

HyMethShip

GREEN REVOLUTION ON THE HIGH SEA



ON THE WAY TO ZERO EMISSION SHIPPING

Shipping is a growing source of greenhouse gas (GHG) emissions from transportation and a major source of air pollution. There is still great potential to reduce energy use and control emissions from waterborne transportation.

HyMethShip is a breakthrough for reducing environmental impacts of ship propulsion. The objectives are:

97% reduction in GHG emissions from ship propulsion

45% increase in efficiency compared to the technology with conventional CO₂ capturing

Elimination of SO_x and PM emissions

Onshore full-size system demonstrator

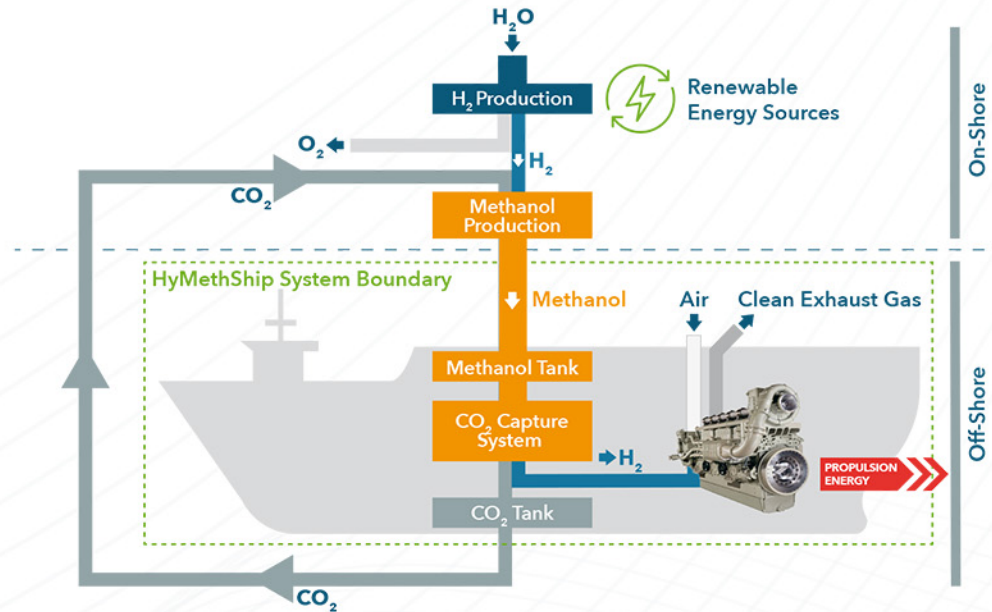


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INNOVATIVE APPROACH



The HyMethShip concept innovatively combines a membrane reactor, a CO₂ capture system, a storage system for CO₂ and methanol as well as a hydrogen-fueled combustion engine into one system.

Methanol is reformed to hydrogen, which is then burned in a conventional reciprocating engine that has been upgraded to burn multiple fuel types and specially optimized for hydrogen use.

Within this project the interactions of the technology building blocks will be optimized, the system will be designed and integrated into on-board installations.

The system will be validated and demonstrated on-shore for an application in the 1 to 2 MW range.

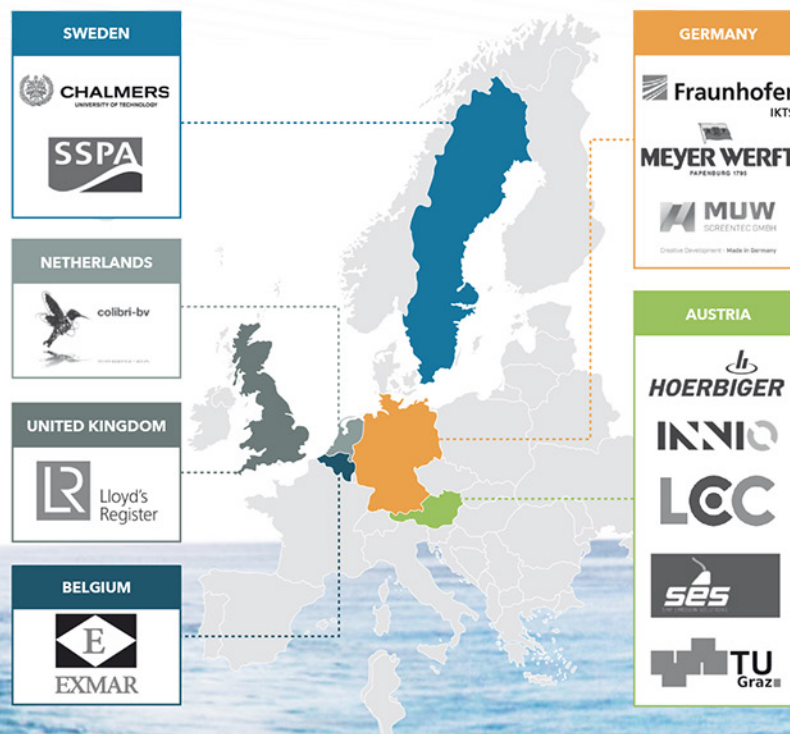
13 top-class partners from 6 EU member states represent the complete system. This powerful consortium guarantees the transfer of innovation to the market.

POWERFUL CONSORTIUM

PROJECT AND DISSEMINATION COORDINATOR

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