

Project Overview

FAST Track to Clean and Carbon-Neutral WATERborne Transport

through Gradual Introduction of Methanol Fuel:

Developing and Demonstrating an Evolutionary Pathway for Methanol Technology and Take-up



FASTWATER Project overview

The FASTWATER project

Timeline: 01.06.2020 – 31.5.2024

Budget: 6.3 mill. EURO



FASTWATER Project overview

Objectives





FASTUMATER

RETROFIT

- The engines to be converted to methanol operation in FASTWATER:
 - 1925 kW ABC 8DZC in harbour tug (left),
 - 300 kW Scania ED95 in pilot boat (top right) and
 - 235 kW Mercury D4.2L in coast guard vessel (bottom right)



Develop and demonstrate **universal, scalable retrofit kits** for converting ships to methanol use for a wide power range (200 kW - 4 MW)





Next Generation

Develop hybrid drives incorporating methanol-fuelled engines; develop the next generation of methanol-fuelled engines for further advances in efficiency, and further reductions in emissions and cost





VIATER

Supply Chain

EASTWATER

 \bigcirc

Demonstrate the complete supply chain from renewable methanol producers to ship bunkering, including setting up bunkering procedures for safe and efficient bunkering in a port environment







31.08.2020

Rules and Regulations

 Work with regulatory agencies to develop rules & regulations for methanol as a fuel (including a methanol fuel standard)





31.08.2020

PEASTUMPTER

Training



Develop a training programme for crew, gain experience with it during the project, and formulate best practices for use beyond FASTWATER



https://www.wilhelmsen.com/globalassets/imtc/images/imtc-activitiess.jpg?preset=oversize&s=372302603



General demo-case appraoch



• Tug-, Pilot boat and coast guard vessel will be tested in operation for 7-12 months





ASTEVATER



31.08.2020

Assessment

- Measure emissions for the different concepts
- Comprehensive assessment including the life cycle performance assessment (LCPA)
- Elaborate business plans based on a comprehensive assessment including the life cycle performance assessment (LCPA)

LCPA in WP 8







Commercialise

- Demonstrate the reliable operation of methanol powered combustion engines in 3 vessels
- Commercialise both medium speed (MS) and high speed (HS) methanol engines for shipping







WATER

31.08.2020

Methanol seminar on November 5th, 2020

Join us on November 5th to hear experts from academia and industry discuss questions such as:

- How much "green" methanol is being produced today, what can we expect 5 years from now?
- What is the cost of carbon as a building block for renewable methanol, how can we capture it?
- What are engine efficiencies and pollutant emission levels for methanol engines today?
- What is the true potential of dedicated methanol-fuelled engines and fuel cells?
- What transport modes can be served with methanol?
- What is the status concerning rules®ulations for methanol-powered transport?





Follow us

Website:



Follow us on:

Linked in

FASTWATER



www.fastwater.eu



Contact

Fastwater project information:



www.fastwater.eu



Address: Telephone: Mail: Web:

Name:

Position:

Organisation:

Contrescarpe 33, 28203 Bremen +49 421 3351715 Christian.Norden@bal.eu

BALance Technology Consulting

www.bal.eu

Christian Norden

Consultant

GmbH

The project has received funding from the European's Horizon 2020 research and innovation programme (Contract No.:860251)

© FASTWATER Consortium 2020



17/E/R