



## ERC ENGINEERING XPERTS

Carbon Intensity Indicator (CII)  
CO<sub>2</sub>-reduction through optimized  
operating strategies





Carbon Intensity Indicator (CII):  
CO<sub>2</sub>-reduction through optimized  
operating strategies

In June 2021, the IMO adopted a catalog of regulations to further reduce fuel consumption and thus CO<sub>2</sub> emissions of the world merchant fleet in the future. The new requirements also affect the existing fleet for the first time.

In addition to the EEXI (Energy Efficiency Existing Ship Index, see separate info brochure), the Carbon Intensity Indicator (CII) was adopted, which is an indicator of the operational efficiency of ships.

From 2023, the operation of ships is to be evaluated in terms of their CO<sub>2</sub> intensity with the help of the CII. The CII indicates how many grams of CO<sub>2</sub> are emitted when transporting one ton of cargo per mile in actual operation.

The reference value is the average CO<sub>2</sub> emissions of all comparable ships of the world merchant fleet based on the sailing data from 2019. CO<sub>2</sub> emissions are to be reduced by 5% as early as 2023. From 2024, the permitted CO<sub>2</sub> emissions will be reduced by a further 2% per year.

A classification will be made in five categories (A to E). If a ship achieves only a rating of E or D in three consecutive years, binding measures must be developed and implemented to ensure that the ship achieves at least a C rating in the future.

### The Xperts support you!

By optimizing existing plants, energy requirements can be significantly reduced at low technical, operational and financial costs. Measures to reduce the exhaust gas back pressure, optimized scrubber operation, technical utilization of waste heat, etc. have a

positive effect on the CII and reduce your operating costs already today!

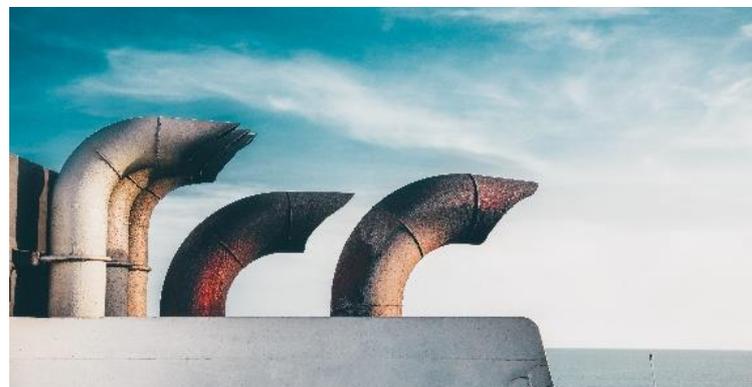
We are happy to help you finding the optimal solution for your ship operation. Together with you, we develop a concept to reduce the CII of the affected ships with the lowest possible technical and financial effort.

With our expertise in the field of overall system optimization on board of vessels, we are at your disposal.

### What we would like to offer you!

- Validation of your operational data to determine the optimization potential
- Identification of all main consumers
- Development of optimization proposals and (if necessary) technical measures to be implemented
- Development of an optimized operating strategy to reduce your CO<sub>2</sub> emissions and operational costs

Please do not hesitate to contact us! Together we will find a way to make your fleet fit for the future.





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