



**13.00 to 17.00 (UK) via TEAMS**

14.00 to 18.00 (EU)

08.00 to 12.00 (US EST)

**Relevant to Professional – Commercial – Government**

End-user Organisations • Operators • Ports & Harbours  
Vessel Builders • Refit Yards • Engineers • Health & Safety  
Naval Architects • Designers • Classification • Legislators

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Onboard • Main Engines • Generators • Hybrid • Alternative Fuel

**Supported by**

**MariNH<sub>3</sub>**

Clean, green ammonia  
engines for maritime

**NEXT GEN AMMONIA - Standard Rate: £120**

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RINA / IMarEST / PSS / UKHMA

Discount Rate: £95

**Further Information:**

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[www.nextgen-marine.com](http://www.nextgen-marine.com)

**THEME: What are the Opportunities and Challenges for Ammonia as Marine Fuel?**

13:00 to 14:20 **Session 1 – Hydrogen and Green Ammonia as Marine Fuels**

**John Haynes - Workshop Lead, NEXT GEN Marine**

Update on Global & Marine Sector Opportunities for Ammonia and Hydrogen

**Prof Alasdair Cairns - Programme Director MariNH<sub>3</sub> / University of Nottingham**

The Potential of Green Ammonia to Decarbonise Commercial Vessels

**Presenter TBC**

High-Pressure Dual-Fuel Combustion Systems for Sustainable Maritime Engines

**Presenter TBC MariNH<sub>3</sub> Team Member**

Utilising Green Ammonia as a Fuel in ICE

**Panel Discussion - Q & A**

MariNH<sub>3</sub> Learnings - Technology - Next Steps

14:20 to 14:30 Break

14:30 to 15:50 **Session 2 – Ammonia Safety and Regulations in Port and on Vessels**

**Dr Mike Mason - CEO, Carbonovia / Green Ammonia Working Group**

Safe by Design: Regulatory Foundations for Ammonia Fuel Handling in Ports

**Presenter TBC - MCA / Maritime Innovation Hub**

Regulating and Facilitating Alternative Fuels for Vessels (UK - Europe - Global)

**John McCorquodale - Inspector, MAIB (Marine Accident Investigation Branch)**

Real World Experience from Transporting Ammonia as Cargo at Sea

**Dr Tom Beard - Clean Shipping Service Lead, BMT**

The Challenges of Integrating Ammonia as Fuel in Sub 100 Metre Vessels

**Panel Discussion - Q & A**

Safety - Regulations - Training & Certification

15:50 to 16:00 Break

16:00 to 17:00 **Session 3 – Scalability and Commercial Opportunities for Green Ammonia**

**Dr Syed Mashruk - Deputy Director - Ammonia Technologies, University of Cardiff**

Economic Modelling Work to Show Viability of Ammonia

**Presenter TBC - UK Ammonia Alliance**

Unlocking Low-Carbon Ammonia: Status, Challenges and Opportunities

**Presenter TBC - Ammonia Supplier**

How Experience of Ammonia for Industrial Applications Translates to Marine Fuel

**Panel Discussion - Q & A**

Infrastructure - Commercial Opportunities - Scalability

**END: 17:00 (UK)**



John Haynes



Alasdair Cairns



Mike Mason



John McCorquodale



Tom Beard



Syed Mashruk



## Workshop Lead – John Haynes

*Since running the first edition of NEXT GEN Marine HYDROGEN in October 2021 the world has changed. Following 2022 political instability in Europe, energy security and the drive for alternative fuels is urgent. For marine it is now essential to establish which fuels are viable and what will be required onshore.*

*UK, EU and US Hydrogen Strategies aim to accelerate the development of clean Hydrogen. Significant government funding on both sides of the Atlantic will help to build Hydrogen infrastructure. Much of this will be around ports, leading to a supply of Hydrogen for use onshore and onboard vessels.*

*At NEXT GEN industry experts and dynamic discussions have examined the potential for Hydrogen. Technology is reaching high TRLs and with barriers to adoption being removed safety is the priority. We now need to identify what, when and where alternative fuels will be available for maritime.*

*Ammonia as a marine fuel is now featuring in global reports relating to energy transition. Growth will be strongest in countries that are investing in alternative fuel infrastructure. As commercial shipping has first end-users we examine opportunities and challenges.*

*We are pleased to be running NEXT GEN AMMONIA with the support of MariNH<sub>3</sub>.*

[www.nextgen-marine.com](http://www.nextgen-marine.com)



MariNH<sub>3</sub> is a five year research programme to develop new and disruptive engine technology for marine that will significantly cut greenhouse gases and pollution.

Commencing 2022, an international team of leading academic researchers has been supported by industry partners at the forefront of engine technology and services development.

The decarbonisation of commercial shipping requires sustainable “green” ammonia production, the development of new engine technologies and effective policy implementation.

MariNH<sub>3</sub> research is focused on decarbonising end use, with minimal pollutants and reduced related energy demand, while at the same time overcoming key technical, economic and social barriers to the adoption of green ammonia as a fuel.

[www.marinh3.ac.uk](http://www.marinh3.ac.uk)

[www.nextgen-marine.com](http://www.nextgen-marine.com)