GLOBAL NEWS

GLOBAL: CROSS-SECTION OF INDUSTRY STAKEHOLDERS TO TRIAL BIOFUEL BUNKERS

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d'Amico Group, Trafigura, ABS, RINA, LR FOBAS, the Liberian Registry and MAN Energy Solutions have teamed up to launch a decarbonisation project that will involve the testing of marine biofuels derived from advanced second generation feedstock.

The Joint Industry Project (JIP) will calculate possible CO2 emissions reduction through a lifecycle strategy, using the so called well-to-wheel (WTW) analysis to compare the performance of biofuels to traditional fossil fuels.

The project will assess the stability and degradation of the biofuel in relation to storage time and NOx emissions to confirm that the use of biofuel B30 will not affect the Tier II certification of the engines, and to measure the effects and improvements on EEXI and CII indexes adopted as short-term measures by the IMO.

The tests will be undertaken on d'Amico's *Cielo Bianco* and *Cielo di Rotterdam* product tankers and the biofuel (EU renewable energy directive (Red I/II) compliant and ISSC certified) will be supplied by TFG Marine in the Amsterdam-Rotterdam-Antwerp (ARA) region.

According to d'Amico, the project 'shows that the paradigm of different players acting separately is shifting towards a collaborative effort', working together to find the best solutions to reach joint decarbonisation goals.

The combined strategic vision and technical capabilities of charterers, original engine manufacturers (OEM), shipowners, fuel suppliers and regulatory bodies is expected to allow to better exploit, study and scout all options for the decarbonisation of shipping.

The pre-trial phase of the project started in March 2021 when details of the nature and composition of the biofuel blends were made available and the protocols relating to fuel testing, inspections, NOx measurement and

the sea trials were established. It was also necessary to prepare the risk assessment to adapt the swap procedures and to develop a consistent crew training programme.

The second phase, the trials on board the vessels, is scheduled for mid-June 2021, in accordance with the planned trade routes of the vessels, and will start as soon as the bunkering is completed, and all protocols have been defined and approved by the OEM and the class societies involved.

The trial phase will monitor the behaviour of the main engine, the diesel generators and the boilers in burning the biofuel blend, to evaluate operation, performance, and fuel storage capability. NOx will also be measured.

In the post-trial phase, the reported emissions will be processed and analysed with particular focus on CO2 and NOx and their effects on the EEXI and CII, according to the existing draft guidelines.

The project is scheduled to conclude in mid-July 2021.

Salvatore d’Amico, Fleet Director at d’Amico Group, said: ‘We are proud to announce that this project was decided in the “Carbon War Room” we set up in the fleet management department to exploit, study and scout all options for the shipping decarbonisation. The room was created involving managers from different departments: Technical, HSQE, Fleet performance monitoring, New buildings supervision to gather ideas, proposals engaging the OEMs and regulatory bodies in the Company strategy.’

Cesare D’Api, Deputy Technical Director at d’Amico Group, said: ‘Shipping needs a GHG lifecycle approach to decarbonise itself. In line with our vision, we decided to do such step in the common direction to reduce the carbon footprint by assessing the biofuels as potential low carbon fuel of the future and its effect on the short-term measures adopted by the IMO. This project by confirming the technical/safety feasibility in burning the biofuel blends as “drop in” solution, will demonstrate that we have a practical and viable option for the decarbonisation which can be handled easily by the crew with no impact on the NOx emissions and without any modification on board.’

biofuels