Delivering CO₂ Emission Reductions

International Shipping is Part of the Solution

INTERNATIONAL CHAMBER OF SHIPPING (ICS)
Representing the Global Shipping Industry
Maritime trade is a driver for green growth and is already by far the most carbon efficient mode of commercial transport. But the shipping industry is committed to delivering further dramatic CO₂ reductions.

Improving fuel efficiency is the industry’s greatest economic priority being a ship operator’s largest cost (even more than building a vessel).

**Delivering CO₂ reductions today**

International shipping reduced its total CO₂ emissions by over 10% between 2007 and 2012, despite increased demand for maritime transport.

The shipping industry is delivering carbon neutral growth through genuine improvements in fuel efficiency, without the need for complex virtual measures such as carbon offsets.

Ships transport about 90% of world trade, but now only account for 2.2% of the world’s total CO₂ emissions (compared to 2.8% in 2007).

The industry has a long-established goal to reduce ships’ CO₂ by 20% by 2020. In 2015 this will be achieved ahead of schedule.

With new engine and hull designs, modern ships are bigger than ever, delivering truly dramatic fuel efficiencies. The largest mega dry bulk ships transport 400,000 tonnes of iron ore. The latest generation of containerships carry the same amount of goods and products as 10,000 heavy trucks, but only 1 gram of fuel is used to move a tonne of cargo one kilometre.

**INTERNATIONAL CHAMBER OF SHIPPING (ICS)**

*Representing the Global Shipping Industry*
Achievements TODAY

10% reduction in total CO₂ (2007 – 2012)

Carbon neutral growth

Mandatory CO₂ rules already in force globally

20% less CO₂ per tonne/km than 2005
Ships built after 2025 will be 30% more efficient (mandatory IMO requirement)

Bigger ships, better engines, cleaner fuels and smarter speed management

More fuel efficient movement through water (e.g. new hull and propeller designs, satellite assisted trim optimisation, renewable ancillary power)

50% CO₂ reduction by 2050
Delivering further CO₂ reductions

UN International Maritime Organization (IMO) rules already require that all ships constructed from 2025 must be 30% more efficient compared to the 2000s, with further improvements going forward.

The entire world fleet will comprise super fuel-efficient ships by 2050, many using clean fuels such as LNG.

Combined with operational measures, such as speed management, and the application of exciting new technologies, the industry (as represented by ICS) is committed to a 50% reduction in CO₂ by 2050.

While fuel efficiency will increase, supply chains are expected to shorten, as emerging economies develop and a far greater proportion of future global GDP growth will be due to service industries. Tonne/km demand for maritime transport is not anticipated to increase at the same rate as occurred prior to 2007.

Further global measures

Shipping is the only international industry which already has mandatory global rules in place to reduce emissions through technical and operational measures, applicable to over 95% of the global fleet.

But with full industry support, IMO is now developing additional measures. The first step will be the collection of CO₂ emissions data from all individual ships, which the industry would like to see mandatory by 2018.

The development of a Market Based Measure (MBM) for shipping is also on the agenda of IMO which is already studying various options.

The real challenge will be to develop a mechanism that can reconcile the vital principle that the same rules must apply to all ships, regardless of flag, with the equally important UNFCCC principle of Common But Differentiated Responsibility (CBDR).

If an MBM is what governments want, the only place to deliver this is IMO, which has already shown it is capable of regulating CO₂ from ships globally while taking full account of CBDR. Almost 70% of the merchant fleet is registered with countries not covered by Annex I of the Kyoto Protocol. But these ships are already covered by comprehensive IMO rules on CO₂ reduction.

Shipping’s preference is for a global levy

If IMO Member States should decide to adopt a shipping MBM, the industry’s clear preference is for a global fuel levy, rather than emissions trading or complex alternatives using arbitrary and theoretical metrics. The latter would seriously distort shipping markets and negatively impact on the efficiency of world trade by sea.

Shipping is part of the solution

Because shipping is already the most carbon efficient mode of transport, and becoming more efficient all the time, it is an important part of the solution to climate change. If additional cargo can be moved by sea, instead of less efficient transport modes, this will actually lead to a reduction in the world’s total CO₂ emissions.

Comparison of CO₂ emissions between modes of transport

<table>
<thead>
<tr>
<th>Grams per tonne/km</th>
<th>Source: Second IMO GHG Study (*AP Møller-Maersk, 2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>Very large container vessel (18,000 teu)*</td>
</tr>
<tr>
<td>5.9</td>
<td>Oil tanker (80,000 – 119,999 dwt)</td>
</tr>
<tr>
<td>7.9</td>
<td>Bulk carrier (10,000 – 34,999 dwt)</td>
</tr>
<tr>
<td>80</td>
<td>Truck (&gt; 40 tonnes)</td>
</tr>
<tr>
<td>435</td>
<td>Air freight (747, capacity 113 tonnes)</td>
</tr>
</tbody>
</table>
Published in 2015 by

International Chamber of Shipping
38 St. Mary Axe
London
EC3A 8BH

Telephone +44 20 7090 1450
info@ics-shipping.org
www.ics-shipping.org