Linkages between green economy measures, trade and climate change

Efficient shipping for a green and sustainable future

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International Maritime Organization
Briefly – IMO

- UN specialized agency established in 1959 to regulate international shipping
- 170 Member States, with over 50 IGOs and 90 NGOs contributing actively to all its work
- Objective: safe, secure, environmentally sound, efficient and sustainable shipping
- How? Adoption of international Conventions, Codes, guidelines and recommendations
- Today: 53 global treaties – no less than 21 on environmental protection
- Integrated Technical Co-operation Programme: support developing countries to ensure global, uniform and effective implementation and enforcement
Briefly – Shipping

- Ships move between jurisdictions, so the same rules must apply at both ends of a voyage.

- If ships had to comply with a patchwork of 170 national regulations:
  - trade would grind to a halt
  - half the world would starve, the other half would freeze.

- IMO provides the global regulatory framework that allows shipping to be the CARRIER OF WORLD TRADE – 90% of global commerce by volume (tonne-mile).
Briefly – Shipping

• Also, it is the most globalized of industries. A typical vessel: Greek owner; Liberian flag; classified in Norway; financed in London; insured in Germany; managed in Singapore; crewed by Filipinos; carrying Chinese cargo; trading between Asia and North America

• While ownership may still rest within some developed nations:
  – 75% of the world fleet is registered in developing countries
  – aside from ship registration, developing countries are also becoming leading providers of services such as port operations, shipbuilding, ship recycling and seafarers (3/4 in each)
  – their share of global seaborne imports has grown from 18% (1970) to 56% (2010), so increasing users of shipping services
Because of IMO’s standards, industry initiatives and ever improving technology, shipping is today the **safest**, most **secure**, most **efficient** and **environmentally sound** means of bulk transportation of goods:

- Ship casualties, loss of life and accidents have decreased
- Zero terrorist incidents
- Pollution incidents have decreased
- All ship-generated pollution is now IMO-regulated, including atmospheric pollution, GHG emissions and transfer of invasive aquatic species
- Most energy-efficient mode of transportation, per tonne of cargo moved
Green economy

• “One that results in improved human well-being and social equity, while sufficiently reducing environmental risks and ecological scarcities.

• In its simplest expression, a green economy can be thought of as one that is low carbon, resource efficient and socially inclusive.

• In a green economy, growth in income and employment should be driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency and prevent loss of biodiversity and ecosystem services.”
Shipping, the green economy and sustainable development

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<th>3 PILLARS</th>
<th>ACTIONS AND CONTRIBUTING IMPACT</th>
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<tbody>
<tr>
<td>Economic</td>
<td><strong>Safe, secure, efficient shipping:</strong></td>
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<td>- well-run merchant and fishing fleets</td>
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<td>- facilitate the movement of 90% of global trade</td>
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<td>- improved turnaround of ships/port throughput</td>
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<td>- increased world commerce</td>
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<td>- improved balance of payments</td>
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<td>- creation of wealth/prosperity of nations and peoples</td>
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### 3 PILLARS

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| **Livelihoods:** | - employment of 1.5 million seafarers, majority from developing countries  
- foreign exchange remittances  
- direct impact on local communities  
- also land-based personnel: maritime Administrations; shipping companies; port authorities; fisheries; coast guard services; training centres; classification societies; naval architects, ship surveyors and inspectors; search and rescue operators; pollution response personnel; shipbuilding yards; equipment manufacturers  
- advancement of women in the maritime sector |
## Shipping, the green economy and sustainable development

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<tr>
<td>Environmental</td>
<td><strong>Protection of atmospheric and marine environments:</strong></td>
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<td>- reduced discharges to sea and emissions to air</td>
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<td>- cleaner waters and coasts</td>
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<td>- improved human health</td>
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<td>- protected marine areas (routeing measures, Special Areas and PSSAs)</td>
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<td>- protection of biodiversity</td>
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<td>- sustained/increased tourism</td>
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<td>- greater access to protein through improved catches</td>
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<td>- integrated coastal zone management</td>
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<td>- marine spatial planning</td>
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Example of “greening” of international shipping

• Earth Summit 1992: Agenda 21, chapter 17 on oceans, contains 20 action points concerning protection of the marine environment from shipping, dumping activities, offshore sector and ports

• All but one item (code of safety for nuclear ships) addressed by IMO, through regulatory AND capacity building work

• Paragraph 17.11 invited IMO to address air pollution from ships
Example of “greening” of international shipping

- MARPOL – principal IMO Convention on prevention of ship-generated pollution – five Annexes (oil, chemicals, packaged goods, sewage, garbage)
- Annex VI – Regulations to prevent air pollution from ships, adopted in 1997 (a few months before KP) with entry into force in 2005
- Dealt only with air pollutants (SOx, Nox, VOC) with GHGs being deliberately left out, given KP negotiations
- But IMO Conference also adopted a resolution calling on the Organization to work on GHG emissions
Example of “greening” of international shipping

• Marine Environment Protection Committee agreed a work plan to address technical, operational and market-based measures (MBMs) to limit or reduce GHG emissions from ships
• July 2011 – adoption of amendments to Annex VI to introduce regulations on energy efficiency for ships of all flags
• First ever, global and mandatory energy efficiency standard for an entire industry sector, leading to:
  – reduced fuel combustion; and, consequently
  – reductions in emissions of air pollutants and GHGs; as well as
  – considerable savings to ship owners and operators throughout the world
Example of “greening” of international shipping

• Amendments adopted by majority of Parties to MARPOL Annex VI, but their representative character augurs well for the environmental integrity and effectiveness of the new regulations
  – 30 States listed in Annex I to UNFCCC, joined by 19 non-Annex I States
  – Developed and developing countries from all regions of the world, including also LDCs and SIDS
  – Some are countries most likely to suffer first from climate change
  – All major flag States (some 80% of the world fleet)
  – Most major ship building nations
  – Both importers and exporters
  – About 75% of emissions from international shipping
Expected benefits and next steps

• Newly released study projects emission reductions to be:
  – 150M tonnes of CO2 annually by 2020 (14% reduction on BAU)
  – 330M tonnes of CO2 annually by 2030, (23% reduction)

• Ongoing further work:
  – extend application to other types of ships/propulsion systems
  – develop implementation guidelines
  – design a market-based measure to provide incentive for ever increasing energy efficiency and GHG reductions, with revenues destined to climate change actions in developing countries
  – provide technical assistance to developing countries for transition to energy efficient shipping
Towards Rio+20 and further “greening”

- Entry into force of all of IMO’s environmental treaties
- Enhanced implementation and enforcement of standards
- Greater energy efficiency for shipping
- Global standards for safe and environmentally sound use of alternative and renewable fuels
- Continued protection of biodiversity through prevention of invasive aquatic species (ballast water and bio-fouling) – a whole new “green” industry and market
- Impact of noise from ships on marine life
- Impacts of ever-increasing size of ships
Towards Rio +20 and further “greening”

• From the definition of the green economy:
  – “… should be driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency and prevent loss of biodiversity and ecosystem services”

• With IMO’s regulatory regime and the industry’s support, shipping is already making a significant contribution to the green economy – but IMO and shipping are committed to making it even greener.
  • The green economy in a blue world!
Thank you for your attention!

For more information please see: www.imo.org