

Newsletter May 2022

Secretary's Message

In the December newsletter, I reflected on some new realities; the growing momentum towards decarbonisation in the industry, the 'new' reality of a Covid impacted world and the strains on the logistics chain. This year, these realities have received a turbo-charge, with the conflict in Ukraine, sanctions and disrupted fuel and food distribution chains and the realisation of the need for efficiency and economy to be balanced more and more with energy supply security and resilience. Thus, I feel this is an opportune time to briefly revisit and reflect on five pillars of wind propulsion development; **Policy, Price, Providers, People and Perception.**

Policy: This has seen a marked upswing across the renewable energy sphere. Dependency on supplies of fossil fuels (and fuels in general) is being challenged in the mid- to long-term with a shift towards renewable energy. In shipping this is manifesting at IMO and EU levels with a growing tide of regulation from carbon reduction targets, short-term measures such as EEXI and CII and moves towards carbon pricing. The trick is in positioning wind propulsion at the heart of the regulatory framework, and there we still have work to do. The granting of IMO consultative status to IWSA and the launch of wind propulsion work streams in the European Sustainable Shipping Forum (ESSF) and the International Towing Tank Conference (ITTC) earlier this year are all steps in the right direction, with a clutch of submissions slated for MEPC 79 (Dec 2022) and MEPC 80 dealing with wind sector overview, measuring/validating technology and a holistic approach to design and wind.

Our message to regulators – a level playing field for all energy sources in policy and subsidy!

Price: Here the driver is clear, fuel prices have spiked with the global average price of VLSFO well over \$1,000/ton and the alternative fuel roll likely to be a costly one. This is boosted by the inclusion of shipping in the EU ETS (currently \$280/ton fuel) next year, adding pressure on IMO to adopt similar MBM's. To add 'carrot' and not just 'stick' is important for the wind propulsion segment, thus we strongly support returning proceeds back to the industry to be used to lower costs of installations and new builds and for the wind propulsion segment to command a substantial portion of those funds, commensurate with the decarbonisation potential of the technology across the fleet.

Providers: Well, our members have certainly been stepping up, and each week of this year so far we have seen new projects, new installations and pending orders announced or partnerships commenced. This is as it should be, and the healthy R&D pipeline will also be delivering much the same in the way of pre-market and early market uptake in the coming year.

People: Almost everyone I am talking to within the industry have shown a keen interest in wind propulsion developments, though not everyone, everywhere. Pioneering ship owner executives get it, many cargo customers get it and financiers are increasingly getting it, but there is a difference between 'getting it' and 'investing in it'. Momentum here is also starting to grow, however a critical mass is still some way off.

Perception: Shifts here can be difficult to quantify, but when both the Economist and the Financial Times feel that wind propulsion is one technology segment to keep an eye on in 2022 and beyond, that starts to indicate a shift in thinking is underway, with cargo owners and the wider world sitting up and taking note – the resounding message here is that the new take on wind propulsion is coming of age, and it is a 'Now' solution to a very 'Immediate' problem.

So, what is holding things back? well finance tends to follow the sure thing, and shipowners and policy makers are hungry for verified data and proven solutions. That is on us to provide more of that. More demonstrators, more validated data leads to less uncertainty, less risk and higher uptake

Gavin Allwright (IWSA Secretary General) secretary@wind-ship.org

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- Membership & Fee Structure



bound4blue (Spain)

In late December, [bound4blue](#) installed an 18m eSAIL® on “La Naumon”, the theatre vessel of the world-acclaimed La Fura dels Baus and the production company Elipsis Onboard, which was co-funded by the EU, in the framework of the GREENing the Blue project (CINEA – European Climate, Infrastructure and Environment Executive Agency). [Press Release \(English\)](#)

More recently the company has signed an installation agreement with the Dutch short sea ro-ro and general cargo vessel operator Amasus Shipping to install two 17m eSAIL® on the 91m, 2,850dwt vessel EEMS Traveller. [Read more...](#)

This month, IWSA member [Louis Dreyfus Armateurs](#) has also signed an agreement with bound4blue to install three eSAIL® systems in 2023 on a vessel owned and operated by them (more vessel details to follow soon) [Read more...](#)



Norsepower (Finland)

In May, [Norsepower](#) installed a rotor sail on a second Scandlines hybrid ferry, the 22,319 GT MV Berlin, following the successful results achieved on the sister vessel MV Copenhagen. The foundation work was completed in advance and then the installation of the 30m rotor sail was completed in a few hours during regular service for the vessel. [Read more...](#)

Norsepower has also signed an agreement with CLdN to install two tilting 35m x 5m Rotor Sails on the MV Delphine, a Ro-Ro vessel in operation between the UK, Ireland and Europe, which is reportedly the largest short sea Ro-Ro vessel operating in the world today. [Read more...](#) They have also recently signed a formal agreement with NAPA, the global maritime software, services and data analysis company to offer weather routing software in combination with its Rotor Sails solution. [Read more...](#)

Sea Cargo, the operator of the twin rotor sail SC Connector also announced in January a new route from Norway to the UK to ship salmon. [Read more...](#)



Mitsui O.S.K Lines (Japan)

In February, [Mitsui OSK Lines \(MOL\)](#) announced the completion of the first full-scale Wind Challenger Rig at Oshima shipyard, Japan. The full-scale rig has been extensively shore tested in preparation for installation this summer on a new build bulk carrier currently under construction [Read more...](#)

This month, [Enviva Inc.](#), the world’s leading producer of sustainable wood bioenergy, and MOL Drybulk Ltd. (MOLDB), a subsidiary of Mitsui O.S.K. Lines Ltd. (MOL), announced they have signed an additional memorandum of understanding agreement to deploy a 62,900dwt environmentally friendly bulk carrier (EFBC). Following a successful joint study phase, the EFBC is scheduled for launch in 2024 and will aim to utilise rotor sail technology from [Anemol Marine Technologies Ltd](#) together with MOL’s ‘Wind Challenger’ rig. This hybrid vessel will also be built by Oshima Shipbuilding. [Read more...](#)



AlfaWall (Sweden)

The Oceanbird designers have adopted a new wing sail design. The wing consists of a core and a flap, optimizing the aerodynamics forces. It is half the size but shows the same performance as the previous design, allowing a smaller footprint: both environmental and on deck. Instead of a telescopic solution to allow the vessel to pass under bridges and reduce the power in hard weather, the new wing can be folded and tilted. [Read more...](#)

In an unusual but very positive development, the developer of the Oceanbird concept, has been confirmed as the official partner for ABBA Voyage, the revolutionary new concert opening in London, where ABBA will perform as digital avatars. “It is extremely pleasing to be able to make it all happen in partnership with Wallenius, who are as keen on sustainability as we are,” says Benny Andersson. A deep commitment to sustainability made the ABBA members interested in the Oceanbird concept, which makes it possible to significantly reduce emissions from vessels. The parties soon discovered that they shared several joint values and a partnership started to take form. [Read more...](#) [Watch video](#)





eConowind (Netherlands)

In May, Netherlands-based [eConowind](#) and Vertom Shipping announced their collaboration to install wind-assist VentoFoil units on the two general cargo vessels MV Progress and MV Perfect, making it the first fleet order for Econowind. These will be units will have an upgraded suction method reducing the amount of moving parts and speeding up the production process. [Read more...](#)

In March there was also the installation of two modular containers housing twin Ventifoil suction wings on the 7,395 GT RoRo vessel, Marfret Nilon. [Read more...](#) and in January, Conoship International formally announced that their design for 3600 dwt low carbon, wind-assisted mini-bulkers will be built at the Fosen Yard in Germany. The six ships will each feature twin ventifoil systems and are scheduled to be delivered in 2023. [Read more...](#)



Neoline & Chantiers de l'Atlantique (France)

In March, [Bureau Veritas \(BV\)](#) delivered an Approval in Principle (AiP) to [Chantiers de l'Atlantique](#) for their innovative sailing propulsion system, Solid Sail, tailored for the large ships market. [Read more...](#)

This month, [NEOLINE](#) took a further step closer to launching its first 136m primary wind powered Neoliner RoRo vessel which is scheduled to begin construction this year aiming to enter into service in 2024-2025. Following technical studies carried out by Chantiers de l'Atlantique, Neopolia, Mauric and [D-Ice Engineering](#), the ship's rigging will consist of two "Solid Sail" folding rigging systems, including two masts of 76 m in height, each equipped with the "Solid Sail" sail technology of 1,100 m² and a flexible jib of 400 m², with a total sail area of 3,000 m². [Read more...](#)

Also recently Jean Zanuttini, President of NEOLINE gave an interview to Sustainability [Read more...](#)



Anemoi Marine Technologies (UK)

In 2021, [Anemoi](#) set up its production team in China and through 2022 onwards, Anemoi will be executing on the delivery of the TR Lady and other bulk carrier orders. Anemoi's production has been set up to facilitate increased capacity as adoption of Rotor Sail technology expands.

The first of six Rotor Sail vessel designs in Anemoi's Joint Development Project with SDARI (Shanghai Merchant Ship Design and Research Institute) and Lloyds Register has been completed. Lloyds Register awarded Approval in Principle for a 210,000dwt Newcastlemax vessel and validated the impact Rotor Sails have on the EEDI score. (More details to follow.)

The Anemoi team continues to grow in all 3 of its offices (London, Southampton and China). So far in 2022, 9 new team members have joined and a further 19 will be hired this year in the Engineering, Production, Projects, Sales and Finance departments to support increased Anemoi Rotor Sail uptake.

In addition, this month Enviva Inc., the world's leading producer of sustainable wood bioenergy, and MOL Drybulk Ltd. (MOLDB), a subsidiary of Mitsui O.S.K. Lines Ltd. (MOL), announced the agreement to build a 62,900 dwt bulk carrier that will feature Anemoi rotor sails alongside a MOL designed rig, scheduled for launching in 2024. [Read more...](#)



Michelin (France)

In January, [Michelin](#) reached an agreement with Compagnie Maritime Nantaise to test the inflatable WISAMO sail system on the first commercial vessel, the 154m, 12,000 GT RoRo cargo MN Pélican. This will involve installing a 100m² sail before the end of the year operating on a UK/Spain route. [Read more...](#)

WISAMO has also been doubly rewarded by "2022 Trophée Innovation Ocean" & "Grand Prix du Public" awarded by Banque Populaire Grand Ouest / La Banque Bleue. Nominees and winners were invited to a great celebration event in Nantes (FR) to receive their prize last February. [Read more...](#) Since then, WISAMO has also been "Pôle Mer Bretagne Atlantique / PMBA" labelled, which is another important recognition and adoption from the ecosystem, and of course a new step to move forward. More information to come on the [WISAMO](#) LinkedIn page.



Zephyr & Boree, VPLP & AYRO (France)

The Canopée vessel has been designed by [VPLP](#) on behalf of 'Alizés' joint venture of [Zephyr & Boree](#) and Jifmar Offshore services, under construction at the Neptune yard and with over 50% completed, the ship will be delivered by the end of 2022 and the first of its kind to be equipped with [AYRO](#) wings. From 2023, the ship will transport Ariane 6 rocket parts between Europe and French Guiana. [Read more...](#)



Norwegian Ship Design (Norway)

The 88m, 5,500dwt 'With Orca' vessel has been awarded an Approval in Principle (AiP) by Lloyds Register. The vessel is designed by [Norwegian Ship Design](#) and features twin rotor sails and a hydrogen system with fuel to be supplied by Statkraft. It is scheduled to enter operation in early 2024. The zero-emissions vessel is planned to enter into a long-term transport contract with cargo owners Felleskjøpet Agri and Heidelberg Cement. [Read more...](#)



Grain de Sail (France)

In February, [Grain de Sail](#) signed with Piriou for the construction of its next cargo sailboat 'GRAIN DE SAIL 2'. during the One Ocean Summit week in Brest aboard Grain de Sail 1. The rigging will be provided by Lorima. Delivery of Grain de Sail 2, a pure sailing freight vessel with over 350 tons of payload capacity, is expected at the end of 2023. The company from Morlaix, Brittany hence will be adding a second cargo sailboat to its carbon-free maritime fleet in order to expand its transportation capabilities and meet the increasing demand for its coffees and chocolates. [Read more...](#)



Eco Clipper (Netherlands)

[EcoClipper](#) has purchased its first sail cargo vessel, the Dutch Klipper 'De Tukker'. This is the first vessel to join the EcoClipper fleet. The vessel will require a retrofit and will begin providing trade and passenger travel under sail on the North Sea this year. The ship has a barge shaped hull and will be able to carry about 80 cubic meters, or an equivalent of 50-70 tonnes, of cargo. It will also have accommodation for up to 12 paying guests. The ship was built in 1912 as a North Sea Klipper (Schoeneraak) to haul cargo in the region. It is currently at Talsma Shipyard in Franeker, the Netherlands, [Read more...](#)



TOWT (France)

[TransOceanic Wind Transport \(TOWT\)](#) has announced the signing of a new build contract to build their first 260ft (80m) sail cargo vessel at Piriou shipyard and the ship is scheduled to enter service in mid-2023. This will be the first of TOWT's primary wind vessel fleet and will have a 1100t capacity and operate with very low emissions on various routes worldwide with the aim to have all four vessels in operation by 2026. [Read more...](#)

SKYTUG (UK)

[SKYTUG](#) recently completed its first stage of development, bringing its CMDC funded project to a close with successful demonstration of the key principles of the concept, creation of a preliminary design for the tug, and a positive assessment of the technical and economic feasibility of the concept. That will underpin its progression to further development, including prototyping and development of a seagoing SKYTUG demonstrator vessel.



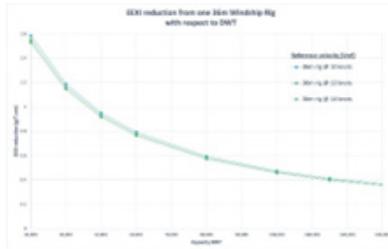
SKYTUG recently exhibited at the World Maritime Technology Conference in Copenhagen giving industry leaders and conference delegates the opportunity to learn more about this exciting innovation and how they can support its progress. [Read more...](#)



Windship Technology (UK)

This month, [Windship Technology](#) has published proprietary research highlighting the positive effect that its patented rig design can have in helping ship operators post the January 2023 EEXI environment legislation. Windship Technology tackles the problem of EEXI and EPL (Engine Power Limitation) with a long-term solution that extends the life of current and new-build ships and this research allows ship operators, owners and charterers the ability to easily see the positive, game-changing operational effect that installing just one 36m rig can have on their vessel going forward.

[Read more...](#)



Nayam Wings (Israel)

[Nayam Wings](#) has been moving forward with its R&D with testing of their POC2 model with a fully autonomous control system on the wing's manoeuvrability according to wind angle and wind speed. The tests are being conducted in a big water reservoir and the data collected is invaluable in taking the next development scaling steps. [Read more...](#)

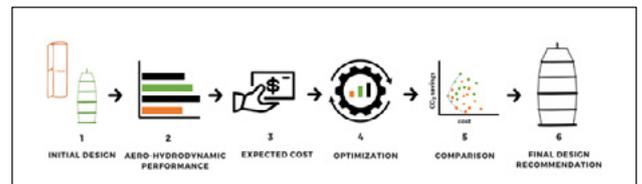
North Windship Technologies (Southern Spars) (UK)

In March, Martina Reche Vilanova kicked off her Industrial PhD project with North Windship Technologies and the Technical University of Denmark, which has already received the IWSA Award for 'Proposed Research Project.'



The project aims to reduce the confusion within the Wind Propulsion Systems (WPS) market, where each WPS can be superior for a specific set of route, ship, and operational constraints, while competing vendors are staking claims without objective scrutiny.

It will do so through development of a cost-benefit performance analysis tool. The goal is to determine for a given ship, what is the best technology to maximise emission reduction while minimising ROI timeline.





IWSA was granted full Consultative Status at the International Maritime Organization (IMO) in February. We have been attending various meetings at IMO including the deliberations at the Intersessional working group 11 and 12 meetings, with interventions and discussions highlighting the need to maintain a level playing field in decarbonisation efforts

to include all energy sources, both commoditised fuels and non-commoditised direct energy sources such as wind. We are currently working on three submissions for MEPC 79 & 80 and will be participating in additional IMO events throughout 2022 along with continued support for the IMO MTCC network, the IMO CARES initiative and FINSMART. We look forward to working closely with IMO in developing the regulatory framework around wind propulsion systems and in contributing to the toolbox of solutions for decarbonising the shipping industry. [Press Release](#)



In May, we announced our coalition partnership with the Global Centre for Maritime Decarbonisation (GCMD) www.gcformd.org which was formed on 1 August 2021 with funding from the Maritime & Port Authority of Singapore (MPA) and six founding partners: BHP, BW, DNV Foundation, Eastern Pacific Shipping, Ocean Network Express and Sembcorp Marine. The Centre's mission is to help the maritime industry reduce its carbon emissions as quickly as

possible by shaping standards, deploying solutions, financing projects, and fostering collaboration across sectors. We are looking forward to working closely with GCMD in knowledge exchange and in bringing more pilot projects into the market, validating those technologies and vessels and laying the groundwork for further rapid and extensive scaling of wind propulsion solutions going forward. [Press Release](#)



As further input into the United Nations initiatives around Oceans, IWSA engaged with the One Ocean Summit in Brittany with Florent Violain, President of Association Windship representing IWSA in person at the event and the Secretary General, Gavin Allwright delivered a number of recommendations and a call for action for policy makers and world leaders attending the summit. The key parts from that statement are as follows:

"During the forum, we have already heard calls for an appropriate level of carbon pricing and levies to be brought into the shipping industry, these are very clear, so I won't take time repeating those now.

Critically, we need to fully integrate the potential of wind-powered ships within International and European institutions, in order to further improve ocean protection and urgently deliver on decarbonisation pledges by adopting a 'propulsion or energy-centric approach rather than a narrow fuel-centric one'.

To this end, actively supporting the evolution of the International Maritime Organization's texts so that wind propulsion is considered in the same way as alternative fuels and is brought to the heart of the maritime transport decarbonisation pathway. Also, promoting direct wind power for shipping in European policies dedicated to the greening of the fleet, including in the proposals currently under discussion such as FuelEU Maritime and the wider 'Fit 55' program.

Another key recommendation is a concrete one: to deploy a fleet of wind-propelled vessels in island territories that are extremely vulnerable to climate change and that will be confronted with the challenges of availability and cost of alternative fuels – in particular the Pacific islands, but also the Caribbean territories and many other least developed regions and small island developing states. This fleet will stand as a strong contributing factor in building resilience in these regions and will be a symbol of international solidarity and a commitment to a 'Just Transition' in the Ocean sphere. Your support nationally, regionally and internationally for the research, development and deployment of direct wind propulsion systems and vessels will be a clear, unequivocal message that urgent and deep reductions in shipping emissions are not just possible this decade, but affordable and hugely beneficial to the blue economy and ocean environment.

As we call it, A Win, Win, Wind situation for All!"

In late June, IWSA will continue to add urgency to this call through presenting to EU representatives, MEPs and the EU Commissioner for Environment, Oceans and Fisheries as they prepare for the UN Ocean Conference in Lisbon where IWSA has also been granted representative status (27 June – 01 July). There we will be delivering the positive message to the entire maritime community that wind propulsion can accelerate and deepen the decarbonisation of shipping and help to facilitate the uptake of other low carbon propulsion solutions this decade. IWSA will be participating in the discussion, presenting at side events and will have a booth for the duration of the conference.

IWSA is very pleased to announce our new collaboration with the high quality, peer reviewed Journal of Sailing Technology, edited by SNAME. As part of that collaboration, we will be informing members of calls for papers, opportunities for presentations of papers at regular events and also disseminating the published materials, as this journal is one of the few fully public access journals out there.

Call for Papers: INNOV'SAIL 2023, the sixth conference in the series, to be held in Lorient, France, 7-9 June 2023. Papers are invited on the following topics to be covered by the conference (list not exhaustive). Note that the topics apply to yacht racing as well as wind-assisted ships:

- Aerodynamics
- Design of sails, masts, rigging, wings, other wind propulsion systems
- Hydrodynamics
- Design of hulls, appendages, foils
- Structural analysis and materials
- Fluid structure interaction
- Computational methods and model validation
- New experimental results and techniques
- Towing tank, wind tunnel and full-scale measurements
- Performance enhancement in general
- Performance prediction
- Weather routing, fuel savings
- Racing tactics and strategy, micro-meteorology and sites investigation
- Optimization, data science, artificial intelligence for sailing and wind propulsion
- Data analysis and integration with sailing and routing strategies



Abstracts of no more than 400 words and 2 pages should be sent to editor.innovsail@citevoile-tabarly.com by 17 October 2022. Notification of acceptance will be given by 10 December 2022. Full papers of accepted abstracts will be due by 20 February 2023. For more information [Innov'sail 2023](#)



In early May, SSPA was visited by HRH the Crown Princess Victoria of Sweden, HRH Prince Daniel of Sweden and HRH Crown Prince Haakon of Norway. In the Maritime Dynamics Laboratory at SSPA, one of the largest wave laboratories in the world, they were invited to a maneuver test in waves of the Swedish-Norwegian developed 'Orcellewind' vessel which Wallenius Wilhelmsen has the ambition to order in 2023 for delivery in 2026. The research project 'Oceanbird' is funded by the Swedish Transport

Administration, SSPA together with Wallenius Marine and the Royal Institute of Technology in Stockholm and is now taken forward by Alfawall, a partnership between Wallenius Marine and Alfa Laval. [Read more...](#)



IWSA is continuing to work within the European Sustainable Shipping Forum (ESSF) as part of the Ship Efficiency sub-group, which has launched a wind propulsion workstream with deliverables focused on technical submissions to IMO, a holistic design and wind propulsion proposal, EU regulation review and delivering an overview of the state of play in the wind propulsion market.

We have also continued to engage with the 'Fit 55' program of proposals directly and through our engagement with stakeholder advisory activities with the STEERER project and EU ETS research. The critical issues being discussed on the FuelEU Maritime proposal are the level playing field being adopted across energy provision, with increased appreciation and incorporation of wind propulsion into the heart of the provisions wherever possible, along with urging increased ambition in decarbonisation targets. There has been increased ambition in evidence with the EU Emissions Trading Scheme (ETS) deliberations and vote at EU Parliamentary level, with a renewed emphasis on the circularity of funds collected through the Ocean Fund proposal, thus creating the carrot/stick approach to encourage further investment in all low emissions technologies and fuels.



In March, Japan's Ministry of Land, Infrastructure, Transport and Tourism took a significant step forward and certified new ship designs including the use of hard sails and a wind kite to provide propulsion assistance and reduce vessels' environmental impact. [Read more...](#)



An extensive Wind Propulsion White Paper focused on the French market and technology developments was released earlier this year from [Association Windship](#) (IWSA Europe Atlantic Hub) – this white paper takes a look at the potential of wind propulsion from a France development opportunity perspective and congratulations to Secretary Lise Detrimont and the team in Nantes for producing this high quality report (Report in French). [Download here](#)

IWSA will again support the BlueWeek activities to be held this year on the SS Rotterdam, in Rotterdam from 13-16 June, especially the Natural Propulsion Seminar to be held on the afternoon of the 13th. This seminar will see 14 project and research presentations and panel discussions. This is always a key event in the wind propulsion calendar, and an important collaboration with IWSA. MARIN will be hosting and leading the proceedings and IWSA will moderate the Q&A/discussion sessions. On the following day, we will also hold our IWSA members meeting during the event (0900-1100 Tuesday, 14 June), so it is a great opportunity to hear about some interesting projects and also have time together with IWSA members (finally in person). There will also be project meetings for the WiSP and WASP projects and a WASP seminar regarding their financing/assessment tool from 1100-1200 on Tuesday 14th. More information and registration:



<https://www.blueforum.org/>

The WASP project has continued to roll out its deliverables holding a webinar in February on Digital Twins and Wind Assisted Ship Propulsion <https://youtu.be/uXhRdUyjh6Y>, a conference in early May in Copenhagen in collaboration with Danish Shipping to deliver preliminary results from the sea trials and standard operations, along with a number of other events. During this period there have also been a number of reports released, including [Barriers and overcoming strategies for accelerating the uptake of WASP](#) and the February newsletter gives an update of the project progress with the next one scheduled for September. [Read more...](#)

A Wind Propulsion Expert Database is also under development, with a [questionnaire online](#) which will form the basis for the expert database being produced and funded as part of the WASP project, and administered by the International Windship Association (IWSA).



From an education and training perspective, our Secretary General visited the World Maritime University (WMU) in early May to deliver a seminar on wind propulsion, drivers and barriers to development along with how wind solutions fit into the overall decarbonisation of the shipping sector. This was delivered within the "Alternative Fuels/ Technologies and Marine Renewable Energy" sessions as part of the WMU Maritime Energy Management Specialisation course.

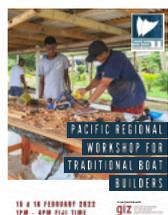
<https://www.wmu.se/>

IWSA has also continued its engagement with the Wind Assisted Ship Propulsion course provided by Enkhuizen Nautical College, Netherlands which covered a wide range of subjects including: WASP vessel performance, weather routing, velocity prediction, history and future of WASP, aero- and hydro- dynamics, policy and regulations, ship building and ships stability of WASP vessels. <https://www.ezs.nl/wind-assisted-ship-propulsion.html>

Research paper: A pay-as-you-use business model for the greening of shipping Cleaner Logistics and Supply Chain, Volume 4, July 2022 – Orestis Schinas & Dmitry Sonechko
Highlights:

- Presents a model for sharing risks and benefits in marine technology business.
- Provides a novel approach to support greening of shipping.
- Complements existing shared-economy models in maritime business.
- Enables further research and adaptation fostering operational pragmatism.

[Read more...](#)



On 15-16 Feb, new IWSA supporter, the [Sustainable Sea Transport Initiative \(SSTI\)](#) organized a regional workshop for traditional boat builders of the Pacific. The regional workshop of Pacific traditional boat builders gathered around 60 participants across the Pacific states and territories, from Papua New

Guinea to French Polynesia and from Guam to New Zealand. It was organized as a Pacific "Talanoa", a session during which participants were gathering, exchanging information on current projects, sharing their experience, talking through opportunities and challenges they are facing, and discussing possible solutions and ways forward.

[Read more...](#)

Exclusive offer for IWSA members:



Join a free 60-min. webinar. Learn how to push your client's 'MUST-HAVE' button.

- Wed, June 22, at 13:45 CEST or
- Fri, June 24, at 09:00 CEST

Click here to register. Note: limited to 15 participants

- <https://negotiating-with-goliath.com/iwsa-webinar/>
- or email ben@negotiating-with-goliath.com

What to expect

You've done the sales pitch, they're amazed. Then they say: "It's one of several options we're evaluating."

The end? Not if you've learned to adopt a negotiator's mindset. To get them to see the world your way.

The key: Learn to see the world their way. Their journey, their pain points, their resistance, their dreams.

Filter out the noise, dock onto their beliefs, and push their **MUST-HAVE** button. Get them on board 100%.



Members, Partners, Projects & Collaborations



Announced Coalition Partnership
(May 2022)



**European Sustainable Shipping Forum (ESSF) –
Wind Propulsion Workstream** (Apr-Dec 2022)



IWSA Granted Full consultative Status
(February 2022)



**IWSA & Journal of Sailing Technology –
Collaboration Agreement** (May 2022)

New Members

Full Members



[Insensys \(UK\)](#)
Full Member



[Sumitomo Heavy Industries
Marine & Engineering, Co. Ltd](#)
(Japan)

Associate Members



[Taiwado – Ben Kimura-Gross](#)
(Germany/Japan)



[Fair Ferry](#)
(Netherlands)

Supporters



[Sustainable Sea Transport
Initiative](#)
(Fiji) – Registered Supporter

Classification Society Guidelines

There are an increasing number of publicly released guidelines and links to specific wind-propulsion classification documents:

Bureau Veritas Guidelines: [Download](#)

ClassNK Guidelines are downloadable from www.classnk.com

DNV-GL Guidelines: [Download](#)

ABS Guidelines: [Download](#)

Lloyds Register Guidelines: [sail assisted ships](#) / [rotors](#) / [masts spars and rigging](#)

Media Listings

Publications

IWSA Newsletter Back Issues: Download back issues of the IWSA public newsletter

[December 2021](#) / [April 2021](#) / [October 2020](#) / [April 2020](#) / [December 2019](#) / [July 2019](#) / [February 2019](#) / [October 2018](#)



10 episodes of the Aronnax Podcast that have featured stories about wind propulsion

9th March 2020 with Gavin Allwright, IWSA and Brian Boserup, Blue Technology [Listen Here](#)

1st April 2020 with eConowind [Listen Here](#)

11th May 2020 with BAR Technologies and AirSeas [Listen Here](#)

1st February 2021 with Roger Strevens re WW plans [Listen Here](#)

1st May 2021 with Orestis Schina HHX and intro to Danielle Doggett, SailCargo Inc. [Listen Here](#)

7th May 2021 with Daniellle Doggett SailCargo Inc. [Listen Here](#)

19th November 2021 with Di Gilpin, Smart Green Shipping [Listen Here](#)

2nd January 2022 with Bound4Blue [Listen Here](#)

1st April 2022 with Orca [Listen Here](#)

24th April 2022 with Syroco [Listen Here](#)

Articles & Interviews



Interview: IWSA SG: Wind Propulsion & Decarbonisation in Middle East
[Read more...](#)

TradeWinds
The Global Shipping News Source

Wind propulsion accelerator aims to take small developers through 'valley of death'
[Read more...](#)

MARINE PROFESSIONAL

Back to the future with wind-propulsion:
[Read more...](#)



Back to the Future With Sailing Ships
[Read more...](#)



'The answer is blowing' in the wind' article (pp26-29)
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FT FINANCIAL TIMES

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Key IWSA Programs 2022+

Program	Date	Description	Opportunity
Accelerator Program	2022+	Large scale incubator – test fleet – installation program giving all tech members access to funding, tech and business support, training & research opportunities + retrofit/newbuild	Multi-stakeholder project currently being scoped. Working on full structure & funding proposals throughout 2022
Wind Propulsion Market Report	Q4 2022	20-30 page report on market developments tech info + 1-2 page policy Briefing paper – include findings from surveys.	Collaborative project between all stakeholders and funding will be secured.
Member & Industry Surveys	Q2/Q3 2022	Series of industry/policy maker surveys IWSA, Shipping & Policy (IMO, EU etc.)	Research level questions and academic collaboration.
Expert Database	Ongoing	Setting up database - researchers/engineers, policy specialists & academics	Developed in coop with WASP project
Small Vessel Publication	Call for Papers 2022-23	50+ pg pdf report on small vessel sector, - tech, economic/business plans, routes & cargos, project profiles + expert input.	Leading publication on small vessel sail cargo and technical developments. Sponsorship and project segments available.
Documentary & Short Film	2022/23	Professionally produced 2-3 min short film intro wind propulsion tech & developments.	Designed for general & maritime audience. Sponsorship required
Webinar & Podcast Interviews	Webinar series 2022	Recorded member/expert interviews + 4 webinars per year with leading expert panels	Recordings will be made available for free on Youtube channel - Sponsorship available
Education Program	Ongoing	Univ. & School program – seminars, lectures, works groups & project visits + Produce educ. materials for wider network.	Expansion of ongoing program to maritime colleges, univs, high schools. - Sponsorship - materials production & events available.
Wind Propulsion Conference 2023	Q1 2023	RINA/IWSA associated Two-day conference – hybrid or in-person event	Sponsorship available: Contact Royal Institution of Naval architects directly
Wind Propulsion Multi-Stakeholder Working Group	Q2/3 2022+	Regular working group - 20-30 members from all external stakeholder groups. Covering all aspects of integrating wind in the industry and policy framework.	Funding required for research, work package support + dissemination.
Wind Propulsion Hub Development	2022+	Increased coordination of international hubs, stakeholder engagement + funding outreach	Involvement & funding of set-up of additional hubs + increased regional/national impacts.
Project Collaborations & Advisory	2022+	GCMD Collaboration WiSP 2 – JIP headed by ABS & MARIN WASP – 3-year EU Interreg project World Wind Energy Association STEERER Group – Waterborne EU policy IRENA: Coalition for Action – UN affiliated IMO & ESSF Status	Engagement in partnership, as representative or as supporting organisation/knowledge partner to further the aim of integrating wind propulsion solutions into the policy framework of commercial shipping and encouraging further pilots and demonstrator vessels.

Upcoming Events

Program	Date	Location	Description
WASP project – policy webinar (EU Green Week)	31 May	online	75-minute webinar on policy matters – EU More details
Green Tech 2022	6-10 Jun	Montreal, Canada	More details
Posidonia	6-10 Jun	Athens, Greece	Tuesday 07 June 1245-1430 (local time) – Wind Assisted Propulsion in Shipping seminar (Seminar room 1A) More details
MEPC 78	6-10 Jun	Online	
Blueweek	13-17 Jun	Rotterdam, NL	Natural Propulsion Seminar – Mon PM (13th) IWSA members meeting – Tue AM (14th) 0900-1100 WiSP meeting – Tue PM (+ possible WASP project meeting on one day) More details
Electric & Hybrid Marine Conference	21-23 Jun	Rotterdam, NL	Wind Seminar - IWSA, WiSP, WASP presentations and panels (Tuesday 21st June). from 1430-1700). IWSA is an official supporter of conference and IWSA members will receive a 20% discount using the code :EHMX22EXHIB20 More details
EU -Policy Webinar	21 Jun	Online	IWSA presentation (tbc)
3rd Decarbonizing Shipping Forum	21-22 Jun	Hamburg	Presenting update of wind propulsion on 22nd June IWSA members receive a 20% discount, using IWSA20 – to be applied directly at the ALJ e-shop after selecting the desired participation format and going to “Cart” : Register here
UN Oceans Conference	27 Jun – 01 Jul	Lisbon, Portugal	Confirmed IWSA attendance- side event being put together & booth participation More details
11th Annual Global Event- Green Shiptech China Congress 2022,	07-08 Jul	Shanghai, CHN	Web presentation – supporting/strategic partner IWSA Members receive 10% discount - IWSA Member Code: GSCC20220218 More details
SMM	6-9 Sep	Hamburg, Germany	Official supporting organisation GMEC conference panel – 7th Sep WASP project – seminar – 7th Sep Unofficial 'Green Route around. All IWSA members will receive a members discount for the GMEC conference (tbc). Conference details
Sea Tech Week 2022	26-30 Sep	Brittany, France	Wind Propulsion session on 27 Sep More Details
MTE conf.	26-27 Sep	Geneva, Switzerland	IWSA Presentation, 26 Sep. IWSA members can receive a 20% discount using the code 'IWSA22'. More details
IMO Global Maritime Day	29 Sep	Worldwide	Event alignments and participation under discussion (tbc)
GreenPort Cruise & Congress	18-20 Oct	Port of Zeebrugge, Belgium	IWSA - official supporter The IWSA members discount code for the Port congress is: GPCIWSA and for the Greencruise is: GPCrIWSA More details
IWSA Asia Tour	Oct/Nov	Japan, Singapore, Korea & China	Details/dates to be confirmed
Global Conference on Naval Architecture and Ocean Engineering 2002 (G-NAOE 2022)	6-10 Nov	Korea	IWSA presentation in decarbonisation section More details
COP27	8-20 Nov	Sharm El Sheikh, Egypt	
Hudson Maritime Small Vessel Event	Early Nov	USA	Virtual keynote address
Motorship	22-24 Nov	Hamburg, Germany	IWSA official supporting organisation – discount code tbc More details
MEPC 79	12-16 Dec		
Wind Propulsion conference 2023	Feb/Mar 2023	London, UK	RINA & IWSA event – Call for papers and confirmed dates (tbc)
Wind4Goods	02-03 June 2023	Nantes, France	International version of this wind propulsion event – More details
Innov'Sail 2023	7-9 June 2023	Lorient, France	IWSA partner organisation Call for Papers & More details

Conferences Attended



2022 GREEN4SEA Virtual Forum



Bulk Carrier Webinar Week:
IWSA Presentation



IWSA Presentation:
Wind Propulsion & the Sustainable Supply Chain



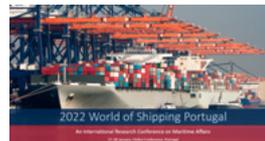
MTCC Africa Regional Industry Forum



Official supporting Organisation



Wind Propulsion Recommendations for Policy Makers and World Leaders Delivered at the One Ocean Summit



World of Shipping – Portugal 2022



Low Carbon Case Studies: Wind Propulsion

Membership & Membership Fee Structure

IWSA welcomes all membership enquiries from companies/ individuals that support our objectives. The associate and supporter categories are open to all, while the Full member category is reserved for those heavily involved in the sector. For further details: contact Gavin Allwright secretary@wind-ship.org

Annual Membership Fees (No VAT) – 01 January 2022 – 31 December 2022

Full Member – Large (more than 250 employees) – €5,000

Full Member – SME (more than 10 employees) – €1,000

Full Member – Individual/micro organisation/NGO (up to 10 employees) – €400

Associate Member – Large (more than 250 employees) – €2,500

Associate Member – SME (more than 10 employees) – €500

Associate Member – Individual/micro organisation/NGO (up to 10 employees) – €300

Registered Supporter – Company – €100 (donation) // Individual/micro organisation/NGO – FREE + donation*

*NOTE: Supporter – No Charge – [Voluntary 'membership fee' to cover costs is welcome – €50 or donation

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- [A Performance Depowering Investigation for Wind Powered Cargo Ships Along a Route](#)
- [Influence of Kite Characteristics on Propulsive Power Applied to Ship Auxiliary Propulsion](#)
- [Performance Prediction Program for Wind-Assisted Cargo Ships](#)