EUROPEAN SEA PORTS ORGANISATION ASBL/VZW
ORGANISATION DES PORTS MARITIMES EUROPEENS ASBL/VZW

Policy statement on reduction of Green House Gas emissions in ports

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1. Rationale

The European Sea Ports Organisation (ESPO) acknowledges the importance of climate change for society and the responsibility of port authorities to participate in the effort of reducing Green House Gas (GHG) emissions.

As intermodal connecting points containing logistic and industrial clusters, ports strive to contribute to the reduction of these emissions. The direct impact of port operations on GHG emissions is relatively small and port authorities are working to decrease it even further. Measures taken to reduce GHG emissions however also have the benefit of reducing emissions of other priority pollutants like NOx, SOx and PM10 as well as operating costs. ESPO believes that source-oriented measures are the most effective tools in reducing GHG emissions and improving air quality generally.

Ports feature among the key players in global supply chains which enables them to positively influence the sustainability of these chains. One of the opportunities to reduce CO_2 is the increased importance of co-modality and modal shift as often mentioned in recent EU policy proposals. ESPO is also convinced that reducing the carbon footprint of ports and increasing their energy efficiency opens up a wide range of business opportunities for the port sector.

Assessing, monitoring and reducing CO_2 emissions are important tasks, but so is adaptation to eventual future changes in the climate. Floods, draughts and other negative effects need to be recognized and timely adaptation strategies have to be developed to avoid multiple negative effects for ports and their surrounding communities. ESPO therefore refers to the European Commission White Paper on Climate Change Adaptation[1] and will further develop its own adaptation policy view.

2. Initiatives and actions to be taken

Already a large number of European seaports are working on reducing GHG emissions and developing innovative approaches and new technologies. ESPO is actively collecting examples of these good practices among the ports and will strive to

[1] European Commission White Paper on Climate Change Adaptation - COM (2009) 147 final

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circulate this useful practical information amongst its members. Good practice examples encompass use of co-generation, generation of renewable energies, measures to increase energy efficiency of buildings and vehicles and speed reductions for vessels while in port, as long as economically feasible and not endangering nautical safety. Possible public financing of such measures should in ESPO's view not qualify as State aid.

ESPO, under the umbrella of the International Association of Ports and Harbours (IAPH), coordinates the regional implementation of the World Ports Climate Declaration (WPCD), agreed on in July 2008 in Rotterdam and endorses the technical developments of the projects of the World Ports Climate Initiative (WPCI) which is the follow-up initiative of WPCD.

Port authorities can strive to improve CO_2 performance in a variety of fields, taking into account the differences in national legislation and jurisdictional regimes as well as the cooperation of the different economic operators involved. It should indeed be acknowledged that European seaports are very heterogeneous entities. There is no one-size-fits-all solution when it comes to applying the results of the WPCI projects or making use of best practices from other ports. What works in one port, may not work in another. Solutions like shore power for instance, have to be assessed for each individual port and cannot be universally applied.

ESPO is considering the feasibility of a cap and trade system for CO_2 emissions from international shipping, or other market related instruments developed at IMO level. ESPO closely cooperates with the EcoPorts Foundation concerning the practical aspects of the WPCD and WPCI implementation and is specifically envisaging an adaptation of the EcoPorts tools for climate change issues.

In line with the WPCI projects, ESPO has identified five main areas where ports can address the issue of global climate change. These are described below.

3. Calculation of a port's CO2 footprint

ESPO endorses the development of the WPCI project on carbon footprint calculation. Quantifying and monitoring one's CO_2 footprint is very important to assess the potential impact of industrial activities on CO_2 emissions in the port. ESPO encourages the creation of carbon inventories of the port and the supply chain and the creation of structures and reporting schemes to internalize CO_2 self assessment and monitoring. This will also allow distinguishing between port authority operations, cargo handling and industrial activities.

4. Reduction of CO2 emissions from port operations and development

ESPO wants to promote CO_2 reduction measures for terminal operations and cargo handling and to promote co-siting to make efficient use of energy and industrial by-products of port sited industry.

Furthermore ESPO encourages the development of sustainable nautical services like hybrid tugboats and patrol vessels, self-propelled barges and other harbour craft. This may also include the supply of renewable shore side electricity for inland navigation as one of many possibilities.

In addition, ESPO encourages port authorities to include sustainability criteria when concluding or prolonging terminal lease agreements or concessions.

ESPO finally promotes the improvement of energy efficiency in buildings and all different kinds of elements in public and private port operations.

5. Reduction of CO2 emissions by promoting usage renewable energy

ESPO welcomes all efforts to promote and enable the generation of renewable energy in public or private port domains. A number of European seaports already make use of renewable energy with wind power and bio-mass being most prominently utilised.

ESPO encourages its members to use renewable energy where possible for port operations. ESPO also calls for the development of incentives at EU or national level to promote the use of renewable energy.

6. Reduction of CO2 emissions of hinterland transport

ESPO promotes the development of efficient and innovative logistics to reduce hinterland emissions, by endorsing the development of the WPCI project on hinterland transport.

ESPO supports a structural modal shift that leads to co-modality, understood as the optimal use of all transport modes. Contribution to this objective can also be achieved by including modal shift criteria in terminal lease agreements or concessions.

7. Reduction of CO_2 emissions of ocean going shipping

When compared to land based transport, shipping is the more environmentally friendly transport mode. This is also mentioned in EU policy papers on modal shift and co-modality. Emissions per ton-km are 3 times lower for shipping compared with trucks and 25 times lower than for air freight. Nevertheless shipping has to do its share in the reduction of global CO_2 emissions, especially in the light of new EU policies on modal shift and co-modality.

ESPO favours in first instance ship-based solutions for reductions of CO_2 emissions from ocean going shipping, i.e. the use of clean fuels and engines. Port authorities can facilitate the reduction of emissions while ships are in port, although port emissions only represent a minor part of the total emissions of a ship.

ESPO endorses the technical development and standardization of shore side electricity as well as the creation of a toolbox which will make it possible for port authorities to assess whether shore power is a practical and sustainable tool for them. ESPO is furthermore in favour of considering the use of speed reductions where applicable and with regard to nautical safety, and endorses the technical development of an environmental shipping index.

The projects on shore side electricity and the environmental shipping index are both carried out within the framework of the WPCI. ESPO supports their technical development but believes that the use of shore side electricity and the environmental shipping index should be left at the discretion of each individual port authority. It should be noted that shore side electricity in particular is only one of some possible solutions to contribute to the reduction of GHG emissions and does not fit all ships and destinations of transport.

ESPO furthermore urges the International Maritime Organization (IMO) to accelerate the incorporation of best practices for CO_2 reduction into IMO treaties and to swiftly adopt current proposals to amend MARPOL Annex VI.

8. Conclusion

ESPO will promote the implementation of the WPCD articles and WPCI projects and contribute to the EU goal of reducing the European Carbon Footprint by 20 percent in 2020 by encouraging port authorities to work together with port operators, actors in the wider logistics chain, city and regional administrations as well as other stakeholders in and around the port area. ESPO will also facilitate the exchange of information within the WPCI network and stimulate European port authorities to create mechanisms and responsibilities within their ports to drive continuous emission reductions and innovation.

9. References

World Ports Climate Initiative - www.iaphworldports.org/wpci_2008/index.html
EcoPorts - www.ecoports.com

Since 1993, ESPO represents the port authorities, port associations and port administrations of the seaports of the European Union. The mission of the organisation is to influence public policy in the EU to achieve a safe, efficient and environmentally sustainable European port sector operating as a key element of a transport industry where free and undistorted market conditions prevail as far as practical.

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