Shipping GHG Emissions - The Debate at IMO

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03/08/2017
Foci of our shipping research and consultancy work

2000’s

Evidence of recent trends in efficiency/emissions

Now

Evidence of how the future of efficiency/emissions might look

2050
CO₂ comparison (or if international shipping was a country):

1. China
2. USA
3. India
4. Russia
5. Japan
6. International shipping
7. Germany
8. South Korea
9. Iran
10. Saudi Arabia
Regulatory oversight

- International Maritime Organization (IMO) in London
  - Marine Environment Protection Committee (MEPC)

- Current regulation:
  - Energy Efficiency Design Index
  - Ship Energy Efficiency Management Plan
Emissions up by 50% - 250%
Business as usual scenarios

CO₂ emissions (Mton)

+250%
+160%
+100%
+50%

2010 2020 2030 2040 2050
Paris Agreement

Governments agreed

• a long-term goal of keeping the increase in global average temperature to **well below 2°C** above pre-industrial levels;
• to aim to limit the increase to **1.5°C**;
• on the need for **global emissions to peak as soon as possible**;
• to undertake **rapid reductions thereafter** in accordance with the best available science.
Global carbon budgets – glide path

- 2°C: ~1,250 Gt
- 1.5°C: ~620 Gt

~40 Gt
Global carbon budgets – emit now, pain later

2°C ~ 1,250Gt
1.5°C ~ 620Gt
Carbon budgets for shipping

**Assumptions:**
- Uses global CO₂ budgets
- Estimates shipping proportion using 2.3% of global CO₂
- 2°C ~ 33Gt
- 1.5°C ~ 18Gt
The scale of the challenge ahead

IMO 3rd GHG Study, current policy

2°C pathway

1.5°C pathway

IMO estimate  RCP2.6  3rd IMO GHG scenarios

CO₂ emissions (MTon)
Typical length of contract (charter)

Max period for financing

Average economic lifespan of ships today

All scenarios here are 2°C

60-90% decrease in fleet average carbon intensity
Roadmap for developing IMO GHG strategy

• Roadmap adopted in October 2016

• Adoption of initial strategy in 2018:
  – Feeding into initial stocktake of UNFCCC in 2018
  – 3 meetings:
    • June/July ’17: 1st intersessional and MEPC 71
    • October ‘17: 2nd intersessional
    • April ‘18: 3rd intersessional and MEPC 72

• Adoption of revised strategy in 2023 at MEPC 80
  – Data Collection System
  – Fourth IMO GHG Study
1st intersessional & MEPC 71 - Input

• 34 proposals submitted, 11 of which co-sponsored by Pacific Island States

• Many encouraging signs, e.g.
  – Calls for ambitious GHG reduction targets
  – China & India: strategy in line with 1.5 and 2°C temperature goal
  – Industry support
  – Importance of low-carbon energy and fuels recognised
Outcome: Outline of the structure of the initial strategy

1. Preamble/ introduction/ context incl. emission scenarios
2. Vison
3. Levels of ambition
   Guiding principles
4. List of candidate short-, mid- and long-term further measures with possible timelines and their impacts on States
5. Barriers and supportive measures; capacity building and technical cooperation; R&D
6. Follow-up actions towards the development of the revised strategy
7. Periodic review of the Strategy
What next?

• 2\textsuperscript{nd} intersessional in October
• 3\textsuperscript{rd} intersessional & MEPC 72 in April 2018
• Important to keep up pressure, there will be resistance
• Need to ensure high level of ambition, early adoption of measures
• Work on submissions has started
• Outreach to other countries crucial
Pacific timeline:

- 2013 Majuro Declaration
- 2015 Suva Declaration
- 2015 MEPC 68
- 2015 Paris Agreement
- 2016 MEPC 69 - 70
HAC 4 Ships

- EU/Pac alliance
- “buddies”
- New partners
- PIDF facilitation & regional outreach
- EU/PIFS financial support
- UCL/USP technical support
IMO Roadmap:

• 23 – 27 October 2\textsuperscript{nd} ISWG
• Deadline for submissions 4 weeks prior (22 September)
Moving forward

• Pacific participation (what and how)
• Regional technicians workshop
• PIDF Leaders’ Summit Honiara (22 August)
  • Report back on 1st ISWG & MEPC 71
  • Pacific Position Paper
Thank you!

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