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PRESS RELEASE

MAERSK TANKERS, NORSEPOWER, ETI, AND SHELL COLLABORATE TO TEST WIND PROPULSION TECHNOLOGY

Norsepower's fuel-efficient technology expected to save approximately 10% in fuel consumption and associated emissions on 109,647 DWT product tanker vessel

Copenhagen, Helsinki, & London – 14 March 2017: Norsepower Oy Ltd. in partnership with Maersk Tankers, The Energy Technologies Institute (ETI), and Shell Shipping & Maritime, today announced that it will install and trial Flettner rotor sails onboard a Maersk Tankers-owned vessel.

The project will be the first installation of wind-powered energy technology on a product tanker vessel, and will provide insights into fuel savings and operational experience. The rotor sails will be fitted during the first half of 2018, before undergoing testing and data analysis at sea until the end of 2019.

Maersk Tankers will supply a 109,647-deadweight tonne (DWT) Long Range 2 (LR2) product tanker vessel which will be retrofitted with two 30m tall by 5m diameter Norsepower Rotor Sails. Combined, these are expected to reduce average fuel consumption on typical global shipping routes by 7-10%.

The project is majority funded by the UK's Energy Technologies Institute (ETI) with contributions from Maersk Tankers and Norsepower. Shell will act as project coordinator, and provide operational and terminal / port consultancy to the project team, while Maersk Tankers will provide technical and operational insight.

Commenting on the partnership, Tuomas Riski, CEO, Norsepower, said:

"We are privileged and excited to be collaborating with Maersk Tankers, Shell, and the ETI on this project. We are optimistic that support for this trial from these industry leading organisations will open up the market for our technology to a larger number of long-range product tanker vessels – paving the way for ship fuel efficiencies, and ultimately reducing emissions, including greenhouse gases. As an abundant and free renewable energy, wind power has a role to play in supporting the shipping industry to reduce its fuel consumption and meet impending carbon reduction targets."

Tommy Thomassen, Chief Technical Officer, Maersk Tankers, explained:

"Together with our partners, we have the opportunity to deploy an innovative technology that can improve fuel efficiency on our LR2 product tanker vessels and help to reduce their environmental impact. We look forward to contributing to the project, and sharing our decades of experience and knowledge within safety and tanker operations."



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Karrie Trauth, General Manager, Technology & Innovation, Shell Shipping & Maritime, commented: “At Shell, we believe that innovation and technology are key elements to improving the efficiency and environmental performance of shipping operations. We look forward to using our shipping and technical expertise to support this trial.”

Andrew Scott, Programme Manager HDV marine and offshore renewable energy, The Energy Technologies Institute (ETI), added: “Flettner rotors have the potential to reduce ship fuel consumption substantially, especially on tankers and dry bulk carriers. It is one of the few fuel saving technologies that could offer double digit percentage improvements. To date, there has been insufficient full scale demonstration on a suitable ocean going marine vessel to prove the technology benefits and operational impact. Demonstrating the technology in this project will make it more attractive to shipping companies and investors, and could play a significant role in reducing the fuel costs and improving the environmental impact of shipping in the future.”

The Norsepower Rotor Sail Solution is a modernised version of the Flettner rotor – a spinning cylinder that uses the Magnus effect to harness wind power to propel a ship. Each Rotor Sail is made using the latest intelligent lightweight composite sandwich materials, and offers a simple yet robust hi-tech solution. When wind conditions are favourable, the main engines can be throttled back, providing a net fuel cost and emission savings, while not impacting scheduling. Independent experts will analyse the data gathered from the project before publishing technical and operational insights, and performance studies.

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Notes for Editors

About Norsepower

Norsepower Oy Ltd is a Finnish clean technology and engineering company pioneering the generation of renewable wind energy for the global maritime industry. Norsepower is the leading provider of low-maintenance, software operated, and data verified auxiliary wind propulsion systems.

For more information on the Norsepower Rotor Sail Solution, please visit www.norsepower.com

About Maersk Tankers

Maersk Tankers owns and operates the largest product tanker fleet in the industry. The first dedicated product tanker vessel was acquired in 1928, and ever since, the fleet has been expanding and improving to meet customer needs worldwide. Maersk Tankers is part of the Energy division of A.P. Moller - Maersk, headquartered in Copenhagen, Denmark.

For more information on Maersk Tankers, please visit www.maersktankers.com

About the Energy Technologies Institute

The ETI is a public-private partnership between global energy and engineering companies – BP, Caterpillar, EDF, Rolls-Royce and Shell – and the UK Government.

The role of the ETI is to act as a conduit between academia, industry and the government to accelerate the development of low carbon technologies. We bring together engineering projects that develop affordable, secure and sustainable technologies to help the UK address its long term emissions reductions targets as well as delivering nearer term benefits. We make targeted



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commercial investments in nine technology programmes across heat, power, transport and the infrastructure that links them.

About Shell Shipping & Maritime

Shell Shipping & Maritime is Shell's centre for maritime expertise. Located within Shell's integrated Trading and Supply business it provides commercial, ship management and technology services, along with assurance advice to internal and external customers. It is the world's largest charterer of ships and operates 10 oil tankers and around 40 LNG carriers. Shell transports over 35,000,000 tons of LNG across the oceans each year.

On any one day, Shell has an interest in around 300 ships and 1200 barges on the world's oceans and rivers. It is involved in over 100,000 cargo transfers a year. A Shell cargo is loaded or discharged every five minutes into one of the 130 global ports and terminals in which it operates.

Shell Shipping & Maritime is also accountable for the safety aspects for all of Shell's floating activities, including mobile drilling rigs, supply boats, anchor handlers and tugs, Floating Oil Storage, Regasification Units and Single Buoy Moorings

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