

Increase TCE rates and reduce OPEX



Owners and managers in the merchant fleet are under increasing pressure to maximise lifetime value and minimise operational costs for tanker and bulker vessels – whether new builds or existing vessels. At the same time, stricter environmental regulations are being adopted. Wärtsilä's integrated solutions help you to reduce fuel costs and optimise maintenance processes, increasing the profitability of your vessel as an owned asset and enhancing its resale value at the same time.

REDUCE GREENHOUSE GAS EMISSIONS

The regulatory environment is becoming increasingly complex and challenging. The key driver for change is the International Maritime Organization (IMO) 2050 target to reduce greenhouse gases (GHG) from shipping by 50% compared to 2008 levels, which comes in addition to previously established NO_x and SO_x caps. This puts pressure on the shipping industry to quickly identify and adopt new solutions to cut emissions. The positive news is that future-proof compliance is achievable through a combination of technological and efficiency improvements.

At Wärtsilä, we believe that fuel flexibility is key to creating a truly future-proof vessel. By utilising LNG, a dual-fuel approach can cut GHG emissions by up to 15%. However, by installing selective catalytic reduction (SCR) technology and scrubbers, it is also possible to keep using traditional fuel if there is a specific need that makes this the right long-term choice. Wärtsilä is one of the leading suppliers of exhaust gas cleaning solutions for both new-build and retrofit projects.

BENEFITS WITH WÄRTSILÄ AS YOUR PARTNER

- Leverage future-proof solutions to reduce GHG emissions
- Reduce operational costs
- Increase residual value
- Increase reliability and reduce maintenance costs

Depending on the route and operational profile of the vessel, alternative environmental solutions can also be added, including sail technology, air lubrication, solar panels and cold ironing.

REDUCE COSTS AND INCREASE EFFICIENCY

Fuel flexibility and asset efficiency enable owners to significantly reduce fuel, running and maintenance costs, making a vessel far more attractive to charterers – as well as reducing the total cost of ownership through lower OPEX and higher revenue.

FLEET OPERATIONS SOLUTION

Wärtsilä Fleet Operations Solution is a fully integrated network for ship-to-shore communication based on the connected ECDIS. This means you can benefit from an integrated navigational system and intelligent automation that takes efficiency, equipment maintenance and operational processes into account to deliver actionable insights that reduce fuel consumption and improve performance at both vessel and fleet level.

INCREASE THE SAFETY, EFFICIENCY AND COMPLIANCE OF YOUR FLEET

- Route planning is always based on the latest nautical charts, resulting in a route that is safe to sail
- Built-in weather optimisation finds the most fuel-efficient route
- Data and charts are automatically delivered, with no ordering or need for USB
- SmartLog allows ship-to-shore reporting, with most data already pre-filled
- A mobile tablet on board is used for SmartLog and “take me home” ECDIS backup
- Real-time vessel and fleet tracking means no AIS gaps
- Advanced Eniram fuel-efficiency algorithms identify areas for savings

Wärtsilä solutions also enable you to optimise your propulsion

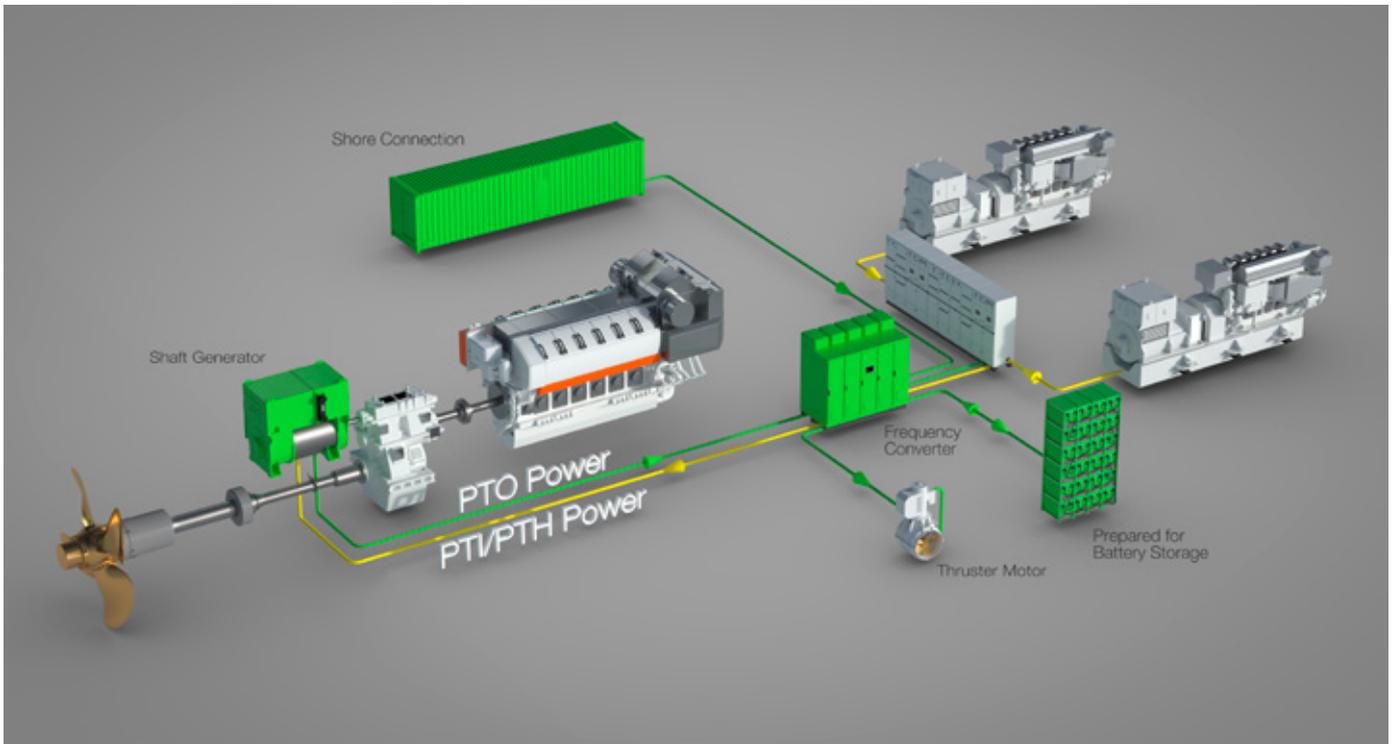
machinery according to actual ship speeds. Today’s standard optimisation point is at high ship speeds, which are almost never used. Optimising the propulsion machinery for actual ship speeds can deliver up to 5% fuel savings.

Shaft generators are the most effective way to produce electricity onboard. Depending on the operation profile a hybrid machinery arrangement may also give considerable fuel savings, especially during waiting and port operations. Combining shaft generators and hybrid machinery can deliver up to 5% fuel savings.



“ Tanker and bulker vessels are typically sold five times over their lifecycle





Example of hybrid machinery configuration

INCREASE THE RESIDUAL VALUE OF YOUR VESSEL

A complete solution package from Wärtsilä can help your vessel achieve better performance and fuel efficiency while also extending its profitable life span – meaning your vessel maintains its value over the lifecycle.

Asset value or residual value is based on day rates, the year a vessel was built, fuel consumption, DWT and the shipyard which built the vessel. With Wärtsilä solutions, your vessel is optimised to achieve greater reliability, a longer productive lifetime and high fuel efficiency, resulting in a higher resale value.

Getting a good return on a vessel is important for investors, owners and charterers, and fuel efficiency is a key factor in this equation. Wärtsilä solutions can deliver this through guaranteed asset performance solutions that provide shared risk and reward based on vessel performance. We also support the Poseidon Principles by delivering concrete data to lenders to provide greater performance oversight.

IMPROVE RELIABILITY

Wärtsilä solutions also reduce risk, improve vessel reliability and minimise downtime to help you get more out of your assets. Wärtsilä Expert Insight is an innovative breakthrough that leverages artificial intelligence (AI) and advanced diagnostics to monitor equipment and systems in real time. When anomalous behaviour is detected, it is flagged for specialists at Wärtsilä Expertise Centres – allowing them to support you proactively with an appropriate resolution to the issue. This means that unplanned mechanical anomalies can be spotted before they

“ The annual cost saving on unscheduled maintenance achieved with Expert Insight is 69%* ”

impact the vessel and the committed schedule, lowering maintenance costs and increasing uptime.

In addition to offering expertise, our field service capabilities continuously evolve to meet the needs of the increasingly complex systems used on vessels. Wärtsilä can take full responsibility for service quality regardless of where an asset may be in the world, helping owners and operators realise significant savings in operating costs and enabling you to focus on your core business.

The benefits of Wärtsilä Smart Maintenance

- Transparency – long-term visibility of lifecycle maintenance costs
- Flexibility – tailored solutions and the ability to handle all maintenance needs anywhere in the world
- Technical expertise – quality and performance guaranteed
- Reduced fuel consumption – effective and predictive maintenance optimises performance
- Remote support – online support for crew to implement fixes, minimising the need for external service engineer visits

* Data based on 54 LNG carriers



CONTACT US

If you're looking for more from your vessel, our solutions will meet your needs. Contact our specialists – we're here to help:

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WHY CHOOSE WÄRTSILÄ?

Typically, owners contact shipyards first and receive offers for standard, off-the-shelf designs. Wärtsilä wants to change this by encouraging owners to contact us before they reach out to the yards. Based on the owner's actual needs, we can look at different technologies and see what alternatives would give the best ROI. For example, the standard ship speed optimisation point of 14.5 kn laden is not necessarily the optimal recommendation. By monitoring a fleet's existing AIS data, we can suggest how to optimise propulsion machinery according to actual ship speeds.

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