



Prevention of Air Pollution from Ships

GHG Emissions from Existing Vessels

This document details the planned INF paper submission to the IMO MEPC 63 by the Carbon War Room and Navigistics Consulting. The paper will provide background information and a suggested approach to measuring and controlling GHG emissions from existing vessels.

At MEPC 62 the Organization approved the use of an Energy Efficiency Design Index (EEDI) for new vessels commencing in 2013. (We) acknowledge that the EEDI is expected to reduce marine GHG emissions by 263 million tons in comparison to the business as usual (BAU) baseline by 2030. The regulation will require most new ships to be 10% more efficient beginning 2015, 20% more efficient by 2020 and 30% more efficient by 2025. However, existing Vessels not subject to an EEDI will still produce the majority of marine GHG emissions in 2020.

The Carbon War Room commissioned this paper to discuss the need to include existing vessels in controlling GHG emissions if future marine GHG emission goals are to be met in line with the targets set out at the climate conference in Cancún last year, whereby parties decided that we need to hold the increase in global average temperature below 2°C above pre-industrial levels.

The history of maritime energy efficiency management is readily documented back to the 1970s in reaction to the initial oil price shocks that occurred in that decade. However, existing statistics on vessel fuel consumption are not reliable for use in an efficiency improvement system. There are several approaches already in use for measuring/rating the energy efficiency and, therefore, the GHG emissions of existing vessels.



Having an IMO approved Existing Vessel Design Index “EVDI” as proposed by Rightship, would enable the accurate use of fuel consumption in charter parties and purchase & sale transactions this would enable vessel owners to receive accurate compensation for investing in fuel efficiency improvements. CWR and Rightship, in partnership, have published data for EVDI for 50,000+ vessels. Already 30+ owners / operators have updated their EVDI, providing shippingefficiency.org with more accurate data.

EVDI allows investment in new technologies. Several studies including that from DNV, IMarEST and the IMO GHG Study 2009 attribute that “clean” technologies can be fitted as retrofit and save 25% to 75% emissions, depending on vessel type. The potential reduction in marine GHG emissions from existing vessels is on the order of 220 million tons per year based on estimates of negative MACs in numerous studies. If today's new standards were applied to all ships, not just new builds, would save the industry more than \$50bn a year.

The MEPC should begin active work to establish and implement an EVDI.