

# Comply and Compete: The Top 4 KPIs to Maximize Measuring and Ensure CII Readiness

The new IMO decarbonization regulations are officially in place as of the start of 2023 and CII compliance is top of mind for vessel owners, operators, and charterers. Although critical, compliance is just the start. Implementing vessel performance software such as My Digital Fleet™ from ABS Wavesight™ can not only help maritime players streamline CII compliance, but also gain an operational competitive edge.

Shipping Challenges	Software Solution
<p><b>CHALLENGE</b></p> <h2>Reporting of Fuel Consumption</h2> <p>Manual daily reporting inevitably leads to erroneous data. Discrepancies between fuel consumption and speed can lead to breach of charter agreements as well as inaccurate regulatory reporting. Risks of inaccurate data reporting include:</p> <ul style="list-style-type: none"> <li>✗ Potential claims by charterers</li> <li>✗ Lower CII ratings</li> <li>✗ Lower revenue and TCE</li> </ul>	<p><b>SOLUTION</b></p> <h2>Daily Fuel Monitoring</h2> <p>Utilizing onboard vessel reporting systems, daily reports and sensors to track and monitor fuel consumption with daily trends and comparative analysis provides you with a better understanding of fuel consumption to:</p> <ul style="list-style-type: none"> <li>✓ Improve CII ratings</li> <li>✓ Increase TCE and utilization</li> <li>✓ Enhance fuel efficiency</li> </ul>
<p><b>CHALLENGE</b></p> <h2>Route Optimization</h2> <p>Subpar insight into course, speed and weather means you're unable to optimize your voyage within contract parameters, risking:</p> <ul style="list-style-type: none"> <li>✗ Failure to comply with charterer KPIs</li> <li>✗ Increased fuel costs</li> <li>✗ Increased emissions</li> </ul>	<p><b>SOLUTION</b></p> <h2>Voyage Planning and Tracking</h2> <p>Dynamic route guidance—insights on course, speed and inclement weather—helps inform operational decision-making, resulting in:</p> <ul style="list-style-type: none"> <li>✓ Improved margins</li> <li>✓ Decreased fuel consumption</li> <li>✓ Lower emissions</li> </ul>
<p><b>CHALLENGE</b></p> <h2>CII Calculations and Forecasting</h2> <p>Regulatory compliance and lack of forecasting prevent the ability to properly negotiate contracts or plan future voyages, potentially resulting in:</p> <ul style="list-style-type: none"> <li>✗ At-risk regulatory compliance</li> <li>✗ Unknown or lower CII ratings</li> <li>✗ Unfavorable contracts</li> </ul>	<p><b>SOLUTION</b></p> <h2>Environmental Monitoring</h2> <p>Continuous fleet carbon footprint and CII monitoring makes it easier to move toward decarbonization and allows:</p> <ul style="list-style-type: none"> <li>✓ Easier regulatory compliance</li> <li>✓ Future voyage CII impact</li> <li>✓ Better ability to negotiate voyage contract KPIs</li> </ul>
<p><b>CHALLENGE</b></p> <h2>Maintenance Planning</h2> <p>Up to 20% of fuel costs are directly due to hull fouling. Undiagnosed vessel maintenance issues lead to poor vessel performance and results in:</p> <ul style="list-style-type: none"> <li>✗ Increased emissions</li> <li>✗ Lower CII ratings</li> <li>✗ Higher fuel expenses</li> <li>✗ Reduced margins</li> </ul>	<p><b>SOLUTION</b></p> <h2>Vessel Performance Monitoring</h2> <p>Using algorithms based on ISO standards to provide in-depth voyage performance metrics, such as fuel usage, CO<sub>2</sub> emissions, speed and resistance changes, makes it possible to address maintenance needs before they negatively impact profitability, providing:</p> <ul style="list-style-type: none"> <li>✓ Decreased emissions</li> <li>✓ Decreased fuel expenditures</li> <li>✓ Increased CII ratings</li> <li>✓ Increased margins</li> </ul>