

International Maritime Organisation (IMO) 2023: Potential Impact on Ocean Freight Supply Chain



WHAT:

IMO, a specialised agency under the United Nations, is responsible for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships.

WHY:

To contribute and fight against climate change and its impact. The aim is to reduce CO2 emissions by at least 40% by 2030 and 70% by 2050 compared to 2008.

HOW:

Target to increase vessel efficiency and reduce carbon intensity to reduce Green House Gas (GHG) emissions from international shipping.

IMO Measures	Potential Impacts
<p>Energy Efficiency Design Index (EEDI)</p> <p>A calculation model of energy efficiency for vessels. Mandatory for existing vessels to have an energy efficiency management plan. For example – improved voyage planning.</p>	<ul style="list-style-type: none"> Vessels might be pulled out of service for drydock This could lead to possible changes in port rotations, port calls, or frequency to ensure vessels meet requirements New vessels, especially those with more than 4000 teus capacity, might not be suitable for Oceania trade due to existing port infrastructure <div style="display: flex; justify-content: space-around; align-items: center;"> Rates → Capacity ↓ Service ↓ </div>
<p>Ship Energy Efficiency Management Plan (SEEMP)</p> <p>Also refer to the speed optimization, a potential approach to improve the energy efficiency of the ship.</p>	<ul style="list-style-type: none"> For vessels operating on a lower nautical mile, longer transit time between ports will be expected For example, transit time between Shanghai to Australia is on average 13 days. After SEEMP is implemented, this transit time might increase to 17 days instead <div style="display: flex; justify-content: space-around; align-items: center;"> Rates → Capacity → Service ↓ </div>
<p>Carbon Intensity Indicator (CII) and rating system</p> <p>A graded score of carbon emission; whereby it links the GHG emissions to the number of cargo vessels carried and the distance travelled.</p> <p>From 2023, all vessels to establish CII and will be graded from A (best) to E (worst) on the CO2 emission.</p>	<ul style="list-style-type: none"> Similar to EEDI, more vessels are likely to be pulled out of service for maintenance <div style="display: flex; justify-content: space-around; align-items: center;"> Rates → Capacity ↓ Service ↓ </div>