MARITIME HYBRID, ELECTRIC & HYDROGEN FUEL CELLS CONFERENCE & EXHIBITION

EDITION

29-31 October 2024 · Bergen

#MHEHF2024

Delivering energy efficiency, emissions reduction and sustainability

Post event report

### **Executive summary**

#### Scalable solutions, shore power and regulation take centre stage in Bergen

October's Maritime Hybrid, Electric & Hydrogen Fuel Cells Conference showcased the industry's varied strategies for decarbonisation, featuring dedicated programmes on hydrogen fuel cells as well as hybrid and electric solutions.

Day One focused exclusively on hydrogen fuel cell technology. Speakers examined the current market landscape, challenges in scaling hydrogen production for maritime use, and the necessity for strong regulations to support hydrogen-powered vessels.

International case studies illustrated hydrogen technology in action, including the MS Skulebas project—the world's first hydrogen-powered fishing vessel—and the Sea Change project, which is notable as the first hydrogen fuel cell ferry in the US.

On Days Two and Three, discussions expanded to hybrid and electric solutions. Experts highlighted advances in battery technology and alternative fuels including LNG, methanol and ammonia.

A recurring theme was the essential infrastructure needed for widespread adoption of electric and hybrid vessels in ports. Speakers emphasised shore power development and standardisation as critical components for transitioning to zero-emission shipping.

Partnerships within the supply chain was seen as key to overcoming hydrogen technology challenges. For instance, Maersk is prioritising methanol due to safety concerns surrounding ammonia and high hydrogen costs. Their pilot fuel cell projects aim for a 2026 launch but face hurdles in sourcing affordable green methanol. MSC Cruises shared insights on solid oxide fuel cells, discussing efficiency issues like thermal cycling.

Financial discussions revolved around funding mechanisms such as the EU's Clean Hydrogen Partnership. Experts stressed the importance of dedicated maritime funding to facilitate fleet-wide transitions while addressing the "chicken-and-egg" dilemma between infrastructure development and vessel adoption.

The complexities of designing vessels for new technologies were also explored through case studies that highlighted equipment considerations and crew training needs.

Several vessel owners shared their experiences with hybrid and electric technologies, identifying long-term contracts and crew training as crucial factors for successful implementation. Delegates praised the collaborative atmosphere that encouraged dialogue and knowledge sharing during generous networking throughout the programme.

Running concurrently was a three-day exhibition that provided a platform for companies to showcase products and services.

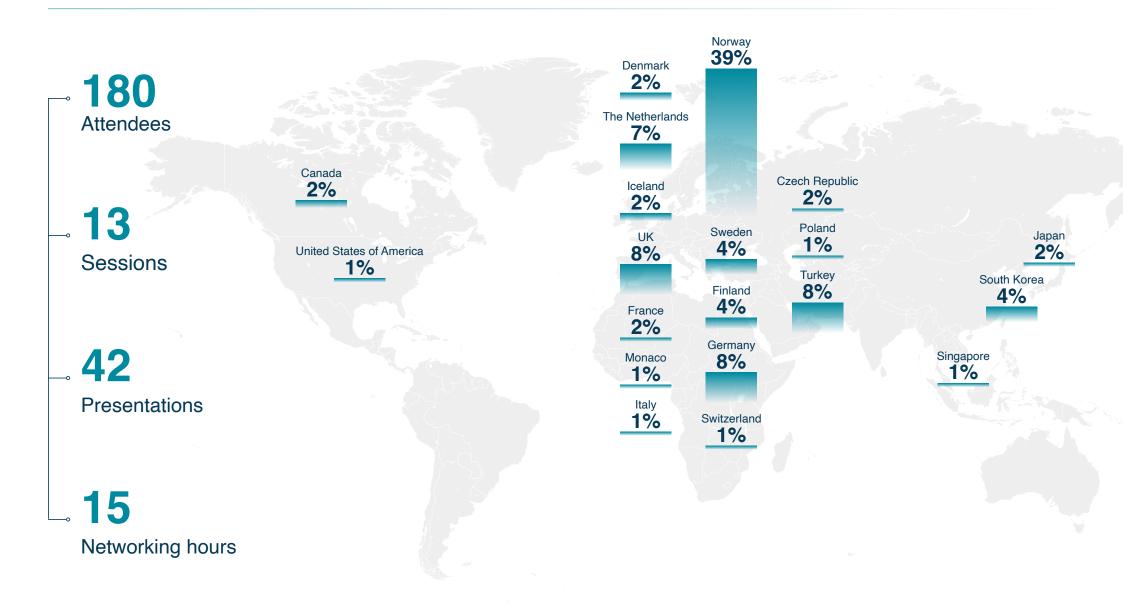
The evening programme included a drinks reception on Day One and a "Maritime Mingle" networking event hosted by Norwegian Electric Systems on Day Two aboard Havila Polaris. This unique setting allowed attendees to engage with groundbreaking technology firsthand while networking with industry professionals.

Riviera's Maritime Hybrid Electric & Hydrogen Fuel Cells Conference will return to Bergen 14-16 October 2025.

#### #MHEHF2024

#### **Event summary**

#MHEHF2024



### Company types represented



## Attendee breakdown by job function

**25%** Executive & Strategic Leadership



Great conference, thanks for having me."

Elias Van Sickle, COO, SWITCH Maritime LLC

**35%** Sales, Marketing & Business Development

**25%** Technical, Engineering & Project Management

**15%** Research, Development & Regulatory Compliance



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# slido audience engagement app

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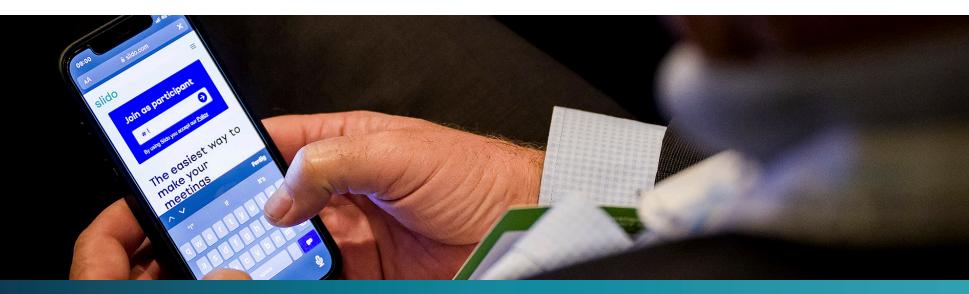


92% Active users

**368** Questions asked



**37 2282** Polls Total poll votes





### Media coverage

## **Total article views** 19,434

#### **Examples below**



#### Bergen event to explore maritime sector's zeroemissions initiatives

24 Oct 2024 by Martyn Wingrove

Vessel owners and operators are set to present advanced case studies showcasing new energy storage and fuel-cell technologies being deployed on vessels



The latest developments in batteries, hydrogen power, and fuel-cell technologies - and their applications across maritime sectors - will be thoroughly explored during a dynamic three-day conference in Bergen, Norway, from 29-31 October 2024 at the Maritime Hybrid, Electric & Hydrogen Fuel Cell Conference 2024.

The event brings together leading vessel owners, operators, logistics companies, port authorities, regulators, investors, banks, system integrators, naval architects, class societies, technology suppliers, battery manufacturers and industry associations.

Day one will focus on the developments and adoption of hydrogen fuel cells, with sessions covering



#### Managing risks amid the rising demand for battery-powered vessels

08 Oct 2024 by Martyn Wingrove

Environmental legislation and local rules are encouraging investment in vessels running on batteries and green energy, but owners need to understand the financial and technical risks

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Increasing demand for green maritime solutions is driving investment in energy storage systems for all types of vessels, but there are risks and safety issues to conside

Batteries are being installed on ferries, tugs, workboats, offshore support vessels, inland cargo ships and shortsea ships, while ports are installing charging stations.

These market drivers and their risks will be debated at Riviera's Maritime Hybrid, Electric & Hydrogen Fuel Cell Conference 2024, which returns to Bergen, Norway, on 29-31 October 2024, bringing together vessel



#### Shipowners lay groundwork for fuel-cell pilot projects

30 Oct 2024 by Martyn Wingrove

Vessel operators are gaining practical experience with hydrogen fuel cells in pilot projects, with large modules being installed for higher power generation



Owners from across shipping sectors are investing in hydrogen fuel cells and dual-fuel engines to test the technology on board their assets

Several owners explained their investments, strategies and pilot projects during Riviera's Maritime Hybrid, Electric & Hydrogen Fuel Cell Conference 2024, in Bergen, Norway.

#### #MHEHF2024

## Social media activity pre/during event



220 Total posts

### **85,000** Total impressions

### C 2,350 Total reactions

#MHEHF2024

Maritime Hybrid, Electric and Hydrogen Fuel Cells ... + Follow ... 1,109 followers 1w · ©

Day 1 of #MHEHF2024 has been a success! The conference and exhibition kicked off, followed by an evening drinks reception, sponsored by Nedstack Fuel Cell Technology.

Thank you to everyone who has participated and made the event memorable so far. Looking forward to more exciting sessions and networking today!

With thanks to our event partners: ComAp Group, Corvus Energy, DNV, Hanwha Group, Hypermotive, Med Marine Holding A.Ş., Nedstack Fuel Cell Technology, The Switch, UZMAR, Wärtsliß, Invest in Bergen, Maritime Battery Forum & Norwegian Maritime Exporters NME.

Stay tuned for more conference updates!

Sad you're missing out? We'll be returning to Bergen next year on 14-16 October 2025! Sign up to find out more about our upcoming MHE conferences: https://inkd.in/ehW9Uauy

#RivieraMaritimeMedia #batteries #marine #bergen #design #integration #safe

MARITIME HYBRID, ELECTRIC & HYDROGEN FUEL CELLS CONFERENCE

29-31 October 2024 · Bergen

HERE'S WHAT YOU MISSED

Here's what you missed at #MHEHF2024...

Day 3 session 1 at the 5th Maritime Hybrid, Electric and Hydrogen Fuel Cells Conference in Bergen.

Representatives from The Switch, Damen Shipyards, Tidal Transit Limited, and Seatrium, alongside EU transport chief Annika Kroon, addressed technical and regulatory hurdles in maritime electrification at today's Maritime Hybrid, Electric & Hydrogen Fuel Cells Conference in Bergen.

Asbjørn Halsebakke from The Switch emphasised IGBT switches as superior to traditional fuses and breakers for battery protection, while Damen's Rebecca Belmer highlighted DC systems' advantages in reducing component footprint and power losses.

Tidal Transit's Leo Hambro highlighted their pioneering integration of a 3.4megawatt battery system with Volvo IPS technology. While acknowledging current range limitations, Mr Hambro emphasised their successful operational strategy achieving 20-knot service speeds at optimal efficiency.

EU transport chief Ms Kroon addressed concerns about potential regulatory overreach, advocating for a measured approach. "We can't over-regulate. We should let technology advance and then adjust regulations," she stated.

In-depth articles from the conference are available at: https://inkd.in/dzjmPF2A



Maritime Hybrid, Electric and Hydrogen Fuel Cells ... + Follow ... 1,109 followers 1mo - 1

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REGISTER HEREI GROUP BOOKING DISCOUNTS AVAILABLE. #MHEHP2024 The Maritime Hybrid, Electric & Hydrogen Fuel Cells Conference 2024 is on 29-31 October in Bergen, Norway Explore the latest in #vessel design and #sustainablefuels. Learn more: https://inkd.in/erBC3DR.j

Session 7: #Hybrid and #Electric Case Studies - Hear from industry leaders on hybrid and electrification of #fleets.

> Electrifying Cruise Ships | Zero-emissions hotel load, retrofitting for battery power, emissions-free operations | Gerry Larsson-Fedde, Hurtigruten Group. > Simplifying Vessel Electrification | New power sources, energy

management, #cybersecurity | Jaroslav Juriga, ComAp Group.

> Hybrid Systems for Large Vessels | Al-based EMS, energy minimisation

operational considerations | Bjørnar Skogseth, Wärtsilä.

performance, new technology | Andrea Macorini, CSMART - Center for Simulator

### Event partner & speaker testimonials

### "

I just wanted to thank you all for the great week in Bergen again. Always a pleasure! Looking forward to the next one!"

Syb ten Cate Hoedemaker, Managing Director, Maritime Battery Forum

## 66

First of all, let me thank you and Riviera Team for a fantastic conference, I enjoyed and learnt a lot... the best."

Andrea Macorini, Electrical Instructor Specialist, CSMART Carnival Corporation

#### 66

You have shipowners, you have suppliers of different equipment, you have class societies and even end users. To be part of a conference where there are so many different players with so many different inputs is for sure great value for us."

Jørgen Kopperstad, Head of Maritime, Norwegian Hydrogen AS

### 66

It has been a very good experience both participating and speaking at the conference. Job well done! The excellent teamwork and collective efforts made this event very successful."

Yang Zhang, Product Manager – Maritime, Yara Clean Ammonia

#### 66

I think the magnitude of competence that is in this room is really high."

Jahn Helge Bjørnestad, Chief Commercial Officer, Napier

#### #MHEHF2024

### Networking & Hospitality Events



#### EVENING DRINKS RECEPTION

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#### HAVILA POLARIS SHIP VISIT

Organised by

norwegian electric systems part of HAV group



#### VIP DRINKS RECEPTION

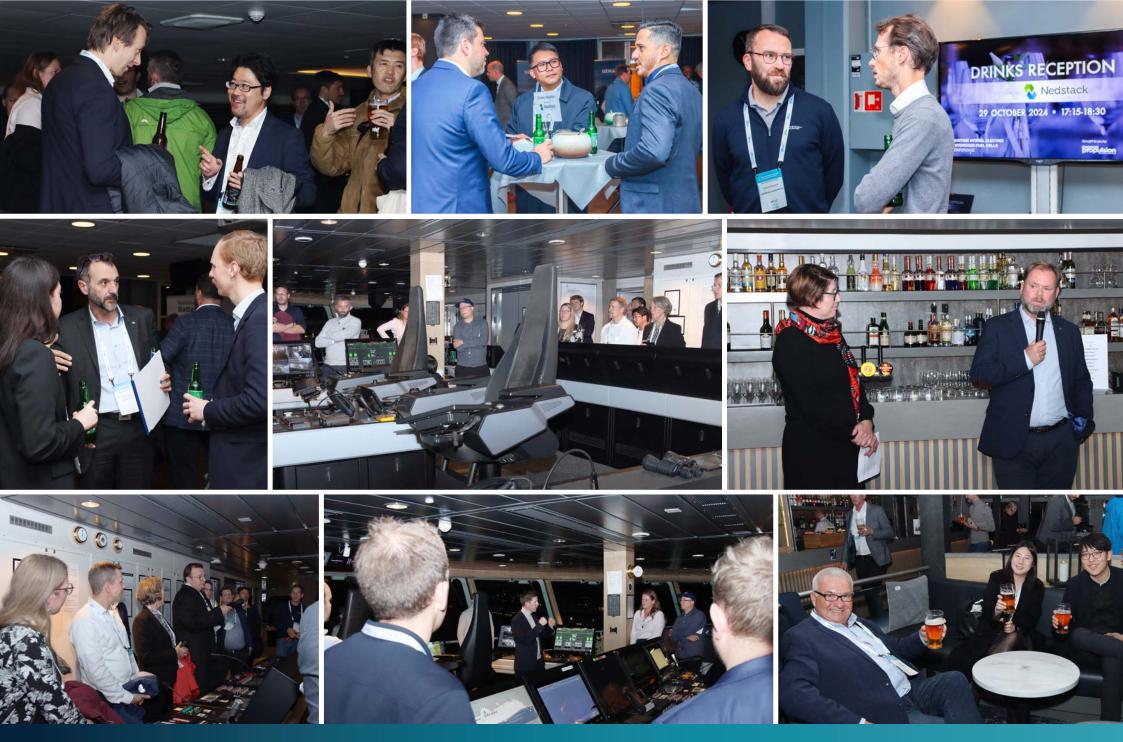
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#### Mark your calendars!

MARITIME HYBRID, ELECTRIC & HYDROGEN FUEL CELLS CONFERENCE & EXHIBITION

14-16 October 2025 • Bergen

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#### REGISTER YOUR INTEREST



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