



European
Commission



USE OF RENEWABLE ENERGY
OUTSIDE ANNEX 1

INNOVATION FUND

Deployment of net-zero and innovative technologies

**eMETHANOLxWSolution: Next Generation tanker vessel
powered by e-methanol and wind assisted propulsion**

The Innovation Fund is 100% funded by the EU Emissions Trading System

| Project Factsheet

The objective of the eMETHANOLxWSolution project is to demonstrate an innovative combination of foldable suction sails and a dual-fuel engine uniquely designed to fit the new hybrid tanker, thus enabling the use of e-methanol as fuel and wind for increased energy efficiency. The project will have a 100 % relative greenhouse gas (GHG) emission avoidance, as the technology used will be able to replace the conventional technology that uses fossil fuels, contributing to the decarbonisation of the shipping industry and customer's zero-emission supply chains of renewable fuels in the Baltic Sea and the North Sea.

The project aims to produce one of the first coastal tankers in Europe that uses e-methanol as a main energy source in its operations. In addition, a wind assisted propulsion system (WPS) will be demonstrated for the first time in the newly built

COORDINATOR

TARNTANK SHIP MANAGEMENT AB

LOCATION

Sweden | Finland

CATEGORY

Renewable Energy (RES)

SECTOR

Use of renewable energy outside Annex I

AMOUNT OF INNOVATION FUND GRANT

EUR 2,755,885

EXPECTED GHG EMISSIONS AVOIDANCE

44,815 tonnes CO2 equivalent

STARTING DATE

01 October, 2023

ENTRY INTO OPERATION DATE

31 December, 2026

FINANCIAL CLOSE DATE

31 July, 2024

vessel, which will enable the best possible optimisation of the system. The project demonstrates the use of several technologies to push the emissions to zero in a novel stepwise combination and system integration in a real operational environment. Furthermore, the project promotes action towards improved energy efficiency in the maritime transport, especially with the WPS. In absolute terms, the combination of e-methanol and wind in a tanker will result in a larger annual emission avoidance compared to a state-of-the-art newbuilt tanker.

By contributing to the decarbonisation of the maritime sector, the project supports the development and deployment of innovative low-emission solutions and reaching the climate targets

| Participants

TARNTANK SHIP MANAGEMENT AB

set by the International Maritime Organisation and the European Union, for instance through the EU Emission Trading System and the new FuelEU Maritime regulation. The project will set an example and share acquired knowledge to other shipping companies about innovative emission reduction technologies.

Scaling these clean technologies to other vessels would further strengthen the available technologies for e-methanol and WPS as well as the e-methanol supply chains. The project will scale itself and convert the technologies to the other newly built and existing vessels in the future. Additionally, there is a high scalability potential to deploy both these clean technologies onboard different types of cargo ships.

Sweden