

WASP News

Putting the **Sail** Back into **Sailing**

January - 2023

The WASP (Wind Assisted Ship Propulsion) project

Funded by the Interreg North Sea Europe programme as part of the European Regional Development Fund (ERDF) this project brings together universities and wind-assist technology providers with ship owners to research, trial and validate the operational performance of a selection of wind propulsion solutions on five vessels, thus enabling wind propulsion technology market penetration and contributing to a greener North Sea transport system through harvesting the region's abundant wind potential.

Market Uplift

The wind propulsion market grew throughout 2022. The WASP project played a significant role in showcasing and validating a selection of wind-assist technologies. As of December 2022, there were 23 commercial vessels with wind-assist systems installed and 2 wind-ready vessels bringing total tonnage to over 1.4 million dwt. The IWSA estimates that as many as 24 additional wind-assist ships will join the fleet in 2023 and even more growth in market is yet to come.

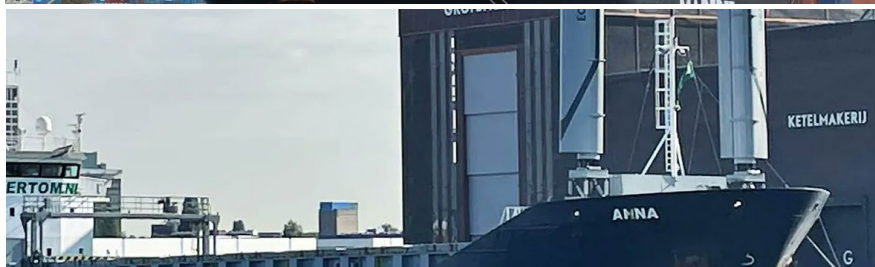
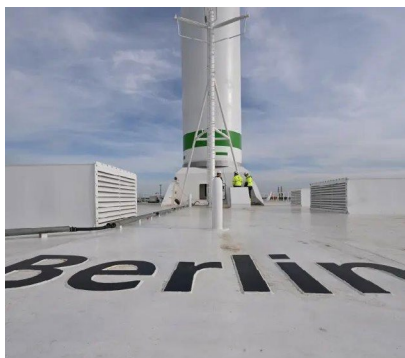
WASP Final Conference

The International Academic conference on Shipping, Sustainability and Solutions will be held in collaboration with the Hapag-Lloyd Center for Shipping and Global Logistics at Kühne Logistics University (KLU) in Hamburg on March 1 – 3, 2023. The conference will cover many sustainable shipping aspects, including energy management, policy, technology, zero and low emission fuels, and wind-assisted ship propulsion. WASP project presentations will be on the March 3, featuring all of the main work package deliverables: Engineering, Validation, Market Analysis, Finance and Policy.

IMO & EU Engagement

The WASP project has been actively engaging with the EU on a number of different levels in 2022 including presentations made about the project at seminars during EU Green Week and European Maritime Days and the hosting of a photo exhibit held at the EU Parliament. Two events were also held at the IMO, a photo exhibit and a presentation made at and IWSA side event, during MEPC79 and the intersessional working session (ISWG 13) in early December.

Market Uplift



Throughout 2022, the wind propulsion market has been growing after the inevitable delays that the COVID-19 pandemic caused along with the global logistics disruption. The WASP project has, of course, played a significant role in showcasing and validating a selection of wind-assist technologies.

As of December, there were twenty three commercial vessels with wind-assist systems installed, along with two that are wind-ready, which brings the total tonnage to over 1.4 million dwt worldwide. These include the MV Berlin fitted with one 30m x 5m Norsepower

rotor sail in May, the sister ship of the MV Copenhagen that was outfitted as part of the WASP project. [Read more...](#)

Also included are two vessels retrofitted with eConowind suction sails, the 7,395 GT RoRo MV Marfret Niolon fitted with two containerised systems and the general cargo vessel, the 5,097dwt MV Anna, fitted with two 16m bow mounted ventifoils. There are ten more installations pending for the first half of 2023, including the retrofitting of two 35m x 5m Norsepower rotor sails on board the 234m long, 74,273GT RoRo, the MV Delphine, slated as the world's largest short-sea ro-ro freight

ship. eConowind suction sails are to be fitted to two Vertom operated MV Perfect and the MV Progress, both 119m long, 6,500dwt general cargo vessels. [Read more...](#)

A further six 3,600 dwt general cargo vessels have been ordered that will be ready to take suction wings for operation in the North Sea region for delivery in 2023/24. [Read more...](#)

Overall, the International Windship Association (IWSA) estimates that as many as twenty-four additional wind-assist ships will join the fleet in 2023 and this growth in the market is only likely to grow.

Speed Trials

The sea trial reports for the MV Frisian Sea and MV Rord Braren have been completed by SSPA and the updated reports are now available.

MV Frisian Sea [Read more...](#)
Rord Braren [Read more...](#)



Ankie Extension

Earlier in the year, WASP project partner, Van Dam Shipping installed the extended version of the retrofitted VentiFoil. This planned extension activity, extends the sails by three meters for a total of 13 metres. The sea trials and performance monitoring of the new sail extensions is being undertaken by SSPA.

International Maritime Organization Engagement



In December, the WASP project took to the international stage with two impactful events held at the International Maritime Organization (IMO) headquarters in London, UK during the deliberations at MEPC79 and the intersessional working session (ISWG 13) that preceded that.

The delegates at these two week-long sessions were discussing whether the ambition level for decarbonisation can be raised from the current decrease in emissions by at least 50% by 2050 along with mid- to long-term measures such as carbon pricing/levy and other Market Based Measures (MBMs). The first event was a photo exhibit, featuring the project vessels and explanation of the project which gained a lot of interest during break times and the evening events held in the delegates lounge on the first floor during the ISWG 13 during the first week. The exhibit was then moved upstairs during the MEPC79 week, and continued to receive visitors from the larger delegation participants. Over 100 WASP project pamphlets were distributed during the event.



This was followed by a WASP project presentation made as part of a wind propulsion side event organised by the International Windship Association (IWSA) on Tuesday 13th and the project was presented by Green Transition Denmark lead, Kaare Press-Kristensen, Senior advisor, Air Quality & Climate and took place in front of over 140 delegates. The side event was primarily to introduce the comprehensive MEPC79 Inf.21 paper on Wind Propulsion developments which was put together as part of the European Sustainable Shipping Forum (ESSF) wind propulsion workstream and co-sponsored by three European countries, Finland, France and Spain. There are significant contributions from the WASP project with four of the project deliverables highlighted in the paper.

[Read more...](#)







WASP Project held Conference at SMM, Hamburg

Interreg
North Sea Region
WASP
European Regional Development Fund



The WASP project touched down at SMM, the largest shipping trade fair in Europe held in Hamburg every two years. After two years of COVID-19 lockdown measures, it was billed as a 'return to normal' event and was very well attended by both wind propulsion providers, including

our technology providers Eco Flettner, Econowind and Norsepower, but also twenty five other members of the International Windship Association, indicating a serious upswing in interest and engagement in the industry. [SMM 2022 – Wind route](#)



The WASP project held a well-attended full day of presentations and panel discussions. The 60+ attendees had three sessions to choose from and most committed themselves to the full day experience and joined us for drinks at the Netherlands Pavilion to round off the day.

Session I: First-hand experiences with Wind Assisted Ship Propulsion (6 presentations & panel)

Session II: Results of, and predictions for Wind Assisted Ship Propulsion (4 presentations & panel)

Session III: Finance & Policies for Wind Assisted Ship Propulsion (3 presentations & panel)

In parallel, three of the WASP project members participated in the main GMEC conference session on Wind Propulsion, with Boomsma Shipping, HHx and IWSA discussing developments and highlighting many of the deliverables from the WASP project as examples for the audience of over 150.



Secretary General Kitack Lim opens the GMEC conference with MV Frisian Sea as the conference backdrop. This year, the IMO World Maritime theme is 'New technologies for greener shipping'

European Union Engagement



The WASP project has also been actively engaging with the EU on a number of different levels in 2022. The project was presented at one of the seminars at the European Maritime Days in Ravenna in May and later again during the EU Green Week. Photos of the MV Ankie, MV Frisian Sea and MV Copenhagen were also included in a photo exhibit held at the EU Parliament in Strasbourg in October during the deliberations over the Fuel EU Maritime proposals.

Policy Event – Hosted by Danish Shipping

Industry stakeholders gathered at another WASP event was hosted by Danish Shipping at their Copenhagen HQ with the first overview of the preliminary results of the sea trials conducted as part of the WASP project.



At the event Maria Skipper Schwenn, Executive Director, Climate Environment and Security at Danish Shipping delivered the opening address along with presentations from Kare Press-Kristensen, Senior Advisor, Green Transition Denmark, Tuomas Riski, CEO, Norsepower, Frank Nieuwenhuis, CEO, eConowind, Dr Frederik Gerhardt, Senior Specialist Aerodynamics Manoeuvring & Seakeeping, SSPA, Gavin Allwright, Secretary General, International Windship Association, Jan van Dam, Owner, Van Dam Shipping and Marko Möller, Manager Special Projects, Scandlines.

[Read more...](#)

Newsletter Back Issues



[June 2020](#)



[January 2021](#)



[July 2021](#)



[February 2022](#)

Also check out the WASP project Youtube channel for past Webinar recordings and ship videos – with more to come... [Youtube Channel](#)



EU Policy Updates

On the EU ETS and Fuel EU Maritime proposals, the deliberations are still ongoing between the Parliament, commission and Council however the inclusion of shipping into the EU ETS is confirmed and this carbon price will be applicable to ships over 5,000 GT from 2024, with a gradual introduction from 40% of allowances to 100% by 2026. Smaller vessels, from 400-5,000 GT will be included in the MRV regulation from 2025 and their inclusion in the EU ETS will be reviewed in 2026

Fuel EU Maritime is a more extensive package of regulations and measures, however although this is taking longer, the level of recognition of wind-assist and wind propulsion systems has grown significantly and this will be specified in the final text. While amendments for more substantial integration of wind propulsion into the regulations and formula were rejected by the EU Parliament in a vote 390 vs 243 in October, this still marks significant progress.

[Read more...](#)



This publication compiled by Green Transition Denmark focuses on air pollution with CO₂, SO₂, NO_x and particles from shipping, technical solutions as well as existing and further regulation and enforcement. Purpose: to inform/inspire decision makers and other stakeholders to implement ambitious regulation (and can also be used in the classroom). Note: Shipping causes other serious environmental problems e.g. pollution with invasive species, underwater noise, oil pollution, etc. These are widely described elsewhere and therefore not included. [Download](#)

This publication is funded by the Danish Maritime Fund, Climate Works Foundation, the Velux Foundations, Danish Energy Foundation, EU LIFE programme: Project LIFE4MEDECA and the EU Interreg North Sea Europe programme: Project WASP

Major Event 2023

WASP Final Conference



The International Academic conference on Shipping, Sustainability and Solutions will be held in collaboration with the Hapag-Lloyd Center for Shipping and Global Logistics at Kühne Logistics University (KLU) in Hamburg, Germany from 01 March (WASP meeting) through to 03 March.

The full conference will cover many aspects of sustainable shipping today, including; energy management, policy measures, new green technologies, alternative zero and low emission fuels, etc. and of course wind-assisted ship propulsion. By attending this impactful event, you will get the opportunity to engage and discuss the many issues and solutions integral for developing a sustainable shipping sector with some of the leading experts in the field, including wind propulsion.

The conference will plot the necessary steps towards improving the sustainability profile of the maritime sector and contribute with qualitative and quantitative analyses to the assessment, modelling and estimation of environmental, social and economic aspects related to shipping and ports, with particular focus on management, operations, strategy, regulation, technologies and stakeholders. This event will provide a forum for a debate on emerging sustainability issues in maritime supply chains.

The WASP project presentations will be clustered together on the 03 March, featuring all of the main work package deliverables: Engineering, Validation, Market Analysis, Finance and Policy

Speakers will include:

Prof. Dr. Joshua Lacey (KU Leuven Department of Mechanical Engineering) discussing the engineering deliverables from the project.

Dr. Sofia Werner (Manager of Strategic Research - Hydrodynamics at SSPA) with the latest information on the operation of wind propulsion technologies and performance measurements.

Lara Pomaska (Kühne Logistics University) covering the latest developments in the policy and viable business work package.

Gavin Allwright (Secretary General of the International Windship Association) presenting an overview of wind propulsion developments.

There will also be a 'market place' where you will be able to interact with innovators, technology providers, project developers and researchers from across the field displaying their technologies and concepts, and including all of the experts from the WASP project. [click here...](#)

An extension for abstracts is open until 31 January and papers covering all aspects of sustainable shipping are welcome – see call for abstracts for more details. [click here...](#)

Recent & Upcoming Events & Publications

Blue Week – WASP Seminar & Finance Webinar on SS Rotterdam



In the Summer, we held a seminar and finance webinar onboard the SS Rotterdam and also took part in the others events held as part of MARIN's Blueweek. The seminar focused on the recent developments and results from the project and was again well attended. HHx blue also held a finance webinar outlining the two web-based tools to support the early stages of decision-making. The aim is not only to promote WASP technologies but to offer sufficient arguments for any selection and allocation of resources.

- Technical Selection Assessment: [Technical Selection](#)
- Financial Assessment – Sweet Deal: [Financial Model](#)



Upcoming Events

1. **RINA & IWSA: Wind Propulsion Conference**, to be held at the IMO Headquarters, London, UK will feature papers from WASP project. 16-17 February [Read more...](#)
2. **WASP Best Practices Exchange: Linking technological capabilities to the business case for wind assisted ship propulsion.**
3. **Seminar Date: 23/02/2023, 10.30-12 CET**
4. **Final Webinar:** The last webinar of the series will be held in April 2023 and feature the WASP work package leaders discussing the deliverables and outcomes of the project.
5. **EU Policy Papers & Meetings** – we will be continuing in Q1 2023 to deliver briefings and engage with EU policy events.

Education event

In October, NMT and SSPA organized an educational event at the TU Delft, in collaboration with study association 'William Froude'. A total of 105 students turned up for the event, which is more than anticipated. The international group of students came from all years of the Maritime Technology programme, i.e. Bachelor's and Master's students.

The topic of the event was WASP and WASP Sea Trials in particular. Subject matter specialist Sofia Werner was invited to share her experiences with the students on the sea trials and their results. A general introduction was given by Kasper Uithof, Project Leader of the WASP project including videos of WASP vessels underway and discussion of digital twin development within the project



Key Performance Indicator Workshops

Three multi-stakeholder workshops were held in September and October in collaboration between the WASP Project, the International Towing Tank Conference (ITTC) and the International Windship Association to work on common definitions of key performance indicators (KPI) for wind propulsion. The community has not yet agreed on these standardised KPI's and this makes it difficult to compare technologies and it risks the level playing field. These important meetings brought together over 30 experts from across the sector including technology developers, R&D experts, class and shipowners and the comprehensive work undertaken has moved the development of robust wind propulsion KPI's forward substantially.

The results will be presented to the ITTC in summer 2023.

Partners & Contact

