

# ZESTAs.

Zero Emissions Ship Technology Association

**International Trade Association  
Founded March 2019**

## MEMBERSHIP

### Full members:

- Project or technology that is Zero GHG Emissions at a ship level with minimal upstream impacts.
- One vote per organization.
- Access to BoD.

### Associate members:

- Committed to achieving True Zero through collaboration with ZESTAs membership.
- Membership organizations / trade associations that comply with ZESTAs objectives.
- No voting rights or access to board.



# Our mission is to promote the interests of the Zero Emissions Ship Technology Industry

“ZESTAs is like a Lego set where no matter how you put together the pieces, they always add up to zero.”  
Madadh MacLaine, Secretary General

- Our members are an accelerating pack of industry leaders.
- Inform the shipping industry on available zero emissions technologies through events and media.
- Influence regulators and policymakers at national and international levels to introduce legislation that necessitates the uptake of ZEST
- Enables collaboration between innovators to achieve the overall goal of true ZE vessels.
- Support industry in meeting GHG regulation
- Assist regulators in strengthening emissions reductions in line with 1.5 degrees



# Who we are

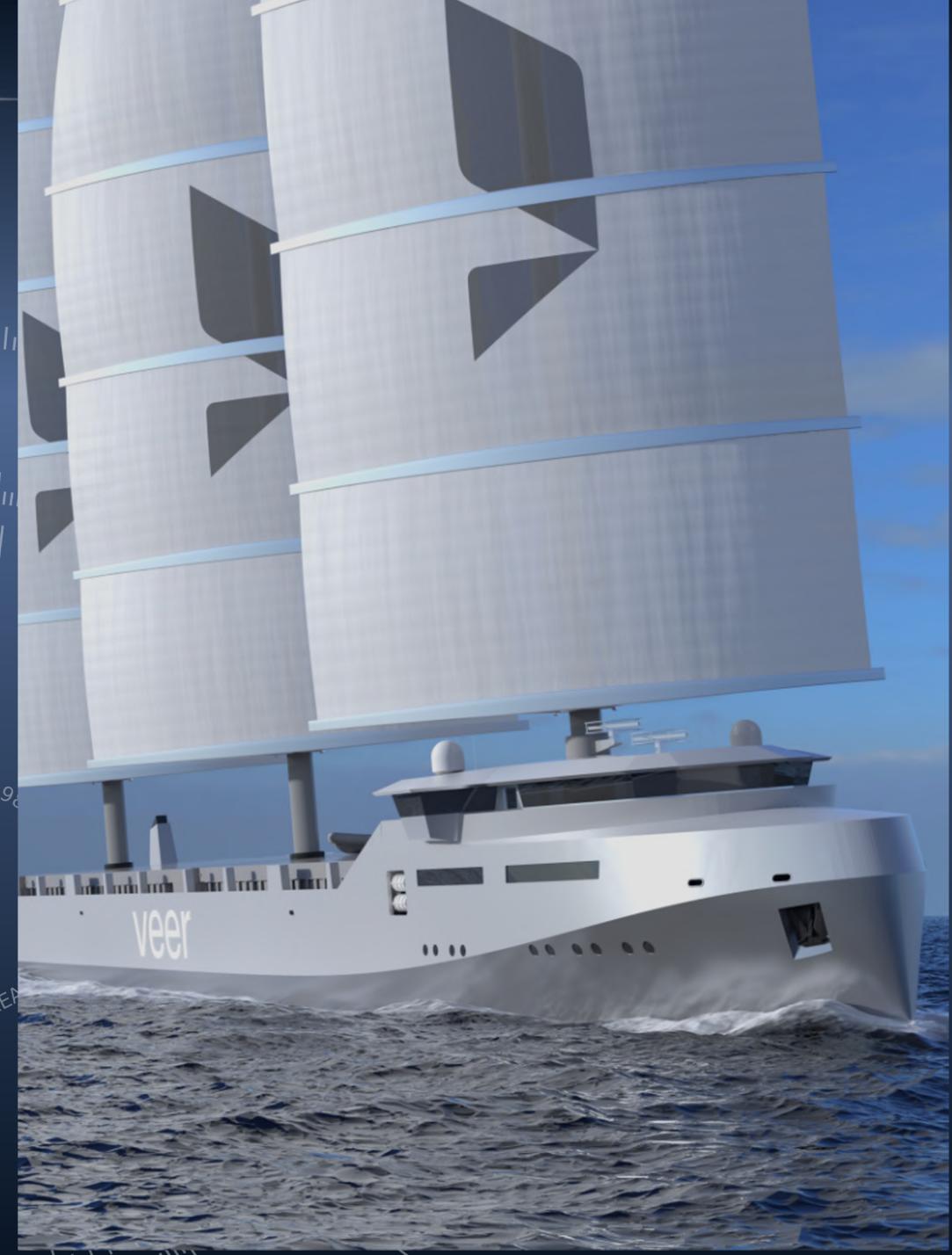
Members are made up of companies committed to achieving zero emissions in commercial shipping.

We operate in 17 countries spread across 4 continents:

- China
- France
- Norway
- Canada
- Sweden
- Costa Rica
- Singapore
- India
- Switzerland
- Senegal
- Denmark
- UK
- USA
- Finland
- Netherlands
- Mexico

Categories - All technology and services needed to make zero-emissions shipping possible:

- Hydrogen Fuel Cells
- Marine Batteries
- Wind Propulsion
- ZE Ship Design
- ZE Ship Owners
- Energy Storage
- Hydrogen Safety
- ZE Ship Finance
- Hydrogen System Integration
- ZE Hydrogen Producers
- RE Electrical Charging
- Hydrogen Bunkering



# Zero Emissions Ship Tech in the Market

Over 400 vessels are fitted with zero emission technology solutions today.

**ZEST Market grows by >400% per year.**

Industry is ready to change but requires IMO, regional and national policy makers to lead with strong clear regulations.

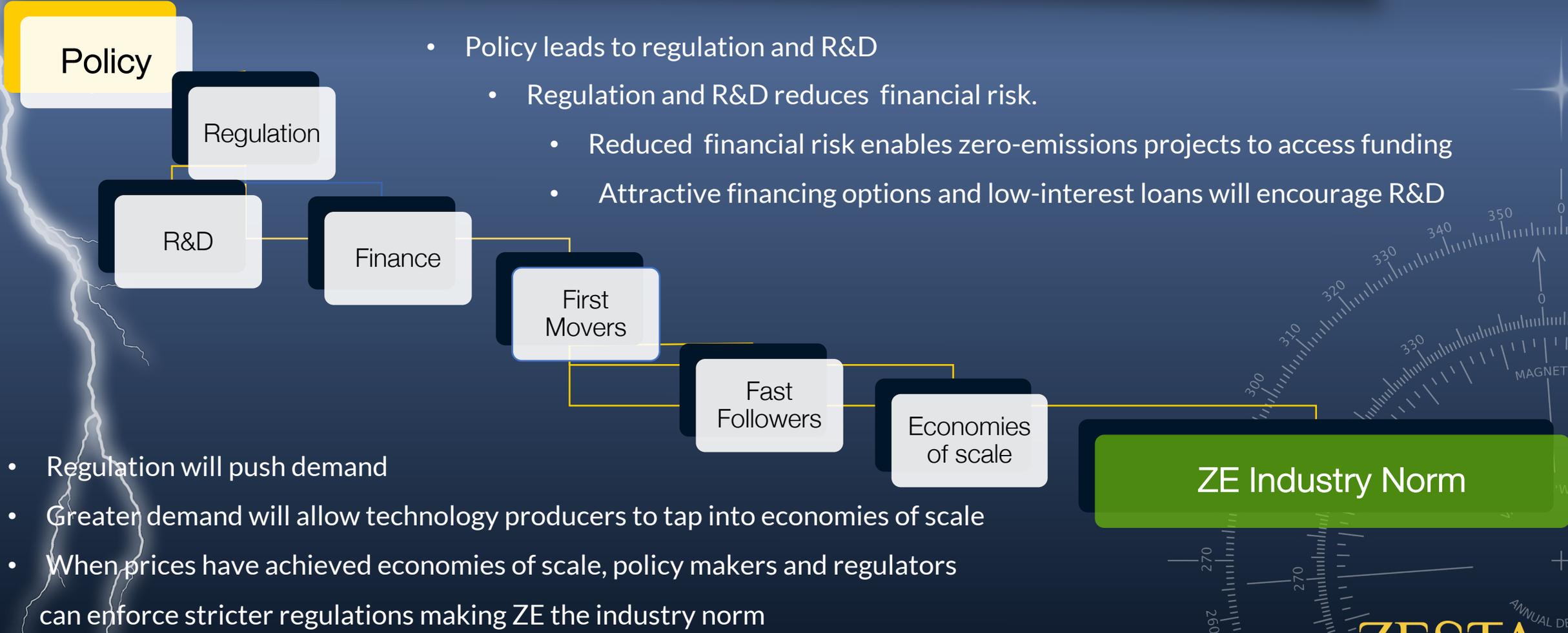
ZESTAs is a practical guide for both industry and regulators to technology and implementation.

## Marine markets where ZESTAs is working:

- Offshore Vessels
- Inland Waterway Vessels
- Oil and Gas Vessels
- Arctic/Antarctic Vessels
- Transoceanic Cargo Vessels
- Short Sea Vessels
- Ports
- Oil Rigs
- Passenger Vessels



# Cascading Interactions of Policy & Market



# ZESTAs IMO Consultative Status November 2022

The Zero Emissions Ship Technology Association has been granted consultative status at the IMO

ZESTAs Secretary General has been engaging with the IMO since 2014.



Secretary General Madadh MacLaine has been regularly attending IMO Council Meeting and Committee Meetings including MEPC, CCC, MSC.

Presenters; Guus Van Der Bles EconoWind, Brent Perry SPBES, Prasanna Colluru FPS, Madadh MacLaine ZESTAs, Tomas Trondstad HYON, Jogchum Bruinsma Nedstack



Our goal is to tell the policy makers and the maritime industry at large that companies like yours are making Zero Emissions Shipping possible today.

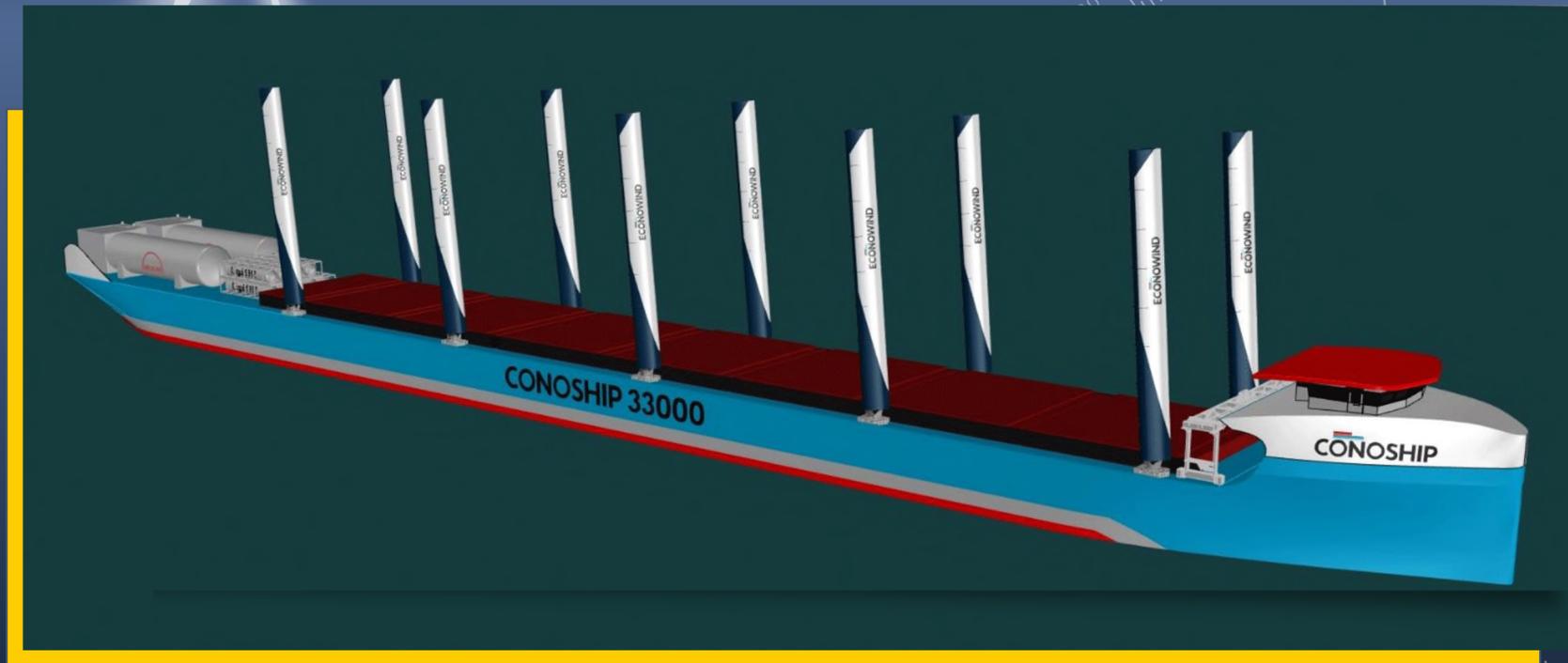
We are working on Submissions to the IMO to ensure that policy takes into account the latest advances in technology

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# The Technologies Required for Zero Emission Vessels are Available Today. *ZESTAs is working with the IMO to achieve fair global market availability*

## Hybrid Propulsion:

- 10 x 30m EconoWind VentiFoil
- Conoship/MARIN E-motor 2500 kW /generator
- SHIFT 25 MWh batteries
- Nedstack 2500 kW Fuel Cells'
- Liquid H2 tanks 2 x 400 m3
- Large Diameter Prop
- North Atlantic 11kn @ Bft 5:  
Charging batteries ~250 kW



**IMO Challenge : ISWG GHG 6**  
ZESTAs presenters to collaborate on a trans-Atlantic ZES

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# A world-first – No Fossil Fuels! COP26, Glasgow

ShipZERO26 brought together the brightest and most innovative minds in the shipping industry to workshop a route to True Zero.



The three-day event was fully aligned with the IPCC’s “very low emissions scenario” Presentations, discussion and collaborative work sessions charted how the industry can grow without fossil fuel or any GHG emitting fuels or technologies.

## ShipZERO26 made it clear that:

- International shipping is well situated to catalyse decarbonisation across many heavy industries through ports;
- Zero emissions ship technology is market-ready;
- Finance is poised to invest but calls for assurance from decision makers
- National governments must implement policy measures to unlock investment and rapidly accelerate the transition to zero emissions shipping in line with 1.5°C warming

# SHIPZERO<sup>0</sup>26

Join us on the Voyage to Zero

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# ShipZERO26 Conclusions

- Zero emissions ship technology is market- ready
- Finance is poised to invest
- Policy makers and industry are aligning towards stricter regulations

Videos of all presentations, panel discussions and keynote speeches are available on our website.



[www.ZESTAs.org](http://www.ZESTAs.org)



Peter Thomson, Ambassador and Permanent Representative of Fiji to the United Nations



Paul Taylor, Vice Chairman, Poseidon Principles



Prime Minister of Greenland Múte B. Egede and CEO of Shift Clean Energy Brent Perry



Ale Southcott, Founder & CEO of Veer.Voyage

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# Amsterdam, June 2022

## ShipZERO26.5 Action Points

- **Pooling:** Merging resources, technologies and funding into multi-vessel projects lowers costs and risks
- **Collaboration between competitors** becomes attractive in pooled projects of 10+ ships
- **True Zero Channels in Green Corridors**
- **Modular design** future-proofs investments
- **Industry-led contract & agreement**



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# ShipZERO28 at IMO HQ London

11, 12 September 2023

- ZE Energy supplies, the ZE transition in Ports and ZE Maritime Transport.
- Day one will focus primarily on the global picture: ports, infrastructure, and renewable fuel supply to the maritime industry, followed by a cocktail reception and Gala Dinner.
- Day two will focus more specifically on shipping and shipboard technologies.



**SHIPZERO**28 LISW

<https://zestas.org/shipzero28>

# ZESTAs : A Beacon to True Zero

The shipping industry is increasingly driven by societal and shareholder/investor objectives to eliminate GHG emissions.

## ZESTAs:

- Informs industry and policymakers on ZES technology readiness and scalability
- Organizes events, seminars and workshops for industry and membership
- Facilitates exchange of information, lessons learned, and best practices.
- Coordinates dissemination and flow of information between regulators, innovators, and industry
- Is a platform for exchanging ideas and realising projects
- Works within the IMO regulatory framework



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Join the ZESTAs community of innovators committed to **True Zero**

Exchange ideas and build the **ZE sector** together

Show **investors and stakeholders** that your company is **committed to leading the energy transition in shipping**

Full membership: **all technologies or projects must be True ZERO GHG** at a ship level with minimal upstream impacts

Associate membership: **companies who are on course for zero, or external to the industry but support our objectives**

Membership fees:

**Large Company** £3000

**SME** £1800

**Micro** £800

**Individual** £400

<https://zestas.org>

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