

# bunkerworld

www.bunkerworld.com

May/June 2010

## MEPC 60 grapples with greenhouse gas emissions

**Discussions on how to address greenhouse gas (GHG) emissions from shipping hit the wall again at the International Maritime Organization (IMO) meeting in late March. Decisions on other milestones which determine fuel use sailed through.**

IMO's attempt to introduce GHG regulations for ships saw political opposition that was very much in evidence at the 60th session of its Marine Environment Protection Committee (MEPC 60), held in London, 22-26 March.

A proposal from MEPC chairman Andreas Chrysostomou on the aims for MEPC 60 had expressed hope that there could be agreement by the end of the meeting to make the IMO's energy efficiency design index (EEDI) for new ships a mandatory requirement.

That was not to be. Plenary discussions during the first two days of the week-long meeting saw repeated interventions by delegations casting doubt on whether the IMO was even the right body to regulate GHG emissions from ships.

It was suggested that the IMO should defer to the United Nations Framework Convention on Climate Change (UNFCCC) which was "the main body for tackling climate change" and should not make any independent moves.

But there was no specific mention of emissions from bunkers in the Copenhagen accord following the UNFCCC's 15th Conference of Parties in December (COP15), leaving the IMO with no clear guidelines.

At MEPC 60, countries including China, Brazil, Saudi Arabia, South Africa and India insisted that any regulatory framework for GHG would have to take the UNFCCC 'common but differentiated responsibilities' (CBDR) principle for developed and developing nations into account. The CBDR principle has hamstrung all previous attempts at the IMO to introduce mandatory GHG measures for the global fleet as it runs contrary to IMO's founding principles of universally applicable

regulations for shipping.

### GHG and Annex VI

A proposal to introduce a new part to MARPOL Annex VI to regulate the energy efficiency of ships became the main focus for discussions on day two of MEPC 60.

Submitted by Japan, Norway and the United States, it proposed a draft text for the application of mandatory technical measures to

ping, the proposal was aimed at steering clear of the CBRD principle. The co-sponsors of the proposal said adding a new part to MARPOL Annex VI would be the only way to move fast on introducing mandatory energy efficiency measures for ships.

"On the other hand, taking into account that the current MARPOL Annex VI addresses prevention of air pollution from ships,

before it could be considered for mandatory application, suggesting more focus on voluntary measures.

Despite opposition, MEPC chairman Andreas Chrysostomou said a working group (WG) would be established to work on a mandatory EEDI to be added to MARPOL Annex VI, based on the joint proposal (MEPC 60/4/35) from Japan, Norway and the



American suppliers will see new ECA regulations.

improve the energy efficiency of ships, centred on the EEDI. It also included a provision for the inclusion of the Ship Energy Efficiency Management Plan (SEEMP) in the proposed framework.

Outlining the proposal to the MEPC 60 plenary, the delegation from Japan highlighted that the draft regulation text did not mention controls for carbon dioxide (CO<sub>2</sub>) or GHG. "It refers only to energy efficiency. Reducing fuel use cuts all emissions," the Japanese delegation said. MARPOL Annex VI currently regulates emissions of sulphur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>), which would also fall if ships use less fuel.

By avoiding specifically attempting to set limits on CO<sub>2</sub> or GHG emissions from ship-

such as emissions of SO<sub>x</sub> and NO<sub>x</sub>, which have direct impacts on human health and the environment, it is reasonable to separate this new issue from the current Annex VI and thus to add a new part (Part two) addressing the improvement of energy efficiency," the proposal stated.

While a majority of MEPC 60 delegations supported the proposal in full, strong objections were raised by several countries. The delegations of China and India stressed that MARPOL Annex VI was "not the appropriate legal instrument" to address technical and operational energy efficiency measures for ships. Several countries aligned with that position.

China and others also said the EEDI methodology was "not mature" and needed more trials

United States. The WG was, however, renamed from 'WG on GHG Emissions from ships' to 'WG on energy efficiency measures for ships' and asked to submit a written report to plenary by the end of the week.

### Talks hit the wall

The report by the working group (WG) on energy efficiency measures for ships was delivered to the plenary on Friday, and instantly ran into a new round of objections. A number of delegations, including Brazil, China, India and Saudi Arabia made it clear they could not accept the use of MARPOL Annex VI as the legal instrument for energy efficiency measures. They also objected to the use of the word 'mandatory' in the WG report.

## In this issue

**Cover story:**  
MEPC 60 grapples with greenhouse gas emissions

**Hub ambition at Mediterranean gateway - 4**



**Lukoil poised to extend its reach - 6**

**A physical supplier you can count on - 8**

**Egyptian bunker market has 'promising future' - 10**

**Suppliers must play a critical role in driving compliancy - 11**



**Is ISO 8217 compliance enough to prevent bunker disputes? - 12**



**VIP profile: Tackling new challenges - 14**

**Regional news:**  
Asia - 15  
Europe - 18  
Middle East - 20  
Americas - 23



**Sustainable shipping: Asia's maritime industry sees benefits of a green revolution - 24**



Fuel oil bunker ban for Antarctic shipping.

Discussions also returned to the issue of different responsibilities for developed and developing countries.

"Although the meeting was able to prepare draft text on mandatory requirements for the Energy Efficiency Design Index (EEDI) for new vessels and on the Ship Energy Efficiency Management Plan (SEEMP) for all ships in operation, the Committee noted in particular, that, among other things, issues concerning ship size, target dates and reduction rate in relation to the EEDI requirements all required finalization," the IMO said after MEPC 60.

It was agreed, despite some resistance, that an intersessional working group would take place on the issue prior to the next MEPC meeting (MEPC 61), which has been scheduled for September 27 to October 1, 2010. Some objected to an intersessional WG meeting as they thought the IMO should not take any action on GHG until after the UNFCCC conference in Mexico at the end of 2010 (COP16).

The delegation of Norway, however, said that the IMO should not slow down on the GHG issue "when the rest of the world is speeding up" its work on measures to deal with climate change.

### Market instruments

MEPC 60 received 20 session documents and four information documents on market-based instruments (MBI). There were nine distinguishable MBI proposals to deal with shipping's contribution to addressing global greenhouse gas emissions.

There was no time at MEPC 60 to discuss each proposal, said MEPC chairman Chrysostomou, who therefore proposed the establishment of an Expert Group on Market-based Instruments (MBI-EG). He said it would be tasked with assessing all the MBI proposals submitted to MEPC 60 as well as all relevant documents submitted to previous sessions.

Feasibility studies and impact assessments of the MBIs should be available to MEPC 61, "thus enabling the Committee to make further progress and take informed decisions," according to Chrysostomou. That means the MBI expert group will only have until mid-August to submit its report. Reduction potential would need to be considered for each proposed MBI as part of the impact assessment.

Although MEPC 60 agreed to establish such an expert group, it was only approved after extensive debate during which a number of countries cited principal objections to MBI discussions. Several countries wanted discussions on MBIs to be delayed until after COP16 in Mexico.

### New ECA

The Emission Control Area (ECA) extending out to 200 nautical miles (nm) from the coasts of the United States and Canada gained formal approval at MEPC 60. It paves the way for strict sulphur emission limits to come into force in the North American ECA as early as August 2012. The sulphur limit at that stage, according to the IMO's MARPOL Annex VI, will be 1.00% for ships operating in an ECA, falling to just 0.10% in 2015.

The North American ECA will extend to an outer boundary of 200 nm from the territorial sea baseline off the Atlantic and Pacific coasts of the United States (except Alaska) and Canada. It will also encompass the waters extending 200 nautical miles from the territorial sea baseline off southeastern Alaska, 200 nm off the US Gulf of Mexico coast, and 200 nm off several Hawaiian islands.

A drafting group was set up to prepare amendments to MARPOL Annex VI allowing for the creation of the new ECA. The agenda item caused no interventions and sailed through.

MEPC 60 also heard that Canada has provided the IMO with the required instruments of

ratification of MARPOL Annex VI, meaning the country is ready to fully enforce the provisions of the Convention.

The new ECA is the third to be designated by the IMO, after the Baltic Sea and the North Sea. Ships in ECAs must either burn low sulphur fuel or use proven abatement technology to achieve at least equivalent SO<sub>2</sub> emission reductions. Marine fuel experts have warned the extra demand for 1.00% low sulphur fuel oil (LSFO) when the North American ECA comes into force could have significant implications for bunker fuel quality due to more blending to meet the lower sulphur limit.

The revised MARPOL Annex VI, which enters into force in July 2010, also allows for ECAs to set stricter limits on other emissions such as NO<sub>x</sub> and particulate matter (PM).

### Antarctic ban

MEPC 60 also formally adopted an amendment to MARPOL Annex I that bans carriage of heavy grades oils as cargo or fuel in the Antarctic. It will come into effect on August 1, 2011.

The addition of a new chapter 9 to MARPOL Annex I deals with the special requirements for the use or carriage of oils in the Antarctic area. It bans the carriage, as cargo or carriage and use as fuel, crude oils and other types of oil having a density at 15°C higher than 900 kg/m<sup>3</sup> or as well as carriage of bitumen, tar and their emulsions.

The only exception from the ban will be for vessels engaged in securing the safety of ships or in a search and rescue operation in the region. Visiting cruise ships will no longer be able to use fuel oil bunkers in the area.

### Black carbon

Norway, Sweden and the United States submitted a proposal on the need for reducing emissions of black carbon from shipping in the

Arctic to MEPC 60. Black carbon is a product of incomplete fuel combustion, and is dependent on engine type and combustion efficiency. The paper highlighted the negative impact of black carbon on the Arctic, where it deposits on snow and ice and contributes to acceleration of ice melt, in turn accelerating global warming.

As sea ice melts, more sea lanes open up, which means shipping emissions of black carbon (BC) in the Arctic could increase by two to three times the global rate between now and 2050, the paper noted. Marine vessels emit an estimated 2% of total global BC, but "the release of BC emissions in northern shipping routes affecting the Arctic is particularly damaging and magnifies their impact," the paper stated.

"A recent study found that medium speed marine engines typically used on tugboats, fishing vessels and ferries emit BC at more than twice the rate of slow speed engines used on large ocean-going ships (excepting containerships) and high speed engines used on passenger ships," the paper said. Fuel grade has less influence than factors that determine combustion, such as the air fuel ratio, fuel injection quality and the temperature and pressure of the air charge.

The proposal from the three countries highlighted some general options for reducing BC emissions, including opportunities to reduce fuel consumption from the world's shipping fleet through vessel speed reduction, ship design and technology improvements.

Apart from reducing all emissions by reducing fuel consumption, BC may also be reduced by the use of specific pollution control measures. These include in-engine measures, installation of diesel particulate filters, use of water-in-fuel emulsification and replacement of conventional fuel valves with slide valves, the paper noted. It said diesel particulate filters are particularly effective at controlling BC, reducing emissions by 95-99.9% while also achieving 70-95% reductions in total PM emissions. However, such filters are suitable only for high grade, ideally ultra low sulphur distillate fuels and cannot be used together with residual fuels.

Because shipping traffic in the Arctic is "expected to grow substantially as the ongoing melting process opens up sea lanes in the region," thereby increasing emissions of black carbon in the Arctic, "it is important that IMO considers actions" the proposal stated.

With a packed agenda at MEPC 60, chairman Chrysostomou said the joint proposal would be revisited at MEPC 61. ■

Unni Einemo

#### PUBLISHER

Petromedia Ltd.  
Gainsborough House  
59/60 Thames Street  
Windsor  
Berkshire SL4 1TX  
UK

#### EDITOR

Guy Wilson-Roberts  
Tel: +1 604 692 2552  
guy@bunkerworld.com

#### PUBLICATION MANAGER

Paul Davis  
Tel: +44 (0)7899 886982  
paul.davis@bunkerworld.com

#### BUNKERWORLD ANNUAL SUBSCRIPTION RATES:

Magazine: \$95  
For online subscriptions to Bunkerworld, see:  
www.bunkerworld.com/store

#### EUROPE & AMERICAS SALES:

David Post  
Tel: +44 (0)1753 272 250  
Fax: +44 (0)1753 272 251  
sales@bunkerworld.com  
Petromedia Ltd  
Gainsborough House  
59/60 Thames Street  
Windsor, Berkshire SL4 1TX  
United Kingdom

#### ASIA SALES:

Michael Chia  
Tel: +65 6324 0920  
Fax: +65 6327 8743  
sales@bunkerworld.com  
Petromedia Pte Ltd.  
91B Tanjong Pagar Road  
Singapore, 088512

#### PRODUCTION

Vivian Chee  
Tel: +44 (0)20 8995 5540  
chee@btconnect.com

No part of this publication may be reproduced or stored in any form by any mechanical, electronic, photocopying, recording or other means without the prior written consent of the publisher. Whilst the information and articles in Bunkerworld are published in good faith and every effort is made to check accuracy, readers should verify facts and statements direct with official sources before acting on them as the publisher can accept no responsibility in this respect. Any opinions expressed in this magazine should not be construed as those of the publisher.