

REAL-TIME FUEL DATA FOR ENHANCED FLEET MANAGEMENT



Challenge

Christiania Shipping is a world-leading chemical ship-owning and chartering company, operating 17 vessels that trade in the Atlantic Ocean, Europe, West Africa, and the Mediterranean.

While the company continually explores solutions to improve operational efficiency, boost competitiveness, and minimize environmental impact, it also needed an effective way to gather accurate fuel consumption data for fleet management and performance optimization.



Solution

Having already fitted tankers Jette Theresa and Alice Theresa with SmartPropulsion, giving an estimated 8-12% fuel savings each, Christiania Shipping also wanted it on board the tanker Stella Theresa.

SmartPropulsion is an on-top software solution that uses AI and learning algorithms to automatically optimize engine RPM and propeller pitch for maximum fuel efficiency. As Stella Theresa has a Fixed Pitch Propeller system, this installation related to the vessel's RPM only.

Flowmeters were also installed to measure fuel usage, and a torque meter was added to measure power, RPM, and torque. This data allows the vessel to be added to the Frugal Propulsion Mydata system, enabling performance to be compared with other vessels for enhanced fleet management.

Benefit

The fuel savings for Stella Theresa are **expected to be as much as 2-4%, with a related reduction in CO₂ emissions**. The overall return on investment is 12 months.

As a digital ShaPoLi solution, SmartPropulsion automatically ensures that Stella Theresa's engine power **never exceeds the calculated EEXI limits**.

The solution also provides full documentation of the vessel's operational performance for **better fleet management, as well as for CII reporting and chartering**.

Following these results, Christiania Shipping is **planning to upgrade additional vessels above 5,000 GT**.

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