



## TECHNICAL CIRCULAR No. 703 of 7<sup>th</sup> October 2021

To	All Surveyors/Auditors. All flags
Title	<b>Carbon Emissions- Antifouling</b>
Reference	IMO and Green House Gas (GHG)

### Reducing Carbon Emissions Through Premium Performance Antifouling

Some premium coating can contribute to reducing the environmental from shipping.

With good painted hull, vessels will be able to reduce their CO<sub>2</sub> emissions.

#### *Energy Efficiency Existing Ship Index (EEXI)*

IMO has adopted an Initial Strategy for reduction of Green House Gas (GHG) missions from ships.

IMO has set a target to reduce the total annual GHG emissions by at least 50% by 2050 compared to the 2008 levels.

The targets are decided as below:

- Reduce carbon intensity by 40% by 2030
- Reduce carbon intensity by 70% by 2050
- Reduce GHG emissions by 50% by 2050

To accelerate the decarbonization of the marine industry, there has been pressure to do more to improve vessel's efficiency. The IMO has developed two measures which will come into effect in January 2023:

- EEXI (Energy Efficiency Existing Ship Index) and
- CII (Carbon Intensity Indicator)

All ships will be categorised and given an efficiency index number that they will need to achieve.

Required EEXI is decided according to EEDI reference line or result of in-service performance measurements.

An estimated number of 30,000 ships may have to be issued with new International Energy Efficiency Certificates, IEEC by first annual, intermediate or renewal survey after January 2023.

Half of the vessels may require measures such as engine power limitation to comply with EEXI requirements.

To raise the level of basic ship performance, ship owners and operators can take various actions

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for EEXI improvement measures such as engine power limitation, change of fuel type, liquefied natural gas (LNG), redesigned propeller retrofit, installations of energy saving devices. For these investments to be effective, hull coatings should also be a significant factor to consider.

*Carbon Intensity Indicator CII*

CII will become mandatory as an operational measure for all vessels over 5000 GT from 2023. The ships will be classified into five different grades based upon evaluation and the CO<sub>2</sub> reduction target will become more stringent year by year.

REFERENCES:

- IMO and Green House Gas (GHG), MFAME

ATTACHMENTS: No

Kindest Regards,  
CONARINA Technical Office

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