The EEDI regulatory framework is expanding, keeping owners engaged in exploring improvement options for new construction vessel projects. In addition to the established long-term goals for reducing GHG emissions, the IMO has approved the introduction of two short-term measures to ensure that actions are taken on a global basis. The first one is the Energy Efficiency Index for Existing Vessels (EEXI), which will be applied retroactively to all vessels in service, through a one-time certification. The second, is the Carbon Intensity Indicator (CII), which will mandate year-to-year carbon intensity reduction and reporting for all vessels. The proposed enforcement date is January 1, 2023 for EEXI.

In anticipation of this regulation, ABS can assist owners in assessing their vessels under the developing EEXI scope, benchmark against the proposed requirement and provide improvement options. EEXI could be a major disruptor and it is therefore important to understand the attributes, boundaries and overall gains by individual energy efficiency technologies, possible engine power limitations and/or other improvement pathways. A proactive approach allows owners and operators to customize a roadmap for their vessels to remain compliant and competitive.

Gathering the Right Information – EEXI calculation requires an accurate speed power curve for the loading conditions under the regulatory scope. Data to calculate an accurate speed curve may be difficult to obtain. For example, vessels built prior to 2013 had speed-power prediction for the design or ballast drafts, but not necessarily at scantling draft.

To address this key component of the EEXI calculation, ABS has developed tools that based on each vessel’s unique self-propulsion characteristics estimate and calibrate the speed-power performance curves at the drafts required by the regulatory scope. This ensures that all pre-requisite information is prepared to allow for the estimation of the EEXI.
IMPROVEMENT OPTIONS
ABS offers a variety of services to assist owners in improving their vessel or fleet's EEXI. Implementation of individual or combined Energy Efficiency Technologies and/or Engine Power Limitation are among the methods used, enabling ship owners to choose the solution best suited for their vessel. For all services, a report is issued summarizing the findings and options for improvement.

Furthermore, ABS offers a broad spectrum of technical reviews and evaluations. ABS services are applicable to new construction and existing vessels and include:

- Design Evaluation
- Energy Efficiency Technologies Evaluation
- Powering Performance Assessment
- Life Cycle Cost Analysis

ABS is closely following regulatory developments and keeps clients informed in order to proactively identify feasible solutions for their vessels.

To learn more about how ABS can help you improve your EEXI, please contact us at sustainability@eagle.org.