

Two tracks to a shipping revolution

Reducing a lot on a few...

On vessels especially built for wind propulsion, there is a potential for almost fully sailing. The Oceanbird concept was developed in a Swedish R&D project, which showed that it is possible to reduce emissions from vessels by up to 90% if all emissionsinfluencing factors are aligned.



...and even more from a lot

To achieve a shipping revolution, we need to address the 60,000 commercial vessels on sea today. First focus is RoRo (Roll On, Roll Off) but we are also looking into other segments. One wing sail on an existing RoRo vessel at normal speed, can reduce fuel consumption from main engine with 7-10% on favorable oceangoing routes.



Wing 560

Height: 40 meters (131 feet)

Width: 14 meters (46 feet)

Total sail area: 560 m² (6028 f²)

Two segments: Consists of a main sail and a flap, optimizing the aerodynamic forces by creating camber

Materials: High strength steel, glass fiber and recycled PET

Safety philosophy: Always tiltable, even in strong winds

Actuation: Variable hydraulic drive

Energy consumption: Low (passive system)

Performance: One wing sail on an existing RoRo vessel at normal speed, can reduce fuel consumption from main engine with 7-10 % on favorable oceangoing routes.

This means a saving of 600 tons/675,000 liters of diesel per year, which corresponds to approx. 1920 tons of CO₂

Suitable for: Wind propulsion or wind assistance, on both newbuilt and existing vessels

Developed by: Oceanbird – a joint venture between Alfa Laval and Wallenius, founded in December 2021



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