

**Proposal to the 6th Session of the Sub-Committee on Bulk Liquids and Gases (BLG 6) titled "Evaluation Of The IMO Greenhouse Gas Emission Study - Comments on the Report on the Outcome of the IMO Study on Greenhouse Gas Emissions from Ships -" (February, 2001)**

**EVALUATION OF THE IMO GREENHOUSE GAS EMISSION STUDY**

Comments on the report on the outcome of the IMO Study on Greenhouse Gas Emissions from Ships

The points reflected in the IMO report are as follows:

**1. CO<sub>2</sub> Emissions from International Merchant Vessels**

Japan is of the opinion that the CO<sub>2</sub> emissions from international merchant vessels are very minute in relation to the total emissions and the rate of increase has been restrained as a result of enormous efforts made by the maritime industry (e.g. improvement of the fuel efficiency of marine engines and hull design, early scrapping and rebuilding of vessels).

**2. Forecasted increase in maritime transportation**

Future CO<sub>2</sub> emissions can be determined by the forecasted increase in maritime transportation and the CO<sub>2</sub> emission rate (g-GHG/ton-mile) of ships. However, we do not consider it appropriate for IMO to undertake the forecasting of such an increase by itself, because the forecasted increase in maritime transportation has a close relationship with world economic trends.

**3. Measures to reduce CO<sub>2</sub> Emissions in the future**

The CO<sub>2</sub> emission rate (g-GHG/ton-mile) of ships will change in response to new technical and operational measures.

In respect to the technical measures, improvements in marine engines, hull designs and propeller efficiency can be expected, but there is a large discrepancy between the report submitted by the Secretariat (5-30%) and the Ship and Ocean Foundation report (4-10%) in regards to the degree of improvement. In addition, there is a present transition towards faster ships, double-hull legislation and NO<sub>x</sub> restrictions. Japan considers that the Sub-Committee should examine the evaluation of the improvement by technical measures.

Operational measures such as slower navigation and weather routeing will effect

the volume of marine transportation which will lead to effects on other transport modes and the world economy. Therefore Japan considers that the Sub-Committee should submit only a variety of the operational measures to the UNFCCC at this stage.

4. **Other Greenhouse Emissions**

MEPC 45/8 does not make estimations on other GHGs such as CH<sub>4</sub>, N<sub>2</sub>O, HFC, PFC or SF<sub>6</sub>, but it does appear that these gases also have some undermined effect. IMO should include the effects of these gases in the final report, to the largest extent possible.

The Ship and Ocean Foundation is presently conducting a study on these gases and it would be possible to use the results of their research in the final report.

5. **The Deletion of Chapter 4: Impact of International Shipping - NO<sub>x</sub> and Tropospheric Ozone**

Chapter 4 of the consultant's report describes the effects of NO<sub>x</sub> gases.

However, NO<sub>x</sub> and secondary ozone are not targeted by the Kyoto Protocol as greenhouse gases that need to be reduced and therefore should not be included in the IMO final report.