MEPC pushes forward with energy-efficiency implementation

At its 65th session, the Marine Environment Protection Committee (MEPC) made significant progress in its work on further developing energy-efficiency regulations; adopted an MEPC Resolution on *Promotion of Technical Co-operation and Transfer of Technology relating to the Improvement of Energy Efficiency of Ships*; and gave the go-ahead to carry out an update to the greenhouse gas (GHG) emissions estimate for international shipping

It also agreed a draft Assembly resolution to address the implementation of the Ballast Water Management convention and approved a number of ballast water treatment systems.

Technical co-operation for energy efficiency measures

The MEPC adopted an MEPC Resolution on Promotion of Technical Co-operation and Transfer of Technology relating to the Improvement of Energy Efficiency of Ships, which, among other things, requests the Organization, through its various programmes, to provide technical assistance to Member States to enable co-operation in the transfer

of energy-efficient technologies to developing countries in particular; and further assist in the sourcing of funding for capacity building and support to States, in particular developing States, which have requested technology transfer.

Update of GHG emissions estimate gets go-ahead

The MEPC approved the terms of reference and agreed to initiate a study for an updated GHG emissions' estimate for international shipping, following discussion in an expert workshop, which met earlier this year, on the methodology and assumptions to be used.

The new study will focus on updating key figures in the current (second) IMO GHG Study (2009), which estimated that international shipping emitted 870 million tonnes, or about 2.7%, of the global man-made emissions of carbon dioxide (CO_2) in 2007.

Development of energy-efficiency measures continued

The MEPC continued its work on further developing technical and operational measures relating to energyefficiency measures for ships, following the entry into force, on 1 January 2013, of the new chapter 4 of MARPOL Annex VI, which includes requirements mandating the Energy Efficiency Design Index (EEDI), for new ships, and the Ship Energy Efficiency Management Plan (SEEMP), for all ships.

The application of the EEDI is being extended to car carriers



The Committee:

- Approved draft amendments to MARPOL Annex VI, with a view to adoption at MEPC 66, to extend the application of EEDI to ro-ro cargo ships (vehicle carriers), LNG carriers, cruise passenger ships having nonconventional propulsion, ro-ro cargo ships and ro-ro passenger ships; and to exempt ships not propelled by mechanical means, and platforms including FPSOs and FSUs and drilling rigs, regardless of their propulsion; as well as exempting cargo ships having ice-breaking capability;
- Adopted amendments to update resolution MEPC.215(63) Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI), including the addition of ro-ro cargo ships (vehicle carriers), ro-ro cargo ships and ro-ro passenger ships, and LNG Carriers;
- Noted, with a view to adoption at MEPC 66, the finalized amendments to resolution MEPC.212(63) 2012 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships;
- Approved amendments to unified interpretation MEPC.1/Circ.795, to update the circular with regard to requirements for SEEMP, to exclude platforms (including FPSOs and FSUs), drilling rigs, regardless of their propulsion, and any other ship without means of propulsion;
- Adopted the 2013 Interim Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions, which are intended to assist Administrations and recognized organizations in verifying that ships, complying with the EEDI requirements set out in regulation 21.5 of MARPOL Annex VI, have sufficient installed propulsion power to maintain their manoeuvrability in adverse conditions;
- Approved the 2013 Guidance on treatment of innovative energy efficiency technologies for calculation and verification of the attained EEDI, which are intended to assist manufacturers, shipbuilders, shipowners, verifiers and other interested parties related to the EEDI of ships to treat innovative energy efficiency technologies for calculation and verification of the attained EEDI, addressing systems such as air lubrication, wind propulsion systems; high temperature waste heat recovery systems; and photovoltaic power generation systems;



Drilling rigs will be exempt from EEDI requirements

- Adopted the 2013 Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI) for cruise passenger ships having nonconventional propulsion; and
- Adopted amendments to resolution MEPC.214(63) 2012 Guidelines on survey and certification of the energy efficiency design index (EEDI), to add references to measuring sea conditions in accordance with ITTC Recommended Procedure 7.5-04-01-01.1 Speed and Power Trials Part 1; 2012 revision 1 or ISO 15016:2002.

The MEPC also endorsed a work plan to continue the work on development of the EEDI framework for ship types and sizes, and propulsion systems not covered by the current EEDI requirements and to consider guidelines on propulsion power needed to maintain the manoeuvrability of the ship under adverse conditions.

Further measures to improve energy efficiency

The MEPC considered the importance of enhancing energy efficiency and reducing fuel consumption with subsequent reductions of CO_2 emissions and other pollutants emitted to air and noted the need to discuss further relevant proposals submitted to the session. In this regard, the MEPC considered the use of a phased approach to implementation, with the focus of its initial work being on data collection, as a basis for future technical work.

The MEPC agreed to establish a subagenda item under the MEPC's agenda item 4 (Air pollution and energy efficiency), for discussion of further technical and operational measures for enhancing energy efficiency for international shipping, and to establish a working group under this subagenda item at MEPC 66. The MEPC invited further submissions to its next session.

Ballast water management

The MEPC approved a draft IMO Assembly resolution on the application of regulation B-3 of the BWM Convention to ease and facilitate the smooth implementation of the Convention, for submission to the 28th session of the IMO Assembly (25 November to 4 December 2013). The draft resolution recommends that ships constructed before the entry into force of the Convention will not be required to comply with regulation D-2 until their first renewal survey following the date of entry into force of the Convention. The aim of the draft resolution is to clarify uncertainty in relation to the application of regulation B-3, through the application of a realistic timeline for enforcement of regulation D-1 (ballast water exchange standard) and regulation D-2 (ballast water performance standard), upon entry into force of the Convention.

The MEPC considered the reports of the twenty-fourth and twenty-fifth meetings of the Joint Group of Experts on the Scientific Aspects of Marine Environment Protection (GESAMP) Ballast Water Working Group (held during 2012-2013), and granted Basic Approval to three, and Final Approval to three, ballast water management systems that make use of Active Substances.

The MEPC also approved BWM-related

guidance, including *Guidance concerning* ballast water sampling and analysis for trial use and a BWM Circular on clarification of "major conversion" as defined in regulation A-1.5 of the BWM Convention.

The MEPC also adopted a revised MEPC resolution regarding information reporting on type-approved ballast water management systems.

Draft amendment on implementation date for Tier III engines agreed

The MEPC considered and agreed to the proposed draft amendments to MARPOL Annex VI regulation 13 on *Nitrogen Oxides* (NO_x), to amend the date for the implementation of "Tier III" standards within emission control areas (ECAs) to 1 January 2021, from the current effective date of 1 January 2016. The draft amendments will be circulated for consideration at MEPC 66 in 2014, with a view to adoption.



NO_x control requirements apply to installed marine diesel engines of over 130 kW output power, and different levels (Tiers) of control apply based on the ship construction date. Tier III controls apply only to specified ships while operating in ECAs designated to limit NO_x emissions (currently the North American Emission Control Area and the United States Caribbean Sea Area). Outside such areas, "Tier II" controls apply.

$\label{eq:constraint} \begin{array}{l} \text{Draft NO}_{x} \text{ Technical Code amendments} \\ \text{approved} \end{array}$

Draft amendments to the NO_X Technical Code, 2008, concerning use of dual-fuel engines, were approved, with a view to subsequent adoption.

Guidelines for implementation of MARPOL Annex VI regulation 13 agreed

The MEPC adopted guidelines, as required by regulation 13.2.2 of MARPOL Annex

VI, in respect of non-identical replacement engines not required to meet the Tier III limit; and a unified interpretation on the "time of the replacement or addition" of an engine for the applicable NO_x Tier standard for the supplement to the IAPP Certificate.

Mandatory RO Code

Amendments to MARPOL Annexes I and II to make mandatory the Code for Recognized Organizations (ROs) were adopted. The Code will provide a consolidated text containing criteria against which ROs (which may be authorized by flag States to carry out surveys and issue certificates on their behalf) are assessed and authorized/recognized, and give guidance for subsequent monitoring of ROs by Administrations.

The MEPC also adopted amendments to Form A and Form B of Supplements to the IOPP Certificate; and amendments to the Condition Assessment Scheme, to make reference to the International Code on the enhanced programme of inspections during surveys of bulk carriers and oil tankers, 2011 (2011 ESP Code).

Correspondence group on ship recycling

The MEPC re-established a correspondence group to finalize the development of threshold values and exemptions applicable to the materials to be listed in Inventories of Hazardous Materials and amend accordingly the 2011 *Guidelines for the Development of the Inventory of Hazardous Material*.

Guidance on evaluating biofouling guidelines

An MEPC circular on *Guidance for* evaluating the 2011 *Guidelines for the* control and management of ships' biofouling to minimize the transfer of invasive aquatic species was approved.

MARPOL Annex V implementation – guidance agreed

The MEPC adopted amendments to the 2012 *Guidelines for the implementation of MARPOL Annex V*, to add references to 'e-waste' generated on board such as electronic cards, gadgets, equipment, computers, printer cartridges, etc.

The meeting also approved draft amendments to the format of the Garbage Record Book under MARPOL Annex V, to update the Record of Garbage Discharges, for circulation, with a view to adoption at MEPC 66.

The MEPC also approved an MEPC circular on adequate port reception facilities for cargoes declared as harmful to the marine environment (HME) under MARPOL Annex V, which agrees that, until 31 December 2015, cargo hold washwater from holds previously containing solid bulk cargoes classified as HME, may be discharged outside special areas under specific conditions. The circular also urges Parties to MARPOL Annex V to ensure the provision of adequate facilities at ports and terminals for the reception of solid bulk cargo residues, including those contained in wash water.

