

**Multi-year Expert Meeting  
On Transport and Trade Facilitation:**

**Maritime Transport and  
the Climate Change Challenge**

16-18 February 2009

**Potential Approaches to Mitigation in  
Maritime Transport**

**The work of the IMO's Marine Environment Protection Committee (MEPC)**

**Presentation by**

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# EXPERT MEETING ON TRANSPORT AND TRADE FACILITATION: MARITIME TRANSPORT AND THE CLIMATE CHALLENGE

Potential Approaches to Mitigation in Maritime Transport  
The work of the IMO's Marine Environment Protection Committee (MEPC)

Andreas I. Chrysostomou  
Chairman (MEPC)

## Technical and Operational Measures

- Energy Efficiency Design Index for new ships
- Energy Efficiency Operational Index
- Efficiency Management Plan suitable for all ships
- A voluntary code on best practice in energy efficient ship operations
- Associate Guidelines

The Committee approved the usage of the draft Interim Guidelines on the method of calculation of the Energy Efficiency Design Index for new ships, for calculation/trial purposes with a view to further refinement and improvement.

### **THE ENERGY EFFICIENCY DESIGN INDEX FOR NEW SHIPS**

The design index will contain a required minimum level of fuel efficiency related to a baseline, the actual minimum level, and the frequency with which the limit will be tightened, are among the matters that will be considered at a later stage. The design index is avoiding the so-called "paragraph ships", meaning future ship designs optimized for certain conditions but which do not actually deliver greater fuel efficiency. The different correction factors to make the formula relevant for all ship types were given extensive consideration, as was verification of the design index, as there might not be a Flag state dedicated to the ship at the design stage.

### **THE ENERGY EFFICIENCY OPERATIONAL INDEX**

The interim operational index has been used to establish a common approach for trials on voluntary CO<sub>2</sub> emission indexing, enabling shipowners and operators to evaluate the performance of their fleet with regard to CO<sub>2</sub> emissions. As the amount of CO<sub>2</sub> emitted from a ship is directly related to the consumption of fuel oil, CO<sub>2</sub> indexing also provides useful information on a ship's performance with regard to fuel efficiency.

## **MARKET BASED SOLUTIONS**

1. A global levy on fuel used by international shipping.
2. A possible introduction of emission trading schemes for ships (ETS)