



## View of an end user

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# Stakeholders and implications

| Stakeholders | Implications   |
|--------------|--|
| Owners       | <ul style="list-style-type: none"><li>•Rating of their ships based on EEDI (even existing ships)</li><li>•Revision of shipbuilding programmes (medium and longer term)</li><li>•Strategic technical decisions (design speed, investment on energy saving technologies)</li><li>•Resale value of ships affected by EEDI – just compliance or beyond?</li><li>•Through-life costs / savings</li><li>•Cost of shipbuilding?</li></ul> |
| Operators    | <ul style="list-style-type: none"><li>•Pressure (from cargo owners) to operate / charter ships with lower EEDI</li><li>•Financial incentives for ships with lower EEDI (e.g. reduced port duties)</li><li>•EEDI used in future MBMs</li></ul>  |

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|--|--|
| Shipyards / designers                  | <ul style="list-style-type: none"><li>•Demand for more fuel efficient designs (EEDI part of specification, not just compliance but x% better than requirements)</li><li>•Future deviation from “traditional” design principles</li><li>•Future “unconventional” designs?</li></ul> |
| Engine / machinery manufacturers       | <ul style="list-style-type: none"><li>•Drive for even more fuel efficient engines</li><li>•Engines capable of burning dual fuel or low carbon fuels</li><li>•Demand for energy saving devices (WHR, shaft generators)</li></ul>  |
| Energy saving technology manufacturers | <ul style="list-style-type: none"><li>•Demand for energy efficient technologies (propulsion resistance optimisation, advanced coatings, etc.)</li><li>•Demand for innovative energy technologies (wind assisted propulsion, solar panels etc.)</li></ul>                           |

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|--------------------------|---|
| Classification Societies | <ul style="list-style-type: none"><li>•Statutory verification/certification (on behalf of Flag State)</li><li>•Involvement in areas which were traditionally a matter between owner / yard (speed verification)</li><li>•Involvement in design?</li><li>•Verification of energy saving technologies</li></ul> |
| Flag states              | <ul style="list-style-type: none"><li>•Survey and verification/certification of the EEDI</li><li>•Decision to adopt waiver option and commercial implications</li></ul>   |

# 1 September 2015

- Amendments to MARPOL Annex VI on extension of EEDI requirements and exemptions for cargo ships with ice-breaking capacity and others
- The new requirements will apply to
  - LNG carriers (including non-conventional propulsion)
  - Ro-ro cargo ships (vehicle carrier)
  - Ro-ro cargo ships
  - Ro-ro passenger ships
  - Cruise passenger ships (having non-conventional propulsion only)
- Amendment also includes exemption for ships with ice-breaking capabilities and clarification of the status of ships not propelled by mechanical means

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Who is affected by the EEDI?

