

Global warming: implementing the WPCC declaration in European ports

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Reducing Air Pollution and CO2 Emissions from Shipping and in Ports

EuDA Emission Workshop 6 November, 2008



Summary

1. Ports and global warming
2. World Ports Climate Initiative
3. Emissions ocean-going vessels
4. Emissions port operations and development
5. Emissions hinterland transport
6. Use of renewable energy
7. CO2 footprint
8. Way forward
9. Concluding remarks

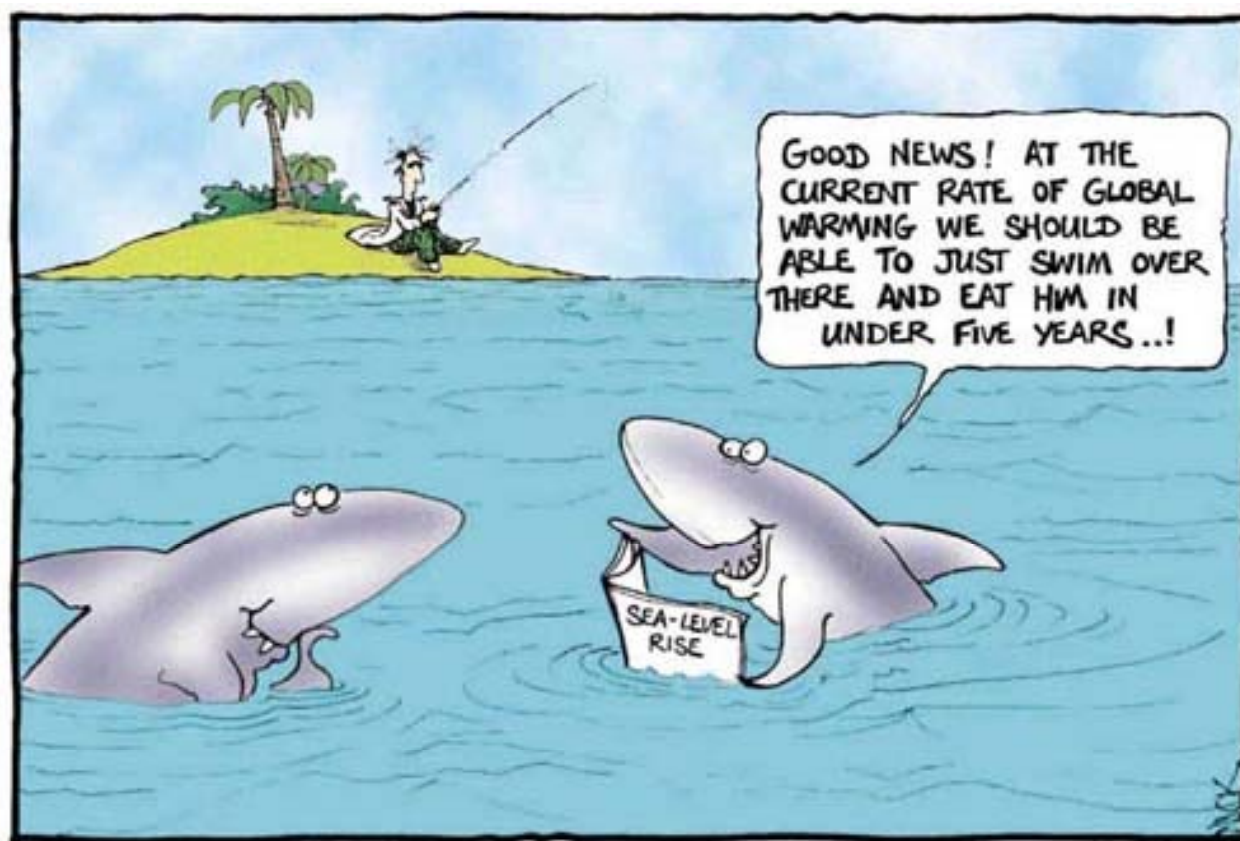


A few words about ESPO

- Founded in 1993
- Represents European port authorities in all varieties
- Members in EU Member States and neighbouring countries
- + 800 ports handling 3,5 bln t of cargo and 350 mln passengers annually
- Based in Brussels - recognized counterpart of EU institutions
- Platform with EFIP (European Federation of Inland Ports)
- Joint secretariat with EcoPorts Foundation



1. Ports and global warming



- Opinions on global warming may diverge
- It has however become a societal priority which ports cannot afford to ignore
- “Green” supply chains are being required by shippers due to consumer pressure
- It pays off to be pro-active
- Reducing GHG and other pollutants decreases operating costs at the same time
- Increasing energy efficiency is economically beneficial



2. World Ports Climate Initiative

- Originates from C40 Climate Leadership Group / Clinton Climate Initiative
- Declaration World Ports Climate Conference Rotterdam 9-11 July 2008
- Endorsed by 55 ports
- Coordination:
 - Global: IAPH
 - Europe: ESPO
- Lead projects
- Best practice



World Ports Climate Change Declaration

- Starting point: ports have many opportunities and the responsibility to reduce GHG
- Five key areas:
 1. Reduce CO2 emissions from ocean-going shipping
 2. Reduce CO2 emissions from port operations and development
 3. Reduce CO2 emissions of hinterland transport
 4. Promote the use of renewable energy
 5. CO2 footprint



3. Emissions ocean-going vessels

- Support the development of clean shipping (fuel / engine / ship design)
- Promote and accommodate the further development and standardization of shore-side supplied (renewable) electricity
- Consider speed reductions where effective and possible with regard to nautical safety
- Develop transparent incentives based on a shared system of environmental indexing of ships
- Urge the IMO to accelerate incorporating best practices in reducing CO2 in IMO treaties and to accelerate adoption of the current proposals to amend MARPOL Annex VI



WPCC project: environmental ship index



Lead: Port of Rotterdam



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WPCC project: shore power



Lead: Port of Göteborg



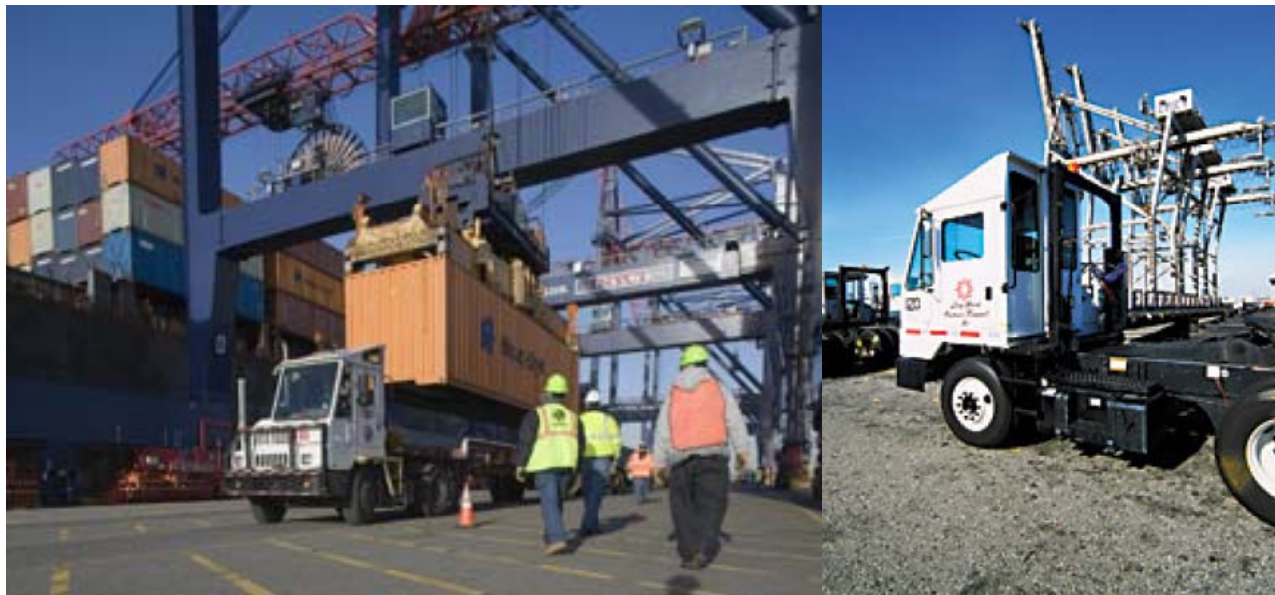
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4. Emissions port operations and development

- Promote CO2 reduction measures for terminal operations and cargo handling (e.g. in lease contracts)
- Promote co-siting and shared utilities to capture energy efficiencies and use waste energy
- Develop sustainable nautical services, such as those represented by tugs and other harbor craft
- Encourage shore-side supply of (renewable) electricity for inland navigation, e.g. inland vessels, tugs and self propelled barges
- Improve the energy efficiency of buildings, cargo handling, transportation and other elements of public and private port operations



WPPC project: port and terminal equipment



Lead: Port Authority New York – New Jersey



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Best practices European seaports

- Port of Rotterdam:
 - Use of clean fuel + reduce fuel use patrol vessels
 - Co-siting criteria for tender procedures and lease contracts
 - Shore power for inland barges
- Port of Södertälje:
 - Bicycle on reach stackers



5. Emissions of hinterland transport

- Use efficient and innovative logistics to reduce the need for hinterland transport
- Institute, facilitate and program the modal shift towards clean and energy efficient modes of transport
- Stimulate the environmental performance of all transport modes (e.g. by environmental zoning)



Best practices European seaports

- Port of Amsterdam:
 - AMS barge
 - Inland shuttle service
- Port of Rotterdam:
 - Container transferium
 - Dynamic traffic management
 - Modal shift
'bonus/malus' in terminal lease agreements



6. Use of renewable energy

- Promote and enable generation of renewable energy (e.g. wind, solar, geo-thermal) in public and private domains
- Use renewable energy where possible for port authority operations and advocate the use of renewable energy for port operations more broadly
- Promote the transport and processing of certified biomass for the production of renewable energy



Best practices European seaports

- Port of Marseilles:
 - Windmills
 - Electrical vehicles
- Associated British Ports:
 - Wind farms
 - Biomass generators
 - Combined heat and power



7. CO2 footprint

- Ports to begin a process of quantification and managing of CO2 footprints by creating carbon inventories for their own activities, for port operations as a whole, and for the relevant part of the supply chain
- Create structures and reporting mechanisms to internalize CO2 self-assessment and control
- Develop the methodology to determine and reduce the footprint of the port area (per unit of activity/cargo) and distinguish between cargo handling and port industrial activities
- Ports to develop their own (proportional) targets for CO2 emission reductions in the port and industrial area in conjunction with relevant parties



WPCC project: carbon footprint method




Lead: Oslo Port Authority



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8. Way forward

- Complete inventory of best practices (input: herwig.ranner@espo.be)
- Update ESPO Code of Environmental Practice
- Update EcoPorts tools SDM and PERS 
- ESPO policy view on global warming early 2009
- MoU with American Association of Port Authorities
- Progress reports at GreenPort 2009 conference (Europe) and IAPH 2009 bi-annual (global)





GreenPort-2009

In Association with **EcoPorts** Foundation

The International Ports and Environment Conference and Exhibition

Equipment, Solutions and Expertise Working with the Environment



**Ramada Hotel
Naples, Italy**

Welcome Reception: 24 February 2009
Conference Sessions: 25/26 February 2009



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www.green-port.net



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9. Concluding remarks

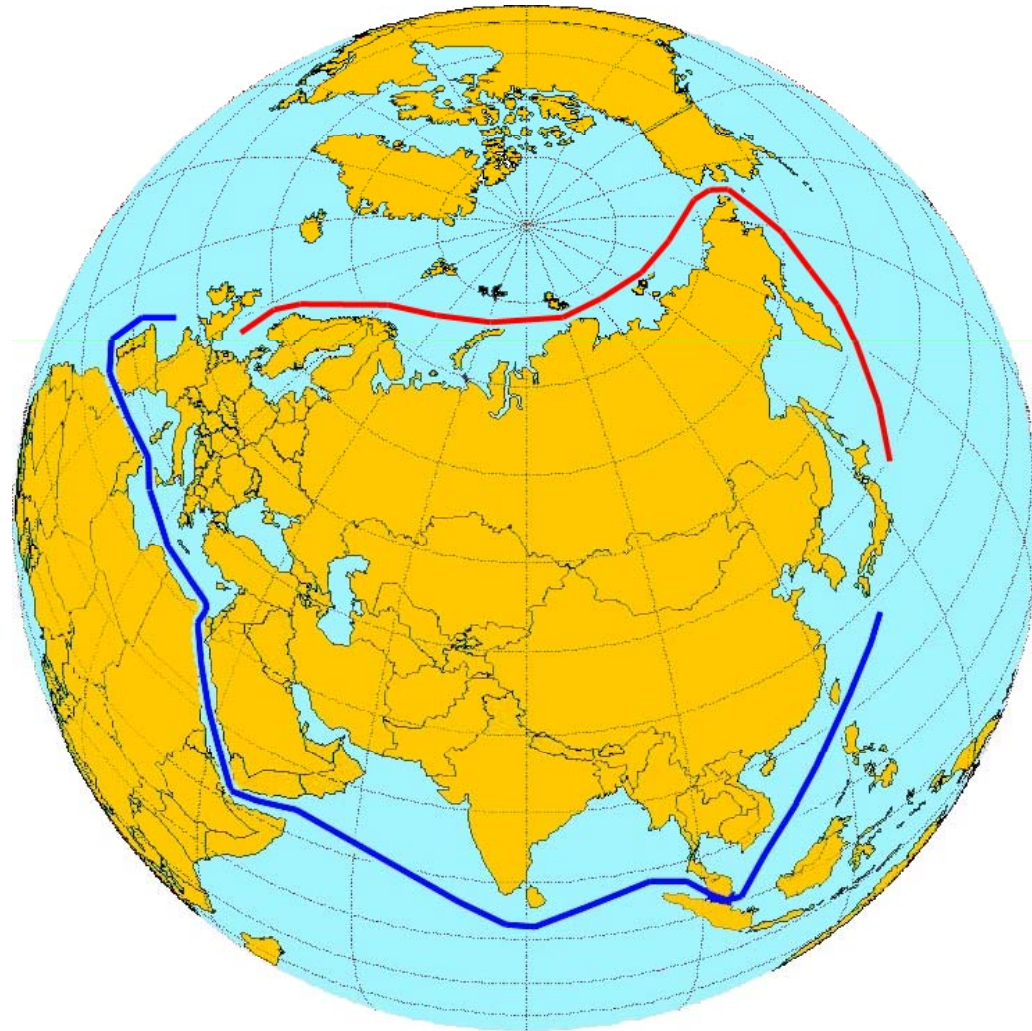
- Reducing GHG needs to become part of daily environmental management of a port
- Global warming measures should be adapted to the specific situation of each individual port (avoid hypes, e.g. 'cold ironing')
- Small-scale initiatives can generate important effects
- A lot can be done through self-regulation but not everything
- EU legal / policy framework for ports and shipping should be proportional and dovetail the international framework



Let's also look at the potential impact of global warming on the European port system...



A navigable Northern Sea Route?



Thank you for your attention



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