

MBIs for reduction of CO2 emissions from Tramp shipping

By the Union of Greek Shipowners

The size of merchant shipping

1 Merchant Shipping is an international service. According to the Tramp Shipping Market report (2004) prepared by Clarkson Research and commissioned by ECSA (supported by ICS) the deep-sea merchant fleet ships were owned by 4,795 companies registered under 144 different flags. Only 16 of these companies (0.25%) owned more than 100 ships and the average shipping company had 5 ships. The tramp shipping industry has predominantly private small and medium sized companies engaged in the transportation of homogenous dry bulk cargoes such as coal, cereals, fertilizers, forest products, iron ore, cement and wet (bulk) cargoes such as crude oil, oil products and chemicals. Around 75% of the world fleet are bulk carriers, tankers and general cargo ships and a significant percentage of them are owned and operated by Greek companies.

'Fixing' (chartering) of tramp shipping

2 The bulk of world trade is carried out by trade optimized ships which are built on a production line basis. The ships' hull and machinery are designed and built by shipyards as a standard design. Shipyards offer few options. Shipowners have very little say on the hull form, engine design and installation, choice of propellers etc., and hence on their designed energy efficiency.

3 Tramp ships operate under voyage charters, consecutive voyage charters, contracts of affreightment, or time charters (which are the predominant basis of employment). The time charterer is responsible not only for the vessel's trade but also for all related expenses, including the port costs, but more importantly, the purchase and supply of the fuel consumed.

4 Many shippers/receivers are concerned about consequential costs to the production/sale processes from delays. The speed of delivery includes important cost elements, such as financing costs, opportunity cost etc., which influence pricing. Ships, when employed on time charter are fixed on the basis of a description given by the owners that advises of the ship's speed and consumption at various speeds, both laden or in ballast as well as intermediate conditions. The ship is 'fixed' (i.e. the daily charter rate is agreed) on the basis of this description. Ships of the same size with different speed and consumption descriptions will get different time charter rates *ceteris paribus*. When on time charter the fuel is paid by the time charterer. If the ship underperforms, i.e. makes less speed or consumes more fuel than is warranted by its description, the time charterer claims the underperformance or over-consumption from the shipowner.

5 The ship operator does not decide on the voyages undertaken, he simply mans and maintains the ship. The voyage, the ship's speed and itinerary are decided on by the charterer who knows the description and requirement of the cargo and decides on the optimum speed and route the ship will travel. Any changes consistent with the charter party (the employment agreement) are decided between the charterer and the receiver and then the appropriate instructions are given to the ship's Master.

Tramp shipping and distribution of ETS allowances

6 Ship operators in the bulk trades predominantly employ their ships on a time charter basis (trip or period). Ships in the bulk sector may visit large numbers of ports when on time charter agreement. They will not as a rule know their next destination until they have discharged their cargo from the previous charter. This is an essential feature of tramp shipping. The ships may be on charter (sublet) to a number of charterers at the same time, the only one controlling the ship's movements, however, being the one that fixes the particular cargo.

7 The CE Delft Report on Greenhouse Gas Emissions for Shipping and Implementation Guidance for the Marine Fuel Sulphur Directive (December 2006) **underlines** that in order to be able to participate in ETS, the maritime sector would have to be allocated emission allowances and these would have to be distributed amongst ship owners or operators. The report points out that currently, allocation in ETS is often based on a historical baseline or on a "business as usual" baseline, possibly combined with a target. Others have argued that permits go to those who governments favor. Distribution is based on grandfathering (a historical baseline), benchmarking, or auctioning. Allocation in shipping could theoretically be based on a historical or on a "business as usual" baseline, at least if the geographical scope would be intra-EU routes, but so far no specific proposal or model has been provided to demonstrate how and whether this would work in practice.

8 The report stresses that the distribution of allowances cannot be based on grandfathering, at least not for operators engaged in tramp shipping. The reason is that ships from tramp operators may not visit EU ports regularly. If they would happen to make only a few calls at EU ports in the year used for grandfathering, and many calls in a later year (a very likely occurrence) they would need to buy many allowances. On the other hand, a competitor who happened to make many calls at EU ports in the baseline year but only very few thereafter, would receive a large windfall profit. Thus grandfathering allowances would distort the competitive market in the sense that it would penalize growth of transport to the EU by ship operators and reward a decrease of transport. More importantly it would increase transport cost to and from the EU. In view of the nature and pattern of tramp shipping operations it is very hard to conceive how tramp shipping can be brought under any emission trading scheme and how the complicated problem of emissions allocation could be addressed and resolved.

9 It should be noted that the European Economic and Social Committee (EESC) with its opinion on "The Greening of Maritime Transport and Inland Waterway Transport" (CESE 868/2009, dated 13.5.2009) expressed the view that the application of ETS is far more complicated in the maritime transport than for aviation, and in particular on tramp shipping due to the practicalities of world maritime trade which render ETS calculations very difficult. The EESC underlined that "international shipping is predominantly occupied in carrying cargoes in constantly changing trading patterns all over the world. Most of the EU vessels have as port of loading or discharge non EU ports which are determined by the charterer. Ships are not homogeneous. They vary in size, type and characteristics so a benchmark is difficult to be established. Shipping is characterised by many small companies making the expected administrative burden of an ETS very heavy. Many ships, in the tramp sector which comprises the largest part of shipping, may call in the EU only occasionally. Refuelling of ships during voyages may take place in non EU ports and fuel consumption between ports is based on estimates only. In the circumstances, several countries could potentially be involved in the allocation of ETS emissions: e.g. the country of shipowner, ship operator, charterer, cargo

owner, cargo receiver. Moreover, an EU ETS scheme for maritime transport would have to be applied on all vessels visiting EU ports, with a real possibility of retaliation measures by non EU countries not applying the ETS on behalf of their flagged ships”.

10 An MBI for international shipping must provide a high degree of certainty so that business can invest with confidence. It is worrisome that ETS permit prices will fluctuate and are therefore unpredictable. Furthermore, an ETS system would not enable its additional cost to be passed on to the charterer and eventually to the consumer, since the cost of carbon would not be known at the time of contracting the charter party. Because the economic cost is not known in advance the impact on tramp shipping will be more severe, as commercial planning will be severely undermined.

11 Given the vast number of shipping companies, it would be a great challenge to implement a complicated ETS system. Under any MBI the long term cost of administration and compliance must be predictable. The scheme should seek a solution to the problem with the right transaction costs in small companies that does not give rise to market dominance by a few major players. Large shipping companies or corporations whose shipping activities are subsidiary, may have the capacity to deal with an ETS. Small private shipping companies will be severely disadvantaged.

Going forward

12 In considering MBIs for shipping it should be realized that the most important parameter is that of the carbon footprint of the cargo. It is the receiver of the cargo that decides on its origin, volume, when he wants it shipped and when he wants it delivered. He also pays the charterer for its shipment. The ship operator has no opinion on these matters. He negotiates the time charter rate with the charterer and executes the voyage instructions given. How then will he become more energy efficient if obliged to join an ETS?

13 MBIs, and in particular ETS, would not be effective in reducing emissions since only the reduced demand of the consumer can result in a reduction of the total CO₂ emitted from shipping. The time charterer always pays for the fuel consumed during his charter and it is therefore curious that ships should be solely responsible for the emissions of the fuel burned. In the tramp/bulk sector the party paying for the fuel must also be responsible for emissions. Charterers or receivers, however, have not been included in any discussions regarding MBIs for shipping.

14 In the tramp/bulk sector if we want to address the problem we must focus on its root cause which is the behaviour of:

- the receiver who wants to buy goods or commodities at the lowest CIF cost from wherever they are available, and
- the charterer who will choose the ship he charters from its description, pay for it accordingly and run it at the speed at which he decides.

15 In shipping the carbon footprint is that of the cargo, therefore that of the party requiring its transport and paying for its delivered cost. A bunker levy financing a dedicated Compensation Fund is the most appropriate financial mechanism which can readily be included in the cost of freight.

Conclusion

16 Tramp/bulk shipping cannot effectively and appropriately be brought under an ETS scheme, due to its structure and operation.