



## COMPANY PROFILE

01.04.2022

# ELECTRIFYING THE OCEANS

for a **brighter** future

(and because it's **commercially** wise)



*"We cannot solve our problems with the same thinking  
we used when we created them"*

*- Albert Einstein*

*The future of ocean shipping is **simple**, **safe** and **sustainable** -  
the frictionless fabric of global trade.*

*Therefore, ships will go electric and autonomous. They will be  
deployed at scale, coordinated by an intelligent network for  
efficient movement of goods.*

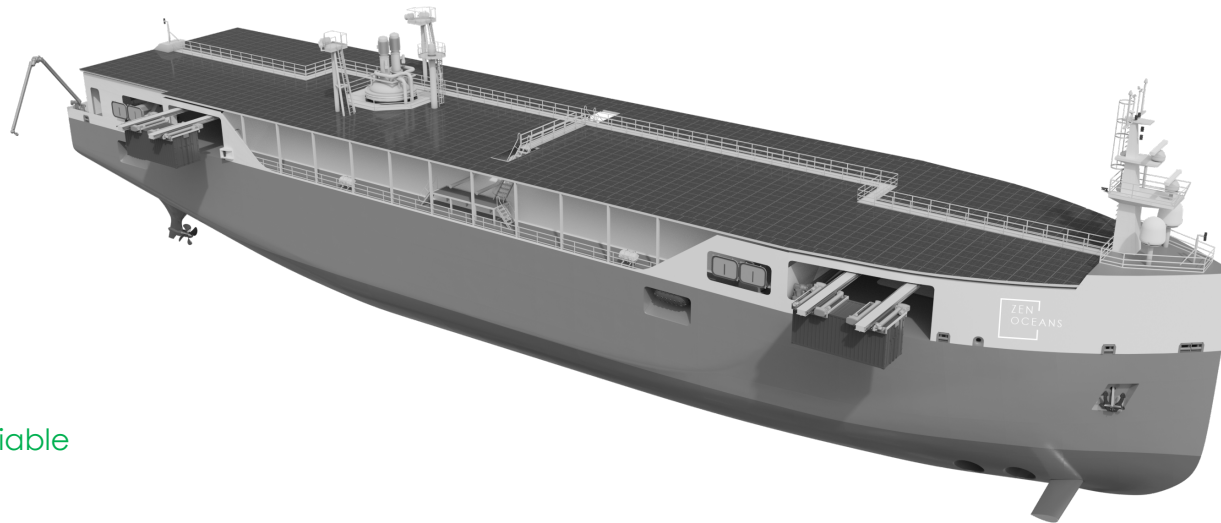
# FULLY ELECTRIC SHIPS

Purpose-built, designed from keel-up for battery electric propulsion (and autonomy).

Zero emission

Energy efficient

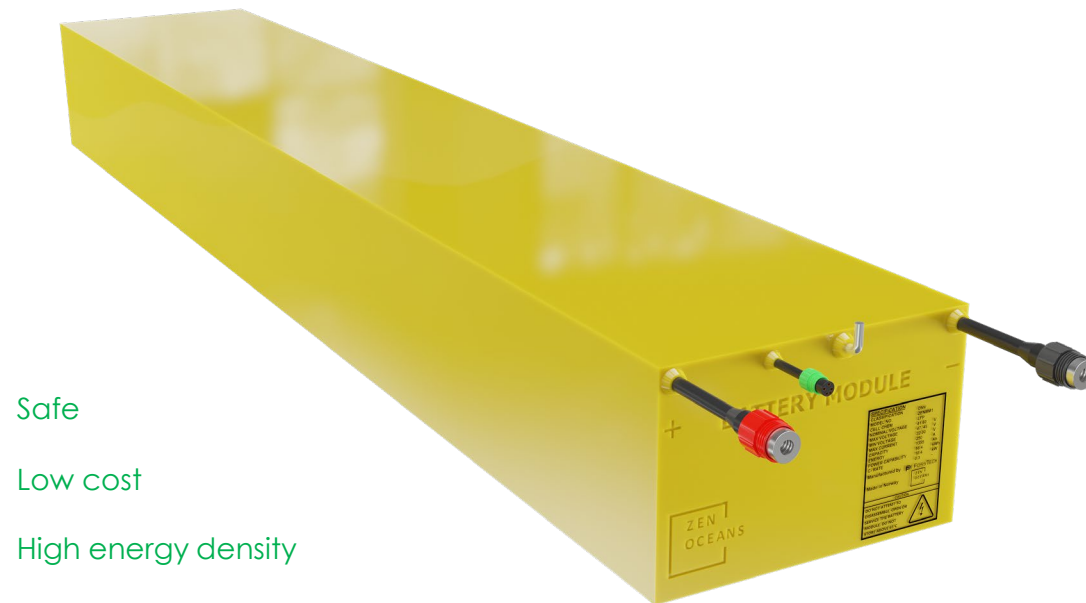
Safe, Simple & Reliable



*The future starts now!*

# POWERED BY ZENERGY™

Our patent-pending, safe & low-cost maritime  
battery system.



Safe

Low cost

High energy density

*Enabling sustainable ocean transport.*



# DEPLOYED AT SCALE

Operated as a fleet by an intelligent platform for battery-sharing, charging and route optimization

Integrated fleet

Intelligent logistics

Cost effective trade

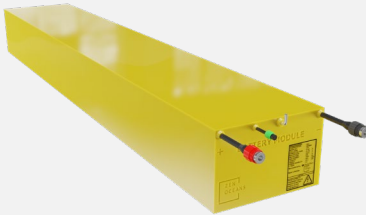
*Clean and efficient without compromise.*

ZEN  
OCEANS

# PLAN

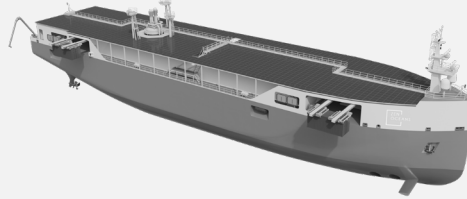
1

## Maritime batteries



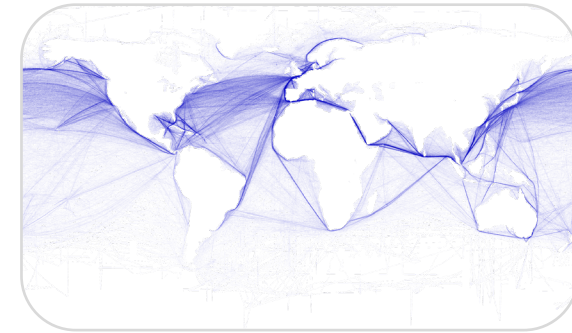
2

## Electric ships



3

## Trade platform



<b>Mission:</b>	Develop safe & low-cost maritime batteries	Develop purpose-built energy & cost-effective ships	Develop intelligent logistics solution
<b>Business model:</b>	Sell maritime batteries	Sell electric ships	Shipping as a service
<b>Potential:</b>	Large and promising	Huge but challenging	Enormous.
<b>Status:</b>	<ul style="list-style-type: none"><li>• Working module prototype</li><li>• Ongoing type approval (DNV)</li><li>• Planning commercialization</li></ul>		

# ZENERGY™

## MARITIME BATTERY LINE

Safe & low-cost maritime batteries

**MODULE**  
60 kWh



**PACK**  
3.8 MWh



**SYSTEM**  
∞





# ZENERGY™

## MARITIME BATTERY LINE

Safe & low-cost maritime batteries

### Watertight

100% watertight modules, allowing for water flooding as primary mean for fire prevention and mitigation



### High energy density

Battery containers at 4x – 6x energy density compared to other systems on market



### Low C-rate

System designed for low c-rate, implying low cooling demand and thus low system complexity



### Rugged

Structural integrity and cell fixation is satisfied without using reinforced steel encapsulation



### Safe

No thermal runaway propagation risk between cells and modules. World class fire safety properties



### Low cost

The simple and reliable system yields low OPEX and low CAPEX relative to other systems on market



### Scalable

Modularized / containerized system designed for scalability and battery swapping. From 63 kWh to ∞



### Proven

System built and based on off-the-shelves components and proven subsea encapsulation technology

# TEAM



## **Andreas Norberg** - Co-founder, CTO

---

Andreas is an experienced entrepreneur who has been involved in several start-ups and industry successes within the maritime domain.

Andreas is educated M.Sc., Naval Architect (2011) from the Norwegian University of Science and Technology (NTNU) and holds an MBA from BI Fudan (2019).

Andreas was one of the Founding Partners in eConnect Energy and is one of the inventors of eConnect's patented buoy- and ship-to-shore gas-transfer technology. He was a co-founder of LNT Marine, a technology provider and LNG-ship design specialist. Here, he was the inventor of the LNT A-BOX containment system and was responsible for design- and construction of a novel LNG-carrier installed with the LNT A-BOX-system. He has also worked for CGR marine, on developing a new design for a single-tank LNG bunkering vessel.

Andreas has worked with technology development, ship design and shipbuilding his entire careers. ZEN OCEANS was his next step, and he is currently 100% committed to electrifying the oceans.



## **Fridtjof C. Eitzen** - Co-founder, CEO

---

Fridtjof has 10 years domain experience, with a large network in the maritime industry.

Fridtjof is a Clearance Diver from the Royal Norwegian Navy. He holds an M.Sc. degree in Marine Technology (2012), with specialization in hydrodynamics, from Norwegian University of Science and Technology (NTNU), and an online Specialization in Deep Learning and Artificial Intelligence (2017) by Stanford University and Deeplearning.ai. He holds an Executive MBA in Finance and CFA (2021) from Norwegian School of Economics (NHH).

Fridtjof has worked in DNV, as technical consultant on hull integrity and hydrodynamics, and in Golar LNG on multi-billion-dollar ship conversion projects. Since that, he has worked as a fifth-generation partner in Camillo Eitzen & Co, of 1883. He currently serves as Chairman of Christiania Shipping, in Copenhagen.

With a genuine passion for the oceans, he co-founded ZEN OCEANS in 2020, and now seeks to leverage his domain experience to achieve its vision.

***We consider the argument for electrifying the oceans to be very strong.***

*Therefore, we will think big and nudge the market for fully electric ships from 0 to 1. On the way, we will develop products that in themselves will scale into large revenue-generating operations, funding our vision.*

*Do you want to join us?*

**[www.zenoceans.com](http://www.zenoceans.com)**