

Our colleagues from EXMAR and the broader maritime industry had the unique opportunity to board and visit the Fortescue Green Pioneer in Antwerp. This remarkable vessel showcases mining giant Fortescue's commitment to achieving realzero. Our teams were able to witness the technical aspects of the retrofitted engine, which makes ammonia as fuel a reality.



Ammonia dual-fuel engines

Our engineers and operators inspected the ammonia fuel system very carefully, asking challenging questions about how the system works, the operational aspects of the vessel when running on ammonia, and the safety precautions for the crew when handling the systems.

Dual-fuel ammonia engines will soon be implemented on board of EXMAR's newbuild midsize gas carrier (MGC) vessels with two-stroke engines, which share similarities with the technology already applied by Fortescue on four-stroke engines.

Air purifying respirator with positive internal pressure

EXMAR SHIP MANAGEMENT had the opportunity to try the newest equipment on board- an air purifying respirator with positive internal pressure. This device allows operators to minimise exposure to ammonia vapours while performing maintenance on certain machinery.











Ensuring safety operations

Capt. Sergiy DABIZHA, Marine and Vetting Manager, shared his thoughts: “Having gained extensive experience with ammonia as cargo during career at sea, I recognise that operating ammonia-fuelled vessels presents a new challenge for our company.”

”This brings our main concern to the forefront: ensuring safe operations. Such equipment could be a valuable addition to the many established safety barriers EXMAR has developed over four decades of handling ammonia as cargo, as the safety of our crew is our center of attention.”

The Green Pioneer proves that if shipping wants to change, it can change bearing in mind that safety and reliability are paramount. Ammonia as fuel for shipping is not just a future-ready technology; it is already part of the energy transition today. Special thanks to RBSA, Port of Antwerp-Bruges, and CMB.TECH for organizing this visit in the historic heart of Antwerp.