

Environment Regulatory

CII alternative pitched by Danish Ship Finance



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Danish Ship Finance has issued its latest biannual markets report in which it has called for the International Maritime Organization's Carbon Intensity Indicator (CII) to be replaced with a voyage index that shows carbon intensity per voyage to allow performance to be evaluated and optimised. The voyage index would be powered by a global terminal heatmap that displays terminal efficiency.

CII, which came into force on January 1 this year, "fails to produce environmental benchmarks that allow vessel operations to be compared on an apples-to-apples basis", according to Danish Ship Finance.

"To allow competition to drive change, it is essential to create a voyage index that displays carbon intensity per voyage (grams of CO₂e emitted per unit-NM) and split the voyage emission into variables that allow performance to be evaluated and optimised," researchers at Danish Ship Finance argued.

The emission benchmark for individual voyages would represent the average emission performance of similar vessels on a specific route. Over the course of a year, these individual benchmarks would be

combined to create a vessel's individual carbon budget. This budget would then serve as a standard against which the vessel's actual emissions can be compared to assess its environmental performance.

CII has proven to be one of the IMO's more controversial regulations, coming in for fierce criticism over the past year.

Writing for *Splash* earlier this year, Mikael Laurin, head of vessel optimisation at Yara Marine Technologies, noted: "There can be no doubt that the CII is a flawed index for its original purpose, which is rating the operational efficiency of vessels. The loopholes and countless unintended consequences of its framing are the talk of the shipping industry. Many acknowledge that the most obvious flaw is the failure to consider a vessel's actual cargo load, resulting in a better rating for vessels that cover distances and create emissions without directly contributing to world trade. This flaw can be traced back to the fact that data on actual cargo load was omitted from IMO's Data Collection System."

Germany's largest dry bulk operator Oldendorff Carriers released a detailed study into CII's flaws, weeks ahead of the regulation coming into force.

"The CII formulas in the regulation are not holistic, can be gamed and there are many real-world instances where strict adherence and focus on the CII rating letter grades will do more damage than good," Oldendorff stated.

"CII will distort trading patterns and could lead some vessels to emit more CO₂ than they would have prior to the regulations in order to chase a rating," shipbroker Gibson warned in a report looking at the potential unintended consequences of this green legislation.

A non-eco ship, which would typically trade shorter voyages, will now be more likely to engage in longer haul voyages to attain the required CII, which is largely a function of CO₂ emitted, cargo capacity and importantly, distance sailed, Gibson pointed out. Likewise, eco ships with much better CO₂ emissions could be deployed on shorter voyages where, despite smaller distances, could still attain an acceptable CII rating due to their fuel efficiency.