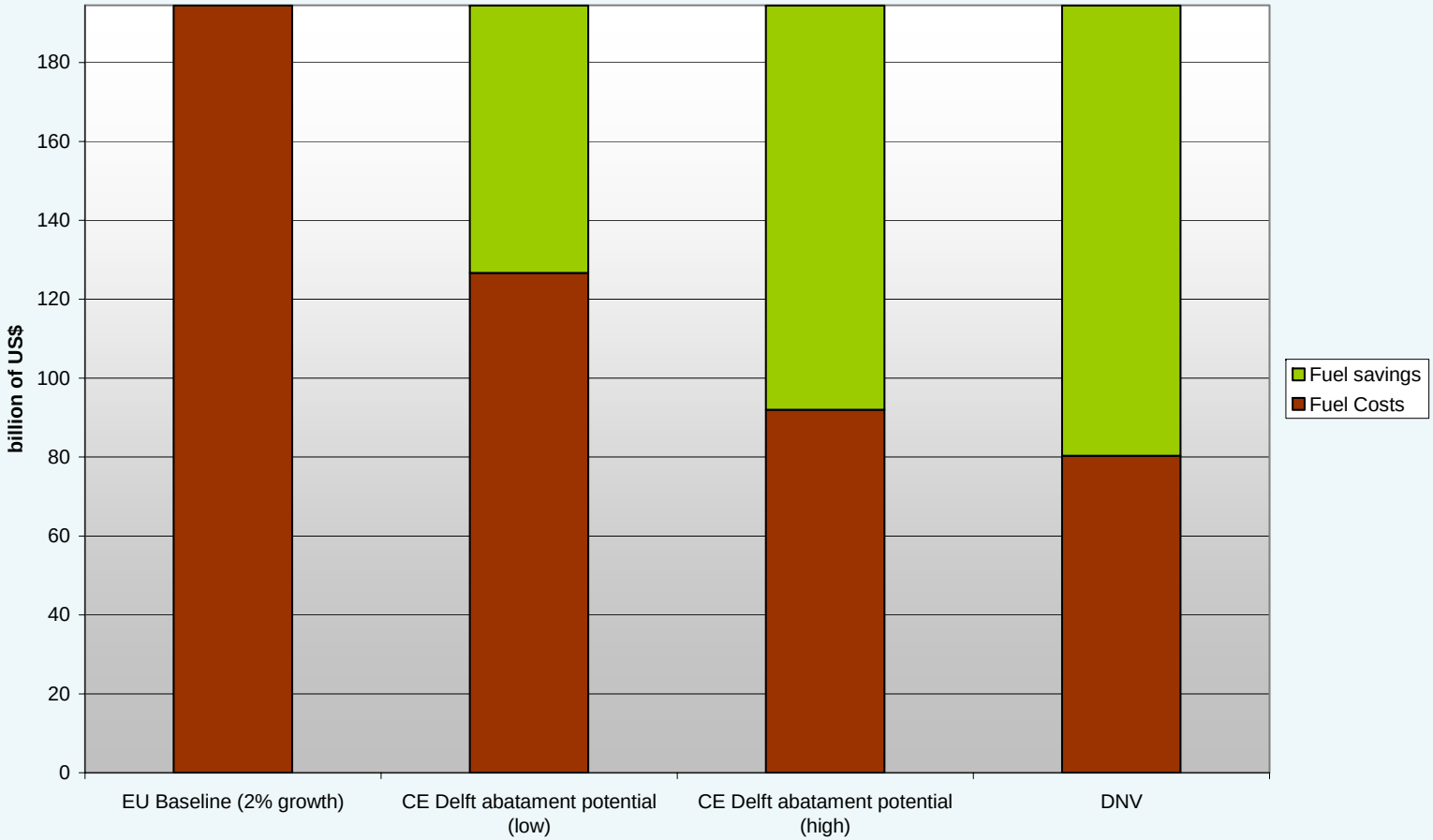
Net benefits of the abatement potentials

- Implementing the EEDI and the SEEMP :
  - US$ 34 – 61 billion of annual fuel cost savings by 2020
- Implementing the maximum abatement potential of measure whose cost effective is negative :
  - US$ 46 - 125 billion of annual fuel cost savings by 2020 (IMO figures)
  - US$ 195 billion of annual fuel cost savings by 2030 (DNV)
  - US$ 130 – 254 of annual fuel cost savings by 2030 (CE Delft)

Net benefits in case of EU measures



Sources: LR/DNV November 2011, Second IMO GHG study 2009, DNV February 2010 and CE Delft December 2009

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