

eMETHANOLxWSolution

Next Generation tanker vessel powered by e-methanol and wind assisted propulsion.

The objective of the eMETHANOLxWSolution project is to contribute to the decarbonization of the shipping industry and our customer's zero-emission supply chains of renewable fuels in the Baltic Sea and the North Sea.

The project demonstrates an innovative combination of foldable suction sails and a dual-fuel engine on the first Hybrid Solution Plus series vessel, uniquely designed to fit the one of the first coastal tankers in Europe using e-methanol as a main energy source in its operations. This will result in significant annual emission avoidance compared to a state-of-the-art newbuilt tanker, with an expected annual GHG emissions avoidance of more than 44 tCO₂e.

With the use of several technologies, the project aims to push the emissions to zero in a novel stepwise combination and system integration in a real operational environment in maritime transport.

How we do it

A conventional two-stroke diesel engine in our newbuild vessel that will be delivered in March 2025 will be converted to a dual-fuel engine, which can run both on (e-)methanol and diesel. Development of the dual-fuel engine is ongoing, and the conversion will be made in 2026.

In addition, suction wing sails technology will be demonstrated for the first time on a tanker vessel, enabling the best possible optimisation of the system, increasing the energy efficiency of the vessel.

The project aims to start operation by e-methanol and wind assistance in January 2027.

Future shipping

After demonstration of the eMETHANOLxWSolution project, these clean technologies will be scaled to our other Hybrid Solution Plus series vessels, representing a game changing shift towards sustainability in the maritime industry. A high scalability potential lies on both clean technologies onboard different types of cargo ships on new buildings and existing fleet.

By contributing to the decarbonization of the maritime sector, the project supports the development and deployment of innovative low-emission solutions and reaching the climate targets set by the IMO and the EU.

This project is co-funded by the EU Innovation Fund.

Beneficiary
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Co-funded by the European Union

Emissions Trading System
Innovation Fund

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