

The GHG Fund proposal

Introduction:

The Danish Shipowners' Association (DSA) supports the establishing of a global market based instrument for regulating CO₂ emission from international shipping.

By 2020 Danish Shipowners' expect to reduce CO₂ emissions by technical measures - excluding speed reductions - by 15 % on average compared to 2007. However, Danish Shipowners are also truly committed to take responsibility to further reduce global CO₂ emissions and realize that this cannot be done by technical measures only. It is necessary to commit to an international market based regulation.

As the political pressure for finding a solution – and a way forward for the shipping industry – will only increase, it is of outmost importance to reach consensus on a market based instrument within ICS. DSA supports the general principles of the GHG Fund proposal¹, but rather than fully accepting the proposal as it is, DSA consider it a good starting point for developing some sort of hybrid model, where incentives to greener shipping are more pronounced.

Brief description of the GHG Fund proposal

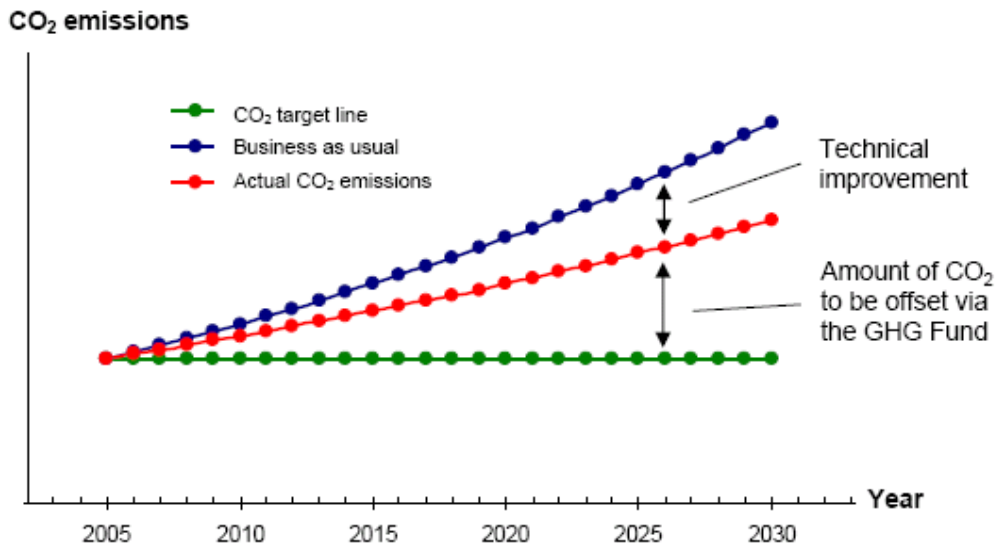
The GHG Fund will provide a simple mechanism that will deliver significant reductions in global GHG emissions. The proposal respects the IMO principle of “no more favourable treatment” (NMFT) when the revenue is collected and could respect the “common but differentiated principle” (CBDR) of the UNFCCC, when the revenue is distributed.

All ships above 400 GT in international trade will pay GHG contributions at a given cost per ton of fuel bunkered. The GHG Fund will be established as a separate legal entity responsible for collecting and distributing these revenues. The revenues will be used for climate change purposes i.e. adaptation and mitigation but also shipping related R&D. The GHG Fund will buy and trade CO₂ allowances on a carbon market, hence the fund will indeed participate in a global emission trading scheme on behalf of the contributors, i.e. shipowners.

The link to a global carbon market

Some members of ICS have expressed concern about how the size of the GHG contribution should be linked to a global carbon market. Denmark has proposed that the level of GHG contributions should be decided and set every four years by the Parties to the Convention taking into account the actual amount of GHG emissions from shipping in relation to an agreed target line. The mechanism is illustrated on the figure overleaf.

¹ MEPC 59/4/5



It is evident that shipping for many years will be dependent on fossil fuel and that future growth in the World's transport demand must be anticipated. The sector is therefore not able to deliver absolute reductions without off-setting some of its GHG emissions through financing mitigation and adaptation projects outside the sector itself.

Denmark argues that to avoid a system parallel to the existing global regime within the UNFCCC, the revenues should be allocated in close liaison with the Conference of Parties to the UNFCCC as part of a coherent financial architecture following a Post-Kyoto climate agreement. Hence, revenues should include support to already operating funds and other mitigation and adaptation actions as agreed by Parties to the UNFCCC.

The International GHG Fund could finance:

- Mitigation by buying credits from the market such as CDM (Clean Development Mechanism) or other credit mechanisms under the UNFCCC or by channelling revenues directly to potential UNFCCC mitigation funds or purposes.
- Adaptation by supporting the Adaptation Fund or other fund mechanisms for adaptation as decided by the UNFCCC.
- R&D in the shipping Industry.

Denmark finds it important that shipping gets credited for its contribution to solving the climate change issue and suggests that the International GHG Fund Administrator should produce an annual report which includes an overview of bunker consumption, the related gross GHG emissions from international shipping, the offset of GHG emissions obtained and the resulting net GHG emissions.

The GHG Fund will indeed participate in an emission trading scheme. It appears that mitigation and adaptation activities may be financed by sale of emission allowances to the GHG Fund on a global carbon market such as CDM or other credit mechanisms accepted under UNFCCC, but not on any other carbon market, that may be established. The GHG fund will spend a major part of its revenue to trade (buy) on behalf of the entire sector in a specified emission trading scheme.

Danish example calculations, based on basic figures from the updated IMO GHG Study, show that a contribution fixed at e.g. 45 \$ per ton bunker fuel will generate a revenue of 12 billion \$ a year.

Comments to the GHG Fund proposal:

In general the Danish Shipowners' Association finds the GHG Fund preferable for the following reasons:

- Environmental effectiveness is ensured.
- Distortion of competition is minimized.
- Application is global to all ships regardless of flag.
- Transparency is provided.
- Administration and transactional cost will be minimized.
- Funds will not pass through national treasuries.
- Certainty on cost to the shipping industry is maximized.
- Environmental behaviour will be rewarded reasonably.

However, the proposal could be improved on the following 3 points:

- A closer link to a market price on carbon could be established if the size of the contribution was adjusted more frequently, e.g. annually, and if it was specifically stated that Parties should consider the prevailing market price on carbon when the contribution was adjusted.
- Further incentive to invest in new technology could be provided by the mechanisms proposed to MEPC by USA and Japan.
- The business relation between the owner and the charterer could be more clearly reflected.

Areas where further investigation is required

An ICS Executive Committee Working Group held a work shop 20 and 21 July 2009 to examine the various MBI options at the table in IMO at MEPC 59. The Workshop identified a number of areas where further investigation was required. The following section answers each of these questions having the GHG Fund proposal in mind:

Will the different sectors within the shipping industry be variously affected?

The contribution will be paid for all fuel purchased by ships above 400 GT on international voyages regardless of flag. For shipping segments not competing with other transport modes each competing shipping company will face exactly the same additional cost, and it is likely that the cost eventually will be passed on to the end consumer. Shipping companies competing with other transport modes will on the other hand face a loss in competitiveness, compared to a situation where they pay the naked price of the fuel. However, land based transport in many countries also pay some kind of levy on the fuel consumed, and that it is included in the national totals under the Kyoto Protocol.

Does domestic shipping need to be included or will national quotas be an adequate way of covering these sectors?

No - The GHG Fund addresses international shipping only, and part of the rationale is that domestic shipping today is included in national totals under the Kyoto Protocol. It may be tempting to provide more overall clarity by including domestic shipping in the GHG Fund system and excluding it from the national totals. However, that would not be feasible because the system relies on Port State Control.

Consider whether any apparently viable scheme could be applied regionally as well as globally.

The GHG Fund could be applied regionally. However, ICS has agreed that to be acceptable any MBI must be of global character.

What options are there for respecting the principle of CBDR and of NMFT in a single system?

The GHG Fund is specifically designed to be able to accommodate both principles. The contributions are collected in accordance with the principle of NMFT and could be distributed in accordance with the principle of CBDR.

Is an emissions cap in fact required?

Only relative reductions are in the hands of the shipping industry because absolute reductions are determined by the development in world trade. However an absolute cap for the sector is most likely required, because such an absolute cap is expected to be set for any other sector by UNFCCC. Not a limit to how much fuel the industry can consume in a year, but a limit above which the industry starts off-setting further consumption. None of the proposals at MEPC spoke about a closed cap-and-trade system which will limit international shipping capacity, but the sector is expected to off-set emissions above a certain level.

Investigate whether shipping should pay the same marginal cost for carbon emission as other industries.

As long as no global carbon price and no global carbon market have been established, it is hard to argue that all industries pay the same marginal cost for carbon. It is of course very difficult to argue for a cheaper price for shipping than for other industries, but the question only arises if all other industries in fact do pay the same price, which is not the case today.

Should the price of carbon emission be fixed in the market place or pre-determined?

A pre-determined and regularly adjusted price on carbon will provide more certainty for industry to decide on investments and a more rational control of emissions subject to democratic decisions by the board of the GHG Fund. The free market forces are harder to control and predict, and various forms of market failure may be experienced.

Identify how investment in new technology can be rewarded as a reduction incentive.

The United States and Japan both submitted papers to MEPC 59 which addressed the fact that the GHG Fund proposal only provides a weak incentive to invest in technology beyond what is profitable today.

The current draft EEDI method² establishes baselines, depending on ship type and ship size, expressing the average efficiency of the world fleet, and set a mandatory required EEDI relative to this fleet average for new ships. United States has proposed³ to establish such mandatory efficiency standards for both new and existing ships. In the current draft EEDI method ships can only comply by technical improvement of the design, but in the US proposal ships would also be allowed to comply by trading. A ship which has an EEDI better than required can sell its excess EEDI to another ship which does not meet the requirement. The administration of this approach is simple: The EEDI values of ships have to be verified for new ships on completion and for existing ships prior to the entry into force of the regulations, and whenever new technology is installed. A market for EEDI will of course have to be created, but it is not necessary to establish a complex GHG Fund or emission trading scheme.

The US proposal will provide an extra incentive to improve the efficiency of all ships and automatically justify investment in technology beyond what is profitable today. It would also solve two of the problems that are inherent in the EEDI proposal: The sea trial after completion may reveal that a new ship cannot be approved, and a ship design, which for a particular trade has to be fast, may be prohibited.

In another submission Japan has proposed⁴ an amendment to the GHG Fund proposal which follows the same line of thinking. The idea is to boost investment in technology beyond what is profitable today by introducing a refund to “excellent” ships e.g. identified by the EEDI. The method is illustrated below:

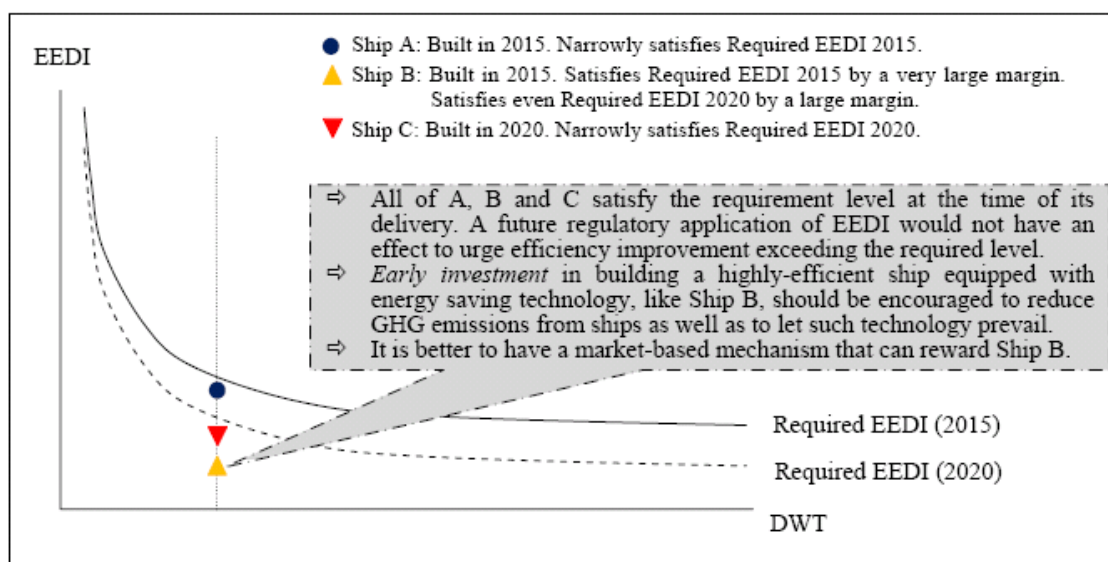


Figure 3 – Image of a future framework on EEDI

Both ship A and ship C are build to just satisfy the applicable EEDI requirement, but the owner of ship B has invested in new fuel saving technology beyond what is required and build his ship to a much better standard. This excellent ship should through its operational life receive a refund of a significant part of the GHG contribution paid to the GHG fund. The Japanese proposal also considers using the EEOI as a parameter. However, that would reward the late starters having a

² MEPC.1/Circ.681

³ MEPC 59/4/48

⁴ MEPC 59/4/34

large potential at the outset, and therefore fail to reward voluntary early action taken. It further lacks predictability which is a requirement to boost investments in low-carbon technology, and is thus not preferable.

The GHG fund proposal only provides a weak incentive to invest in new technology, and the EEDI proposal will be implemented quite slowly because it only applies to new ships. The “on-off” nature of the EEDI regulation will prohibit fast shipping concepts, and it will fail to provide an incentive for compliant ship designs to improve beyond compliance. It may also prolong the life of older ships with less or no requirements for EEDI. The US proposal addresses these concerns very well, but it will not be possible to off-set emissions in excess of an overall shipping cap by contributing financially to mitigation and adaptation efforts by UNFCCC. The Japanese proposal is on the other hand an addendum to the GHG fund proposal which would provide exactly that same revenue for mitigation and adaptation and at the same time provide further incentive for investment in low-carbon technology within the shipping sector.

It should be optional for existing ships to certify their EEDI values and be eligible to the benefits of having EEDI values below what is required. Other existing ships will just pay the basic contribution to the GHG Fund. This way the scheme does not unfairly penalize existing ships. It will also be possible to build new ships for special trades having higher EEDI values than otherwise required. Such ships will not only pay the basic contribution for their excessive fuel consumption but also pay a comparative penalty on top. The combined EEDI/GHG Fund scheme will thus be truly goal-based in nature with flexibility for the individual ship.

In conclusion the two proposals on a mandatory EEDI and on a GHG fund should be merged by the approach described by Japan using the EEDI to identify an “excellent ship” entitled to receive a rebate throughout its operational life.

Determination of the transactional cost that might be expected to be borne by the operators/owners for both the economic instruments.

The GHG Fund requires a minimum of administration due to its obvious simplicity compared to a trading scheme. The transactional cost must therefore also be lower. The fact that the contributions do not pass through national treasuries ensures that these entities do not keep some of it, and the fact that each and every shipowner does not have to trade on the carbon market must also minimize the administrative cost of the owner and the fees collected by various brokers and verification bodies.

Investigate baseline setting. Should this be historic or should a transition period be allowed during which the baseline data can be collected?

In the UNFCCC context 1990 is regularly used as the base year. From the perspective of shipping, which has seen an enormous growth ever since 1990, any later year would provide a huge advantage. Given the uncertainty on past fuel consumption reported in the IMO 2009 Study, it would be more appropriate to choose a future base year in which fuel consumption is systematically reported by all ships subject to the regulations.

In the case of a compensation fund, how will pricing be determined? Does the system provide certainty that environmental benefit will accrue? Does the system provide an incentive for more efficient ships?

The pricing mechanism is described earlier in this note. That mechanism will provide certainty both on price and on the environmental benefit. In the present form of the GHG fund the incentive for

more efficient ships is the contribution on the saved fuel. That should be equal to the incentive in a trading system. This incentive should be increased by merging the two proposals on a mandatory EEDI and on a GHG Fund as described by Japan using the EEDI to identify an “excellent ship” entitled to receive a GHG Fund rebate throughout its operational life.

Investigate whether a global carbon market for shipping from the beginning is realistic. Can existing and carbon markets currently under development be linked?

To be acceptable to the shipping industry any MBI must be global from the very beginning.

In case of the GHG Fund: Is an emission target line a suitable instrument to address environmental certainty?

Yes. What is environmental certainty? – It must be a confidence that real reductions are achieved either directly on the ships or elsewhere through off-setting. The GHG fund adjustment mechanism relative to a cap provides this certainty, and it provides democratic control of the effort made. Another way to answer the question would be that we need to be certain that the dollars spent by the shipping industry will largely finance real reductions instead of transactional cost claimed by national treasuries, brokers and verification bodies. In this perspective the GHG fund is superior to an ETS.

Conclusion

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