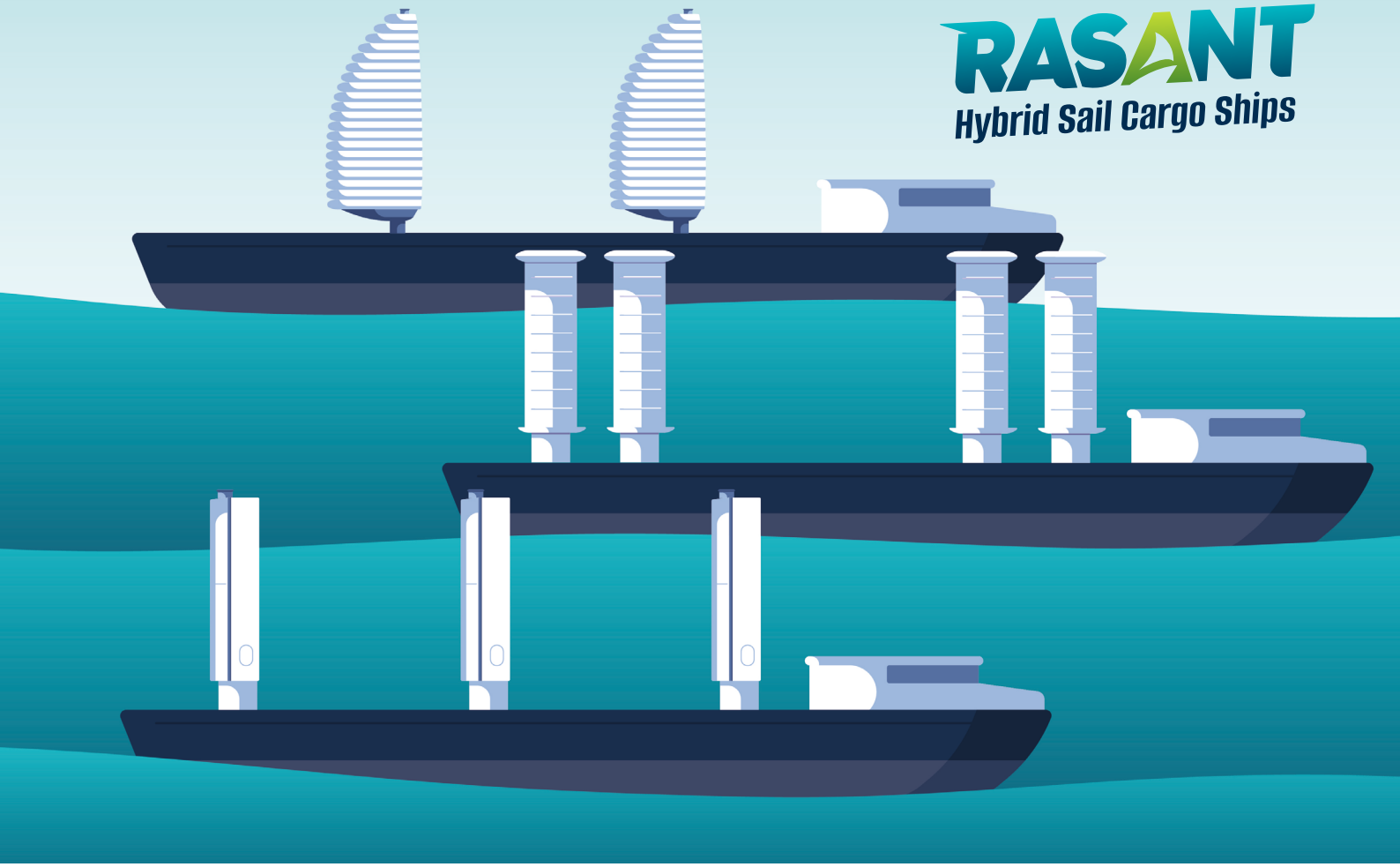
RASANT
Hybrid Sail Cargo Ships



PROJECT

Budget 2,9 Mio Euro **Duration** 01.01.2023 – 30.06.2025

Wind as the main propulsion of cargo ships! What was already common practice 100 years ago can be an essential part of the decarbonisation of maritime shipping.

As part of the project, the four project partners are developing a ship concept that meets the modern market requirements of climate-neutral cargo shipping, primarily using the power of the free medium of wind. An automated, powerful wind-based main propulsion system is supplemented by an auxiliary propulsion system based on renewable, hydrogen-based fuels. The share of the wind-based main propulsion will be maximised with ongoing technological development to enable the most cost-effective and self-sufficient ship operation possible.

The aim is to maximise the wind drive (green) in order to minimise the share of hydrogen-based machine drive (blue).

PARTNERS

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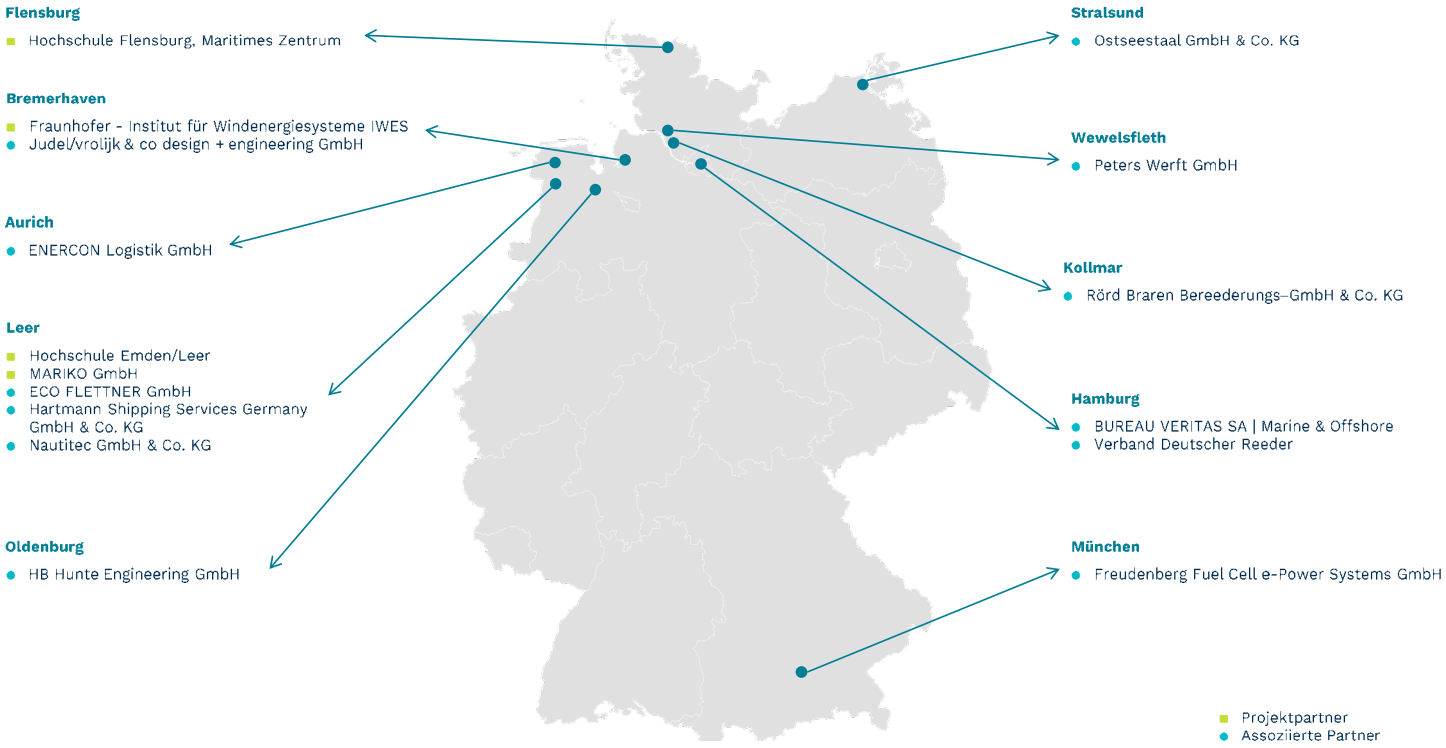

GOALS

1. Marketable ship concept with upscaling potential

A new ship concept is to be developed and optimised in a feasibility study with a focus on design, transport performance, cost structure and operating conditions. Particular emphasis is placed on the marketability of the concept so that it can provide relevant support in the transformation to climate-neutral shipping through corresponding upscaling potentials.

2. Cost-efficient, self-sufficient ship operation by maximising the wind-powered main propulsion system

The attractive and innovative character of the project aims at the development of a new type of ship whose energy demand is covered by a share of free wind energy to be maximised. The automated, high-performance wind main propulsion system is supplemented by a climate-neutral auxiliary propulsion system based on renewable, hydrogen-based fuels. This makes it possible to operate the ship independently of the weather.

3. Networking for climate-neutral wind-based ship propulsion concepts

A network of companies and research institutions is to be established. This will cover the entire spectrum of competences and services for the development, construction and operation of innovative ship concepts with wind as the main source of propulsion. The aim is to create optimal development potential for the maritime industry as a basis for a strong market position in the future market of climate-neutral shipping.

Nationales Innovationsprogramm Wasserstoff- und Brennstoffzellentechnologie | nip

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