



TECHNICAL CIRCULAR No. 577 of 05th September 2019

To	All Surveyors/Auditors
Applicable to flag	All Flags
Title	Scrubbers: Positive Effect on GHG Emissions
Reference	IMO Tier 3 NOx

Scrubbers: Positive Effect on GHG Emissions

Continuing use of heavy fuel oil (HFO) with a scrubber is the most environmentally beneficial means of meeting GHG emissions targets.

After detailing findings from research involving full scale testing on a number of newbuild vessels, studies indicate that two-stroke engines with Exhaust Gas Recirculation (EGR) and scrubbers represent the most cost- and GHG-effective way of meeting both IMO Tier 3 NOx rules and the 2020 sulfur cap.

With new modern refineries set up to convert crude into higher priced products, high sulfur fuel oil (HSFO) will, from 2020, be delivered from existing refineries where its share of energy consumption can be considered to be next to nothing. The explanation is that the heavy bunker oil coming out from the refinery is the bottom of the barrel. If we acknowledge the lower energy consumption in delivering HSFO and deduct the refining we get nine to 10g of CO2 equivalent per MJ for HFO, rather than 13 to 15 of CO2 equivalent per MJ for LSFO/MGO.

The emissions abatement rules need to be reviewed to consider pollution problems in different areas. "To meet climate targets, i.e. reduce global GHG emissions, we can no longer afford to have standards that are strict in areas where we do not have local pollution problems, while areas with high pollution may need even stricter rules than today."

Using higher sulfur fuels with an exhaust gas cleaning system will have a beneficial impact on the

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global reduction of sulfur and nitrogen oxides emissions and on greenhouse gas (GHG) emissions.

There is also a significant benefit from reduced particulates in emissions. With reduced particulates in exhaust emissions of 75 percent or more, the combination of dramatically reduced SOx and particulates makes a big difference in improved air quality and lower health risks.

REFERENCES:

- Courtesy of Diamantino Rosa

- ATTACHMENTS: No

Kindest Regards,
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