

ZESTAs

ShipZero30 Conference 2025

Experts in emission-free
power generation systems



E-Cap Marine GmbH | Blohmstraße 23, 21079 Hamburg, Germany | ecap-marine.com



eCap Marine's Scope of Consulting & Service

Pre-Project

- Consultancy
- Feasibility Studies
- Conception
- Checking available Funds

Manufacturing

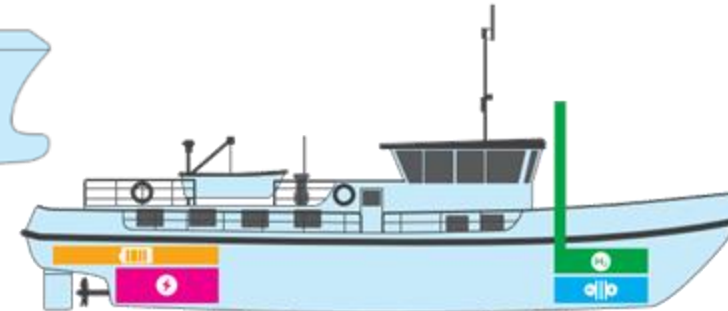
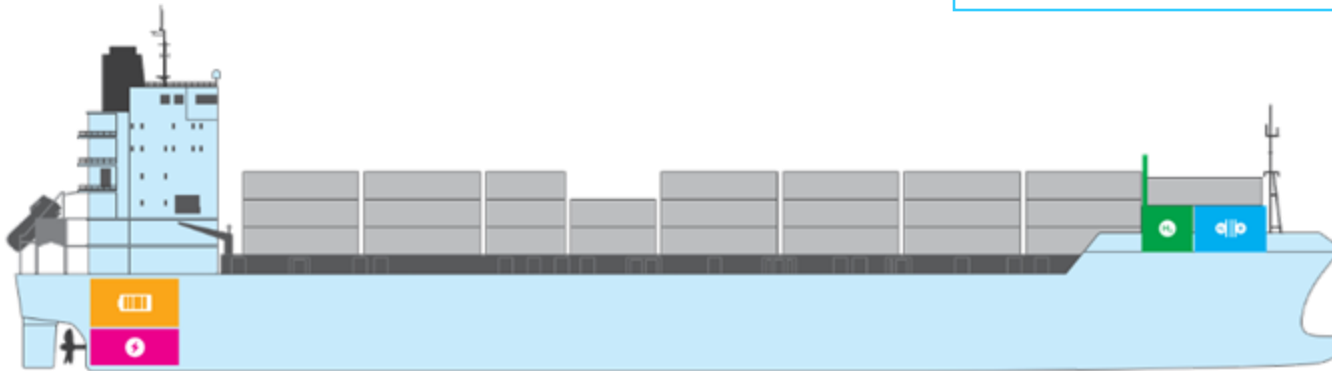
- Design and manufacturing according rules & regulations
- In-house production
- Approval by Flag & Class

Delivery

- Installation on board
- Commissioning
- SAT

Training / After Sales

- Training of Crew and system user
- Maintenance
- Remote Condition Monitoring



Delivered eCap H2PowerPac with swappable tank



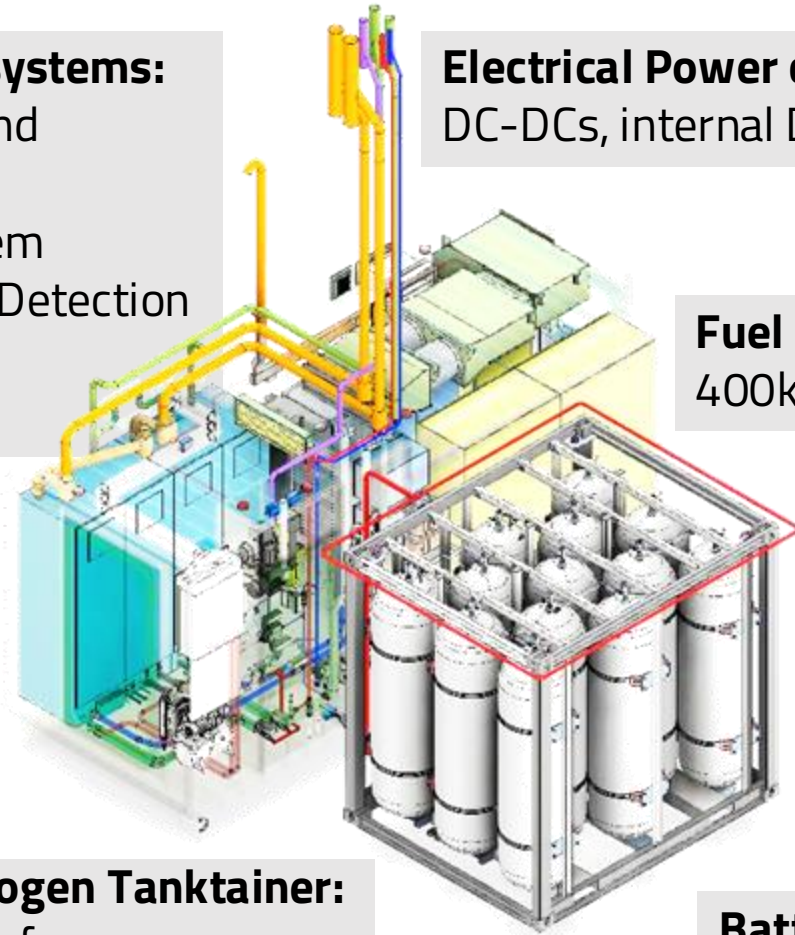
Integrated subsystems:

- Ventilation and Exhaust
- Control System
- Fire and Gas Detection
- Fire Fighting
- Cooling

H2 Pressure Regulation

Swappable Hydrogen Tanktainer:

- 10ft Container frame
- 220kg at 380bar



Electrical Power components:

DC-DCs, internal DC-bus

Fuel Cell System:

400kW

Battery System:

280kWh

1,7MW by Fuel Cell powered B/Cs for Norwegian waters

- Concept, Design, Approval and Delivery of
- FCs and Power System
 - CH₂ storage on deck
 - Fuel Control System and Bunker Station
 - Very high degree of automation



Design Phase

Deliveries
in 2026
and 2027

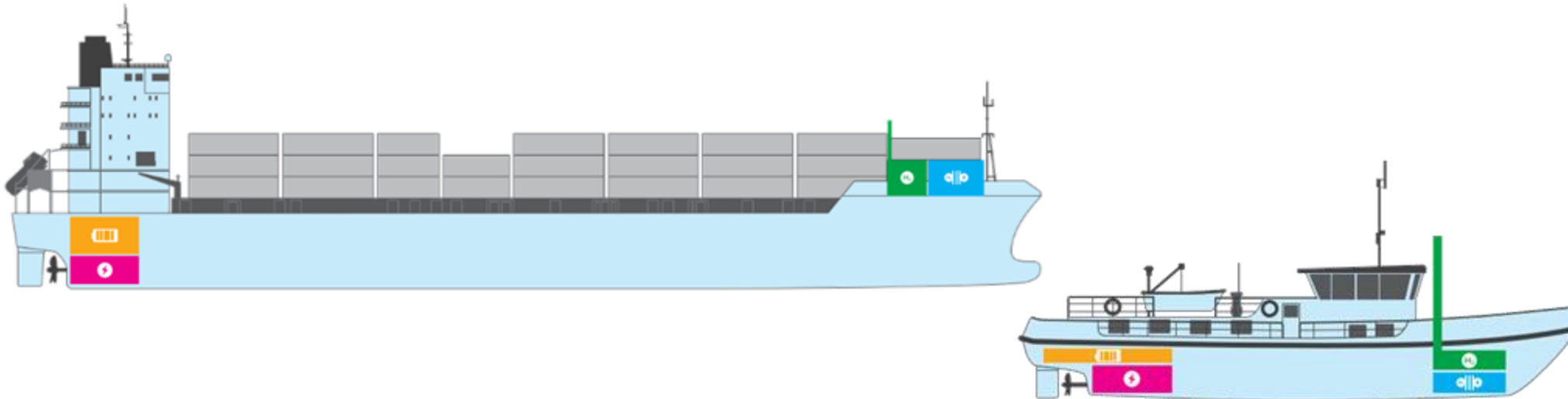
3,2MW by Fuel Cell powered C/V for European Trades

- Concept, Design, Approval and Delivery of
- Containerized on-deck FCs and Power System
 - Highly redundant system
 - Very high degree of automation



Key items for zero emission shipping

- Advanced ship voyage planning
- Heat recovery usage on board
- Optimized power consumption on board
- Explore alternative designs of ship propulsion



E-Cap Marine GmbH

Sustainability in shipping

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