

TECHNOLOGY

[See all articles](#)LATEST JOBS [Sale & Purchase Broker](#)[Sale & Purchase Broker](#)[Sale & Pu](#)

A technician on board a Bunker One vessel. The Danish marine fuel supply firm is to supply hydrotreated vegetable oil biodiesel to Molslinjen. Photo: Bunker One

Bunker One steps up fuel additives trial after early study generates consumption cuts

Trial has been expanded to include vessels from six different shipowners

15 November 2023 11:07 GMT UPDATED 15 November 2023 12:04 GMT

By [Holly Birkett](#) in London

Fuel additives, perhaps the least talked-about solution in decarbonising shipping, have received a vote of confidence from the world's largest bunker supplier after early trials showed cuts in consumption.

It is hoped that additives can be part of the intermediate solution to cutting shipping's use of conventional fuels as the industry transitions to lower-emitting energy sources.



USTC's Uni-Tankers achieving emission reductions of up to 15%

[Read more](#)

Bunker One said its trial of Purify Fuel's proprietary nanO2 fuel combustion catalyst generated consumption fuel savings of 6.4% with marine gasoil and 5.9% with very low-sulphur fuel oil.

The catalyst was trialled on board Uni-Tankers' 5,700-dwt tanker Alsia Swan (built 2009) earlier this year.

"The significant fuel savings observed on Alsia Swan were truly impressive. NanO2 could be a pivotal facilitator for shipping lines transitioning to sustainable fuel and a key contributor to meeting the IMO's carbon targets," said Peter Zachariassen, CEO of Bunker One.

The company will expand its trials by a further six months across multiple vessels, which TradeWinds understands are all owned by different companies.

Article continues below the advert



If the continued trial yields substantial reductions in fuel consumption and related emissions, Bunker One said it will enter into a contract with Purify Fuel.

The companies have already signed a joint supply and marketing agreement for the nanO2 additive.

The catalyst works by chemically altering the timing of a compression combustion engine, allowing complete combustion of fuel and therefore using a larger percentage of the fuel to create power.

This reduces unburned fuel escaping from the vessel's exhaust as particulate matter and cuts greenhouse gas emissions through reduced fuel consumption.

Scott Whitney, CEO of Purify Fuel, said: "We are excited about this opportunity to collaborate with them to help the marine shipping industry decarbonise as we are currently doing for other industries, including railroads and the oil and gas drilling sector."

The collaboration between Bunker One and Purify Fuel was facilitated by Purify Fuel's independent sales agent, Inerfuel, which is marketing and distributing the additive.

Stephen Schueler, chairman of Inerfuel and former chief commercial officer of Maersk Line, described the nanO2 additive as "a significant fuel discovery enabling industries to immediately and economically reduce carbon emissions while transitioning to greener and cleaner fuels".

The additive has already been trialled on board offshore drilling rigs operated by Transocean in 2021 and has been rolled out across the fleet since then.

On land, trials of nanO2 on diesel-fuelled mobile drilling rigs generated savings of more than 6% for fuel efficiency and CO₂ emissions, according to a case study by rig supplier Canrig.

The additive itself does not require any alterations to vessels' fuel systems and is ready to use as soon as bunker fuel is treated with the agent. It also has degreasing properties that clean fuel injectors and reduce engine temperature. [\(Copyright\)](#)

[Bunker One](#) [fuelling](#) [Decarbonisation](#) [Denmark](#)

TRENDING TODAY

Offshore



Seatrium plays down impact from US offshore wind troubles

Bulkers



Turkey warns 'poison merchants' after cocaine found tied to Berge Bulk anchor chain

Containerships



ONE shares \$2bn methanol dual-fuelled container ship order with two Chinese yards