Shipping 2017: Challenges and Opportunities

Jan Otto de Kat | 24 January 2017
Malmö
## Regulatory Landscape

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
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<tbody>
<tr>
<td><strong>NOx</strong></td>
<td></td>
<td>Tier III NOx N America ECA</td>
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<td>Tier III NOx Baltic/North Sea</td>
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<tr>
<td><strong>SOx</strong></td>
<td>Phase 1 EEDI</td>
<td>0.1% LSFO ECA</td>
<td>0.5% LSFO worldwide</td>
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<td><strong>CO₂</strong></td>
<td>Phase 0 EEDI</td>
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<tr>
<td><strong>Other Regulations</strong></td>
<td>Revised IMO IGC Code</td>
<td>IMO IGF Code</td>
<td>IMO DCS</td>
<td>Possible Future Regulations</td>
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<tr>
<td></td>
<td>New SOLAS Ch XIII: III Code</td>
<td>New SOLAS Ch XIV IMO Polar Code</td>
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<td>MBM Underwater Noise</td>
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<td>IACS CSR-H</td>
<td>IMO GBS</td>
<td>EU IHM NB</td>
<td>Bio-fouling Ship Recycling</td>
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<td>EU MRV</td>
<td>EU IHM Existing &amp; Non-EU</td>
<td>Black Carbon</td>
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<td>USCG BWDS 1500-5000 m³</td>
<td>USCG BWDS &lt;1500 &gt;5000 m³</td>
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<td>US EPA VGP2</td>
<td>BWMC 08 Sept 2017</td>
<td>US EPA VGP3</td>
<td>VGP4</td>
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</table>
# List of Acronyms

- **BWDS**  Ballast Water Discharge Standard
- **BWMC**  Ballast Water Management Convention
- **CSR**  Common Structural Rules
- **DCS**  Data Collection System
- **EEDI**  Energy Efficiency Design Index
- **GBS**  Goal Based Standards
- **IGC Code**  International Code for the Construction and Equipment of Ships carrying Liquefied Gases in Bulk
- **IGF Code**  International Code of Safety for Ship Using Gases or Other Low-flashpoint Fuels
- **IHM**  Inventory of Hazardous Materials
- **LSFO**  Low Sulphur Fuel Oil
- **MBM**  Market Based Measures
- **VGP**  Vessel General Permit
CO₂: IMO Data Collection System (DCS)

- Collection and reporting of ship fuel consumption data, all ships > 5,000 GT on international voyages

**Data Collection & Reporting methodology in SEEMP**

- Ship
- Flag or R.O.

- Shall ensure the SEEMP complies with the Regulation

- 1st Reporting Period:
  - BDN’s
  - Bunker fuel tank monitoring
  - Flow Meters

- Aggregate and report the data collected in the calendar

- Verify Reported Data

- Issuance of SoC

- Transfer to the IMO Ship Fuel Oil Consumption Database

**Timeline**

- 1 January 2019
- 31 March 2020
- 30 June 2020
- 31 December 2019
- 31 May 2020
CO₂: EU Monitoring, Reporting and Verification

- Ships above 5,000 GT on voyages to, from and between EU ports