

# Optimizing Vessel Performance to Save Fuel and Reduce Emissions

Powered by DanelecConnect

Working across the shipping sector and growing rapidly, **GreenSteam** currently helps Operators of over 500 vessels to generate fuel savings and reduce emissions.

Offering a low entry point to double digit fuel savings, GreenSteam provides insights that highlight precisely where action is needed, resulting in better informed decisions.

The range of services cover everything from a whole fleet overview to help shore-based teams monitor overall performance, to individual vessel analysis and smart alerts that enable crews to take action and reduce fuel wastage in real time.

For Owners, Operators and Charterers alike, having transparency about vessel performance and how to optimize it has never been so accessible or affordable.

“GreenSteam offers a machine learning platform that offers shipowners and operators a capex and downtime free way to enjoy high payback fuel reductions and embrace the future of vessel performance optimisation.”

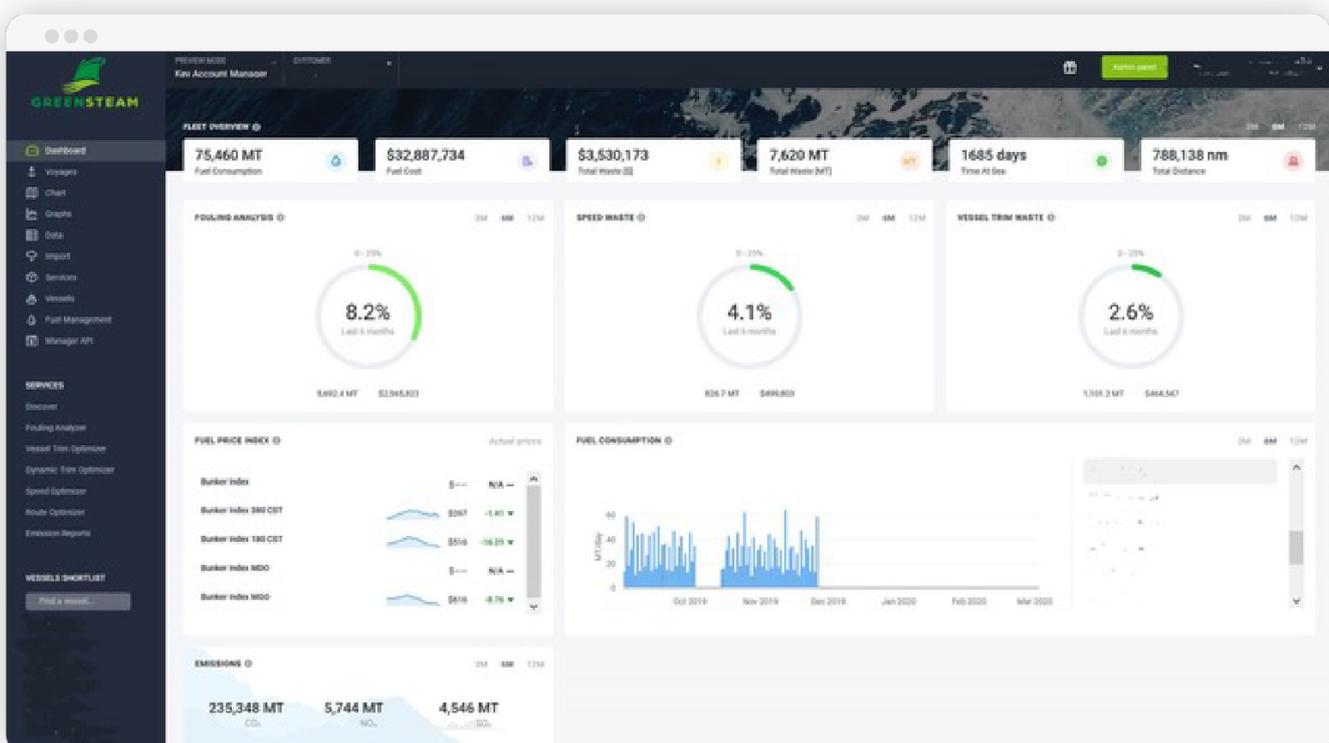
Simon Whitford, COO, GreenSteam

## Modular Approach that Starts with Vessel Data

GreenSteam’s performance model is created using vessel operational data, AIS, weather and sea-state data and is the basis for identifying the inefficiencies that contribute to fuel wastage.

GreenSteam can provide either predictive advice on how to operate a vessel more efficiently, or as dynamic advice in real-time to alert the crew on the bridge.

## GreenSteam Manager Dashboard



GreenSteam's analysis indicates that on average, fuel wastage attributed to factors such as trim, speed and fouling account for more than 15% of fuel costs. These factors are manageable.

It is no longer viable for operators to rely on legacy models based on limited data and expect to make the best decisions. Adopting a data-rich machine learning approach that other sectors have embraced is the only way forward for the shipping industry.

And with clients facing the dual pressures of ensuring they keep a lid on operational costs and complying with IMO carbon-reduction regulations, it is important they partner with suppliers who can take their decision making to the next level.

With GreenSteam onboard, it is possible to move the dial.

## Dynamic Trim Module



## Speed Optimizer Module

## Fouling Analyzer Module



**Danelec's ship-2-shore data solutions** are powered by the connectivity Hardware modules which pick up analog, digital or serial sensor data throughout the ship for onboard data collection, and connect it to the vessel's existing network and communication infrastructure for data transfer to shore.

The data for the service is collected from various systems, such as onboard flow meters, torque/thrust meters, automation systems, and navigation systems or meteorological services.

**GreenSteam** has been operating for over 12 years and is at the forefront of using machine learning to provide actionable insights to Shipping Owners, Operators and Charterers. GreenSteam focuses exclusively on the shipping industry, employing a wide range of experts from naval architects and oceanographers to PhDs in machine learning.

For more information, go to [www.greensteam.com](http://www.greensteam.com) or email [info@greensteam.com](mailto:info@greensteam.com).