INTERNATIONAL SHIPPING

PROTECTING THE OCEAN, COMMITTED TO CO₂ REDUCTION

THE UNITED NATIONS OCEAN CONFERENCE (5-9 JUNE 2017)

UN SUSTAINABLE DEVELOPMENT GOAL 14
CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES
The international shipping industry – which transports about 90% of global trade – is committed to supporting the UN Sustainable Development Goal for the protection of the Ocean (SDG 14).

Central to this is an ambitious new commitment to reduce the international shipping sector's total CO₂ emissions, which is directly relevant to preventing increases in sea temperature and Ocean acidification.

In line with new global regulations adopted by the UN International Maritime Organization (IMO), the shipping industry is also committed to the dramatic reduction of sulphur emissions, which also contributes to Ocean acidification.

The industry is also committed to full compliance with all applicable IMO regulations for environmental protection within the framework of UNCLOS.

Ships trade internationally between continents. The shipping industry is therefore among IMO's greatest supporters because the efficiency of this enormous global industry is vitally dependent on uniform global rules. Chaos would ensue if different rules applied at different ends of an international voyage.
SHIPPING’S CONTRIBUTION TO SUSTAINABLE DEVELOPMENT

**ENVIRONMENTAL**
A CARBON EFFICIENT FORM OF COMMERCIAL TRANSPORT

**Shipping’s CO₂ Reduction Objectives**

- **CO₂ / tonne-km (grams)**
  - 20
  - 15
  - 10
  - 5
  - 0

**Predicted Increases in World Seaborne Trade, GDP and Population**

Sources:
- World seaborne trade – IHS Global Insight
- World economy – OECD Statistics
- World population – UN Department for Economic and Social Affairs, Population Division

**Global Seafarer Supply by Broad Geographical Area**

Source: ICS/BIMCO Manpower Report 2015
Reducing CO₂ Emissions

In line with a new commitment* by ICS to the UN Ocean Conference, the global industry has proposed that the International Maritime Organization should adopt three Aspirational Objectives on behalf of the international sector as a whole (which is not covered by the INDCs that governments have made as part of the Paris Agreement on climate change):

• To maintain international shipping’s annual total CO₂ emissions below 2008 levels

• To reduce CO₂ emissions per tonne of cargo transported one kilometre, as an average across international shipping, by at least 50% by 2050, compared to 2008

• To reduce international shipping’s total annual CO₂ emissions by an agreed percentage by 2050, compared to 2008, as a point on a continuing trajectory of CO₂ emissions reduction.

The industry is confident that the first two objectives can be achieved with:

• Existing IMO regulations (for example, ships built after 2025 must be at least 30% more efficient than most ships constructed before 2013)

• Technical and operational measures: better engines and smarter speed management, supported by more fuel efficient movement through water (new hull and propeller designs, satellite assisted trim optimisation and renewable ancillary power).

However, in view of projected increases in demand for future maritime services, due to population growth and improving living standards, dramatic CO₂ reductions by 2050 will probably only be possible with ‘fossil-free’ alternative fuels and new propulsion technology, which is not expected to be available for another 20 or 30 years.

The development of alternative fuels, and the associated bunkering infrastructure worldwide, therefore needs to form a central part of IMO’s CO₂ reduction strategy.

Reducing Sulphur Emissions

In line with new IMO regulations, which are fully supported by the industry, the maximum sulphur content of marine fuel for most ships globally will reduce from 3.5% to 0.5% from 1 January 2020 (except in Emission Control Areas where ships must already use fuel with a sulphur content of 0.1%).

In practice – and at a collective cost to the global industry approaching US$100 billion per year – most ships will have to use distillate (diesel) fuel rather than the residual heavy fuel oil that most ships currently use.

As well as bringing significant health benefits to coastal populations, the implementation of the global sulphur in fuel cap will reduce the impact from shipping on Ocean acidification.

*Sustainable Development Goal 14.3

Minimize and Address The Impacts of Ocean Acidification

**GLOBAL SULPHUR CAP**

Sulphur content of fuel permitted outside Emission Control Areas

<table>
<thead>
<tr>
<th>Year</th>
<th>1.5%</th>
<th>3.0%</th>
<th>4.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>4.5%</td>
<td>3.5%</td>
<td>0.5%</td>
</tr>
<tr>
<td>2012</td>
<td>4.5%</td>
<td>3.0%</td>
<td>1.5%</td>
</tr>
<tr>
<td>2020</td>
<td>4.5%</td>
<td>3.0%</td>
<td>1.5%</td>
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</tbody>
</table>
Within the authority of UNCLOS, the shipping industry enjoys the comprehensive regulatory framework provided by IMO including the International Convention for the Prevention of Pollution from Ships (MARPOL) which *inter alia* regulates the discharge of oil, hazardous substances, sewage and garbage into the Ocean, as well as regulating atmospheric emissions from shipping.

The success of the MARPOL Convention and its strong implementation through a sophisticated system of flag and port state control is demonstrated by the dramatic reduction of oil pollution, despite a huge increase in maritime trade.

The industry is also committed to the successful implementation of the IMO Ballast Water Management Convention which enters into force worldwide in September 2017. At a collective cost to the industry of about US$100 billion, this will involve the installation of enormous treatment systems to prevent the impact of invasive marine species unwittingly being moved in ships’ ballast water tanks.

### SUSTAINABLE DEVELOPMENT GOAL 14C

**Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS**

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#### Reduction in Major Oil Spills

<table>
<thead>
<tr>
<th>Decade</th>
<th>Average Number of Major Oil Spills per Year (over 700 tonnes)</th>
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<tbody>
<tr>
<td>1970s</td>
<td>24.5</td>
</tr>
<tr>
<td>1980s</td>
<td>9.4</td>
</tr>
<tr>
<td>1990s</td>
<td>7.7</td>
</tr>
<tr>
<td>2000s</td>
<td>3.2</td>
</tr>
<tr>
<td>2010-16</td>
<td>1.7</td>
</tr>
</tbody>
</table>

*Source: ITOPF*
The international shipping industry, as represented by ICS, supports the UN Sustainable Development Goals and the recognition by governments that there are three pillars to sustainability: economic and social as well as environmental.

ICS believes that government regulators should give equal priority to each of these three pillars, including the economic. This is especially important in view of shipping’s role in the continuing spread of global prosperity and the movement of about 90% of trade in goods, energy and raw materials.

The vital need to protect the environment and for ships to comply with all new environmental regulations is fully recognised. But unless the shipping industry is commercially viable it will not be able to deliver the investments in environmental and social improvements that are sought by regulators on behalf of society at large.

The international shipping industry is committed to the delivery of further environmental and social improvements in the interests of sustainable development. But sustainable development requires a shipping industry that is economically sustainable too.

Published by
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