Work of the IMO-GloMEEP
Global Industry Alliance to Support Low Carbon Shipping
Presentation overview

- Objectives - Global Industry Alliance to Support Low Carbon Shipping (GIA)
- Overview on-going GIA projects
- Next steps
Launch of the GIA

- Officially launched in June 2017
- Initially established for 2 year period
Objective of GIA – finding solutions for low carbon shipping

- Support tackling existing barriers towards decarbonizing the shipping sector
- Through implementation of selected projects (within scope of 5 priority areas)

- Initiate pilot projects, promote R & D
- Initiate industry fora and information exchange activities
- Showcase positive initiatives by maritime sector
- Develop capacity-building tools
Current membership of 15 companies:
GIA members contribute financially and with expertise

- Technical expertise / data provided in-kind (GIA Task Force)
- Financial capital through a yearly membership fee (GIA Fund)
- GIA Fund: provides necessary financial resources for implementation of selected projects

GloMEEP Project Coordination Unit:

- Serves as Secretariat for the GIA
There are five on-going projects

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<tr>
<th>No</th>
<th>Activity Title</th>
<th>Progress/Status</th>
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| 1  | Development of E-learning course on the energy-efficient operation of ships (for seafarers and onshore personnel) | • Videotel KVH contracted  
• E-learning course under development |
| 2  | Development of a Protocol for validation of performance of energy efficiency technologies | • Industry Roundtable held (12 July 2018)  
• White Paper on fuel performance monitoring  
• Tendering procedure initiated by GIA Secretariat |
| 3  | Development of guide on alternative fuels their potential for shipping and barriers to uptake with a timeline to 2050 | • Discussions initiated within the GIA TF |
| 4  | Idea generation workshops - Workshops to facilitate brainstorming and idea generation for effective collaboration | • First workshop held (30 May 2018) |
| 5  | Development of study on Just-In-Time Operation of ships - solutions for different shipping sectors | • Industry Roundtable held (29 June 2018)  
• Tendering procedure initiated by GIA Secretariat |

Full update on GIA’s work: MEPC 73/13/4
GIA project 1 -
E-learning course on the
Energy Efficient Ship Operation
E-Learning course – 3 parts

- An Introduction to Energy-Efficient Ship Operation
- Energy Saving at Sea
- Energy Efficiency and the Shore Office

- Videotel KVH contracted to develop course
- Expected delivery by June 2019
- Will be hosted by UN CC: Learn in collaboration with UNITAR
E-Learning course – Part I

Two modules:

1. GHG and Energy Efficiency in the Shipping Industry
2. Practical ways of Reducing Energy Use at Sea

Overall Learning Objectives

- Understand the issue of GHGs and climate change
- Introduction to the energy efficient operation of ships
- Relevant IMO regulations and activities
- What can be done by those in the maritime industry to reduce GHGs
E-Learning course – Part II

Two modules:

1. Deck Department (Operations management)
2. Engine Department (Shipboard Energy Management)

Overall Learning Objectives

- Understand all variables that can impact energy efficiency
- Potential gains that can achieved by developing, implementing, monitoring and improving energy efficiency measures

Energy Efficiency and the Shore Office
E-Learning course – Part III

Two modules:
1. Energy efficiency management
2. Commercial aspects of energy efficiency

Overall Learning Objectives
- Importance of commitment from the top to improving energy efficiency
- Types of shipping contracts and how they influence ship operation and the fleet’s energy efficiency
- Ship loading and ship capacity utilization, Just In Time operation, optimised ship handling, and e-navigation
- Pros /cons of investment in new equipment and retrofitting
GIA project 2 – Validation of performance of energy efficiency technologies
How the impact of an Energy Efficiency Technologies (EETs) be verified?

- ISO 19030 Hull and Performance Standard - promote wider use of ISO 19030 and support gathering of experience within the maritime industry in its application.

Develop tools to facilitate verification of the impact of EETs:

- GIA developed a White Paper on how to validate the performance of EETs.
- Soon - tender for the development of:
  - Standardized Data Reporting Protocol for hull and propeller performance data.
  - Qualitative guidance to support those aiming to invest in an EET to interpret EET performance data and gain confidence in the reported performance claims.
  - Set of questions that EET investors should investigate when evaluating the performance data of an EET / assessing applicability for their ship.

RINA paper – ISWG-GHG 4/3/4
GIA project 3 –
Guide on alternative fuels
Guide on alternative fuels?

- Alternative fuels identified in Initial IMO GHG strategy as candidate measure

WORK IN PROGRESS, GIA looking to:

- Address lack of clarity on existing alternative fuels options for maritime sector, what emission reduction potential different fuels can deliver (including well-to-propeller life cycle assessments), and their potential role in supporting the GHG challenge

- Provide current status / application of alternative fuels in the maritime sector and presents a realistic assessment of the opportunities presented by alternative fuels

- Identify barriers that may impede their large-scale uptake
GIA project 4 – Ideass Generation Workshops
# Ideas Generation Workshop

- 1st workshop help 30 May, Ricardo HQ
- Brainstorming new ideas for activities to be undertaken by the GIA

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<thead>
<tr>
<th>Disruptive and Enabling Technology</th>
<th>Initial IMO strategy on reduction of GHG</th>
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<tbody>
<tr>
<td>Brainstorm:</td>
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<tr>
<td>• Technologies already disrupting the marine industry</td>
<td>• Ideas on incentives for early movers on items IMO GHG strategy document</td>
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<tr>
<td>• Technologies under development that could enable low carbon shipping</td>
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[Global Industry Alliance to support low carbon shipping logo]
GIA project 5 -
Just In Time Operation of Ships
What is Just In Time (JIT) Operation of Ships?

JIT = maintain most efficient ship operating speed to arrive at Pilot Boarding Place when availability is ensured of:

- Berth
- Fairway
- Nautical services (pilots, tugs, linemen)
Work started with a roundtable discussion with all stakeholders

Main topics:

- Advantages and disadvantages?
- Why is JIT not common practice?
- How can we support overcoming barriers?

Outcome of roundtable (29 June 2018): https://glomeep.imo.org/global-industry-alliance/gia-resources/
Preliminary conclusions

- JIT - great potential to globally reduce GHG emissions from shipping
- Additional advantages: navigation safety, crew rest hours, financial, etc.
- However, existing barriers need to be overcome!

<table>
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<tr>
<th>Contractually</th>
<th>Operationally</th>
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<tr>
<td>JIT can start today regarding contracts</td>
<td>JIT must be improved re. communication – even where shipping companies are terminal owners (often separate business units)</td>
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<tr>
<td>More experience is needed in invoking contractual JIT clauses</td>
<td>Early and frequent updates of departure time → early and frequent updates of arrival time</td>
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Next steps for JIT work

- Gather experience from ports that (not) successfully implemented JIT
- Analyze/categorize barriers (both general and trade specific)
- Study concrete measures (including incentives) for removal of contractual/operational barriers to large-scale uptake of JIT:
  - short-term measures (implemented between today and by 2023), and
  - mid-term measures (implemented between 2023 and 2030);
- Report outcome to MEPC
Thank you for your attention!