

# CLIMATE CHANGE AND SHIPPING

## SHIPPING – A PREREQUISITE FOR GLOBAL TRADE

- While shipping is the most environment friendly form of transport, the industry will continue to strive for further efficiency improvements. In this context, reference to the options that the industry believes should be examined further is set out below.
- Shipping is the backbone of globalisation, carrying some 90% of world trade. This is undertaken in the most cost efficient way so that shipping only represents a few percent of the price of goods.
- Shipping delivers fundamentals such as heating and food and provides, as a key facilitator of world trade, huge economic and social benefits to developed and developing economies. This reflects that shipping is a prerequisite for globalization and contributes to lower consumer prices, wider variety of products and larger market potential.

#### AN EXCELLENT ENVIRONMENTAL RECORD

- The global impact of shipping on the climate is limited. There are a number of published studies estimating the total  $CO_2$  emission from shipping e.g. the Stern Report, the IMO Study from 2000 and others. Based on this information, shipping's share of the global  $CO_2$  emission is around 2 - 4 % which, seen in light of the massive transport work performed, is small. Most emissions from transport come from the road sector.
- Shipping produces less Green House Gases to transport one tonne of cargo one kilometre than any other form of transportation:



- Source: Swedish Network for Transport and the Environment and Danish Shipowners Association
- Energy efficient transport by shipping is the result of decades of constant development of better engines, ships and logistics. This development has been largely market driven as fuel is a large share of the shipowner's operating costs. Since the oil crisis in the early seventies, the efficiency of ship diesel engines has improved by 20% and the use of still larger ships and technological advances are constantly improving the efficiency of shipping.



- The world fleet is expected to grow annually by some 3% in the coming years. This reflects the development of world trade. Shipping will, via constant technological advances, achieve an improved energy performance in the future. However, the scale of these improvements will be smaller than the growth in world trade, which is why it will not be possible to achieve absolute CO<sub>2</sub> reductions for shipping. Focus will therefore have to be on relative CO<sub>2</sub> reduction objectives with a view to continuously improving the energy efficiency of the individual ship.
- Further use of waterborne transport would reduce CO<sub>2</sub> emissions from the road transport sector. This goes hand in hand with the EU policy to address the issue of excessively congested roads. Regulation aimed at achieving marginal greenhouse gas savings from shipping, at considerable cost, may well lead to a modal shift to other less environmentally credible forms of transport. The result would be an overall negative impact on global warming.

• Given the growth in world trade, shipping is making a positive contribution in environmental, social and economic terms. Shipping is part of the solution rather than the problem.

### PRINCIPLES FOR FUTURE CLIMATE REGULATION OF SHIPPING

European shipping plays a key role in global maritime trade with a controlled fleet of almost 41% in gross tonnage of the world merchant fleet. ECSA advocates that the following fundamental principles be applied in relation to any future climate regulation of shipping:

- Regulation must be flag neutral to ensure a level playing field for EU shipping and agreed internationally to ensure consistency.
- Regulation must focus on relative reduction with a view to continuously improving efficiency of the individual ship and recognise that absolute reduction objectives are not within reach given the growth in world trade.
- Regulation must ensure the free choice of method to reduce CO<sub>2</sub> emissions, via goal based standards, and to promote innovation and cost effective solutions.

#### THE NEED FOR IMPROVEMENT – Options for the Shipping Industry

While shipping is the most environment friendly form of transport, the need to improve on performance remains. There are a variety of options to achieve this, with the pros and cons of the following ones, in particular, meriting attention;

- Technical and Operational options include more efficient engines, improved hull and propeller design, energy optimal fleet operations, reduction of ship speeds, better waste utilization, and alternative fuels and means of energy.
- Legislative Options include CO<sub>2</sub> emission indexing, the inclusion of maritime transport in the Global Emission Trading Scheme, allocation of emissions from maritime Transport to States and mandatory differentiation of harbour dues.

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European Community Shipowners' Associations



ECSA, formed in 1965, comprises the national shipowner associations of the EU and Norway. ECSA works through a permanent secretariat in Brussels and a Board of Directors, as well as a number of specialised committees. Its aim is to promote the interests of European shipping so that the industry can best serve European and international trade and commerce in a competitive free enterprise environment to the benefit of shippers and consumers.

More detailed information on the shipping industry's position, including on the options to be considered, can be found on the ECSA website **www.ecsa.eu** or through contact with **Tim Marking** or **Sonia Karassavidou**, ECSA Rue Ducale 67, 1000 Brussels, Tel +32 2 511 39 40, Email: marking@ecsa.eu or karassavidou@ecsa.eu

Further data on the shipping industry can be found on: www.shippingfacts.com