



Company News

Berge Bulk unveils the World's most powerful Sailing Cargo Ship

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Berge Bulk, one of the world's leading dry bulk ship owners, launches its Newcastlemax bulker, Berge Olympus, with four retrofitted BARTech WindWings by Yara Marine Technologies. The WindWings installation is part of Berge Bulk's ambition to become carbon neutral by 2025 and marks the Berge Olympus as the world's most powerful sailing cargo ship.

Emission-free Wind

With four WindWings installed, each possessing an aerodynamic span of 37.5 metres height and 20 metres width, the Berge Olympus will save 6 tonnes of fuel per day on an average worldwide route and, in the process, reduce CO₂ emissions by approximately 19.5 tonnes per day. With these fuel savings and CO₂ reductions, Berge Bulk is evaluating the potential of installing WindWings on more of its vessels that trade on routes with favourable wind conditions.

High-tech Retrofits

Berge Bulk's WindWings project is a testament to its commitment to lead the way towards a zero-carbon future while enhancing vessel efficiency. This initiative aligns with the new IMO goals, to reach net-zero GHG emissions from international shipping by or around, i.e. close to 2050, as well as indicative checkpoints for international shipping to reach net-zero GHG emissions for 2030 (by at

least 20%, striving for 30%) and 2040 (by at least 70%, striving for 80%). Contributing to this mission, Berge Bulk's WindWings project reflects its dedication to environmental sustainability and technological advancement.

In addition to the installation of the WindWings, Berge Olympus has been retrofitted with a shaft generator system. The shaft generator is driven by the main engine to supply electric power to the vessel, thus saving fuel and reducing emissions. With a 1MW capacity, it is sized to eliminate the need to operate auxiliary engines while at sea. This installation is in itself ground-breaking and concludes a program that saw multiple vessels retrofitted with the technology.

The Marshall Plan

As part of the global effort to reach future decarbonisation goals, Berge Bulk is forging a trail to carbon neutrality by 2025 through safe, efficient and sustainable shipping. To achieve this milestone, Berge Bulk has deployed a four-pillar decarbonisation plan that focuses on improving fleet efficiency, leveraging the latest maritime technology, piloting new fuels and investing in carbon capture, Berge Bulk calls it the Marshall Plan. Berge Bulk's adoption of WindWings — the culmination of years of research by naval architect BAR Technologies — highlights the clear opportunity for vessel owners to swiftly retrofit new technologies to make a rapid and profound difference to the climate impact of their fleet.

James Marshall, Chief Executive Officer, Berge Bulk concluded: "At Berge Bulk, we are constantly striving to enhance our efficiency and reduce the environmental impact of our existing fleet. From 2008 until today, we have achieved a remarkable 46% reduction in our CO₂ emissions per tonne mile, already surpassing the 2030 IMO target for reducing carbon emissions intensity. There's still so much to do as we accelerate the transition to new fuel in the zero-carbon future. That is why we are proud to partner with BAR Technologies and Yara Marine Technologies to pioneer this WindWing system. The Berge Olympus is a testament to innovation and sustainability."

John Cooper, Chief Executive Officer, BAR Technologies said: "We're immensely proud to be spearheading wind-assisted propulsion through the development of WindWings and through our shared vision with Berge Bulk to launch the world's most powerful sailing cargo ship. We cannot afford to stand still in developing sustainable solutions for the shipping industry. We believe there is more to be done to harness wind power and push shipping into a greener, and more efficient era. To that end, we are already working on superior hydrodynamics and new types of accommodation blocks with several vessel designers."

Thomas Koniordos, Chief Executive Officer, Yara Marine Technologies said: “Wind-assisted propulsion has the potential to offer immediate long-term solutions for shipping’s pathway to Net Zero. We are proud to work with trusted partners such as Berge Bulk and ensure that this technology can be scaled and manufactured to shipping’s high standards, ensuring a robust and resilient supply chain that can meet industry demand.”

Key Info

- Berge Olympus is a bulk carrier ship with four WindWings, a technology that uses wind power to reduce fuel and emissions.
- Berge Olympus will sail between Brazil and China — a trade route known for having favourable wind conditions.
- The WindWings are large, rigid sails that can be adjusted to optimise the aerodynamic performance of the ship.
- Each of the four WindWings is 20 m wide and 37.5 m tall, which is taller than a 10-story building.
- The total surface area of the four wings is 3,000 m², which is more than three times the surface area of the wings of an A380 airplane (843 m²).
- The WindWings can save up to 20% fuel, reducing CO₂ emissions by 19.5 tonnes per day on an average worldwide route.
- The WindWing technology actively supports the industry in its mission to reduce the carbon intensity of international shipping by at least 20% by 2030 and 70% by 2040, reflected in the new IMO regulations.
- The WindWings are expected to achieve double digit percentage reduction in fuel and CO₂.

About Berge Bulk

Berge Bulk is one of the world’s leading independent dry bulk owners and has an outstanding record for its reliable, safe and efficient delivery of commodities around the world. Starting out with 12 vessels in 2007, the company now owns, operates and manages a fleet of 85 safe and fuel-efficient vessels, equating to 14 million DWT.

Berge Bulk’s vision is to lead the world to a zero-carbon future through safe, efficient and sustainable shipping. Acknowledging the crucial role of emerging marine technologies in this transformation, Berge Bulk takes an active stance by retrofitting its existing vessels with revolutionary decarbonisation equipment as part of pilot trials, expediting the progress towards greener maritime practices.