



High Efficiency, Fuel Agnostic Marine Fuel Cells

General Presentation
Jan-2026



Time to Shift

The climate impact of maritime transport.

13.5 %

of EU transportation GHG emissions

3 %

of global GHG emissions

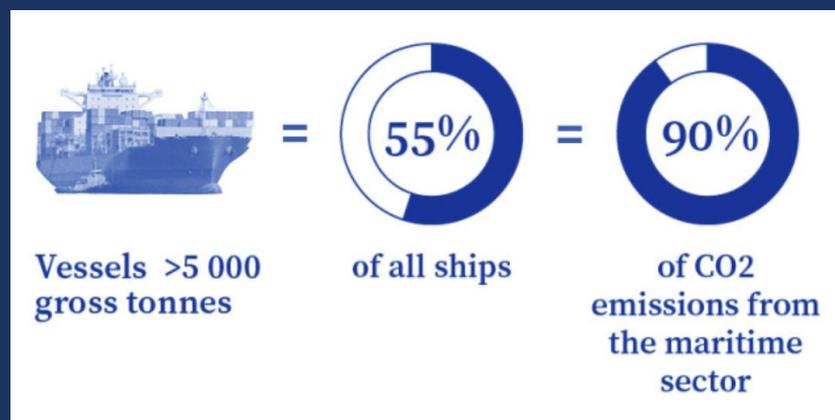
The shipping industry is the backbone of international trade representing 3% of global GHGs, with European Commission projections showing an increase by up to **130%** of 2008 emissions by 2050.



Regulation

EU maritime-emission regulations

80% less CO₂ by 2050



EU Action

The European Union has adopted a number of initiatives to reduce emissions from the European maritime transport sector while keeping it competitive.

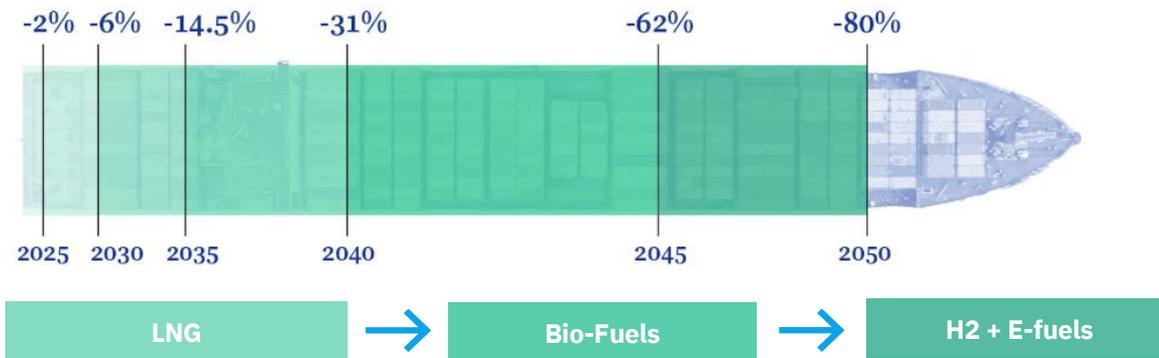
Regulation includes:

1. **FuelEU Maritime:** >5 000 GT vessel pollution reduction (fine for all emissions)
2. **Emissions Trading System (ETS):** Carbon tax on all vessels (off setting CO₂)
3. **MRV Maritime:** >5 000 GT vessel reporting
4. **MARPOL (IMO):** sulphur-cap in fuels

FuelEU Maritime applicable to >35 000 vessels globally today

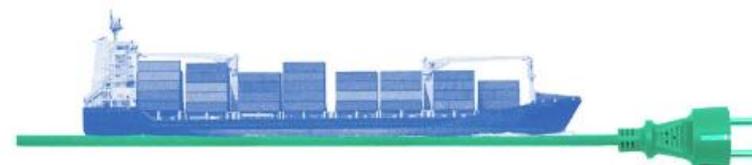
Calling at European ports (with exceptions such as fishing ships)

Annual average carbon intensity reduction compared to the average in 2020



Shore Power +2030

Must be connected to the grid or onboard **zero-emission technology**





Genevos develops and deploys fuel agnostic, high-efficiency fuel cell modules to power vessel propulsion and onboard energy systems.

XPM-100

Offshore - Deep Sea

High power, energy intensive vessels

Features:

- Fuel agnostic (LNG, methanol, hydrogen)
- 60% electrical efficiency
- Low OPEX: less fuel & less maintenance
- 200 kW to 10 MW installations



HPM-40

Coastal

Low – medium power, high operational times

Features:

- Plug-and-play
- Green hydrogen
- 50% electrical efficiency
- 50 – 250 kW installations



Our Solution

for decarbonising the maritime sector

30% fuel saving

compared to combustion

Zero pollutants

NO_x , SO_x , PM, CH_4 , N_2O

Our Team.

2025 - 2026



Founders



Rebecca SHARP
CEO



Phil SHARP
CTO

Advisors



Prof. Nigel
Brandon OBE
Technical



Erwan
Jacquin
Maritime

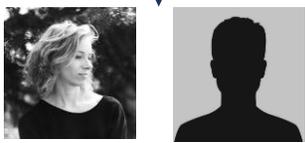


Hugues
Jacquemin
Commercial



Tristan
Smith
Shipping

Administrative



Marie-Laure V
Executive
Assistant



Matthew A.
Finance
Contractor

R&D / Product Development



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Technical
Manager



Chris N
SOFC Technical
Manager



Walid T
FC Specialist



Alexandre B
Control System
Engineer



Laurent F
FC Systems
Engineer



Florian N
Design &
Industrialis.



Romain F
Systems
Engineer



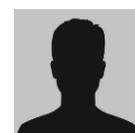
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Engineer



RECRUIT
Electrical
Systems



RECRUIT
Mechanical
Engineer



Alexis N.
CFD
Engineer

Commercial



Philippe D
Sales
Director



Benoit P
Project
Manager

Production



Cédric M
Production
Technician



Nicolas V
Quality Control
Engineer



RECRUIT
Project
Manager

Our Journey to Deployment.

2021



- Patenting of marine fuel cell module concept
- Development of 15kW prototype for European Marine Energy Centre ferry demonstration
- Approval in Principle granted (LR)



2023

- 40kW and 80kW prototype development for pilot projects
- World first green hydrogen refuelling: 'OceansLab – Cleantech Accelerator'
- €2.5m seed fund-raise

electric & hybrid marine AWARDS 2023

bpi france



2025

- Certification & commercialisation of HPM-40
- EU project kick-off for Ship SOFC development project



electric & hybrid marine AWARDS 2025

electric & hybrid marine AWARDS 2026



2020

- Development of 8kW prototype
- Region Nouvelle-Aquitaine 'Start-up Innovation' grant
- 'Solar Impulse Efficient Solution Label',



2022

- Monaco Prize for Innovation in Renewable Hydrogen and Transportation
- Winner of Electric and Hybrid Propulsion System of the Year Award
- Region Nouvelle-Aquitaine 'Start-up Innovation' grant

electric & hybrid marine AWARDS 2022



bpi france



2024

- Launch of Genevos-powered Hydrogen Support Vessel for America's Cup
- Approval in Principle (AiP) HPM-250
- EU Horizon's fishing vessel demonstrator kick-off 'H2-SEAS'



European Commission

electric & hybrid marine AWARDS 2024

Our HQ & Production Centre.

La Rochelle, France

A maritime hub of resource, knowledge and opportunity.



Test Laboratories: [La Rochelle & Nantes](#)



Total
2 400 m²

Internal
1 200 m²

Since
Feb.2025



Product: HPM-40, Market Fit

Low Power Coastal Vessels

PEM-Hydrogen Modular Power Integration: Efficient, Zero-Emission Maritime Energy

HPM Product Features

- Proton Exchange Membrane (PEM), low temperature fuel cell technology
- 40 kW modules / scalable to 200 kW
- Hydrogen fuel
- **50-55% net efficiency**
- **>90% CO2 lifetime reduction compared to diesel**



Propulsion & Auxiliary

Auxiliary / Range Extender

Fishing

< 12 m small-scale

Charter

Motor boats / sailing boats

Taxis

< 50 pax

Ferries

< 24m

CTVs

Surveillance

Hybrid

Battery / diesel hybridisation



Expanding Infrastructure

Access to Green Hydrogen. Western Europe.

Increasing Demand

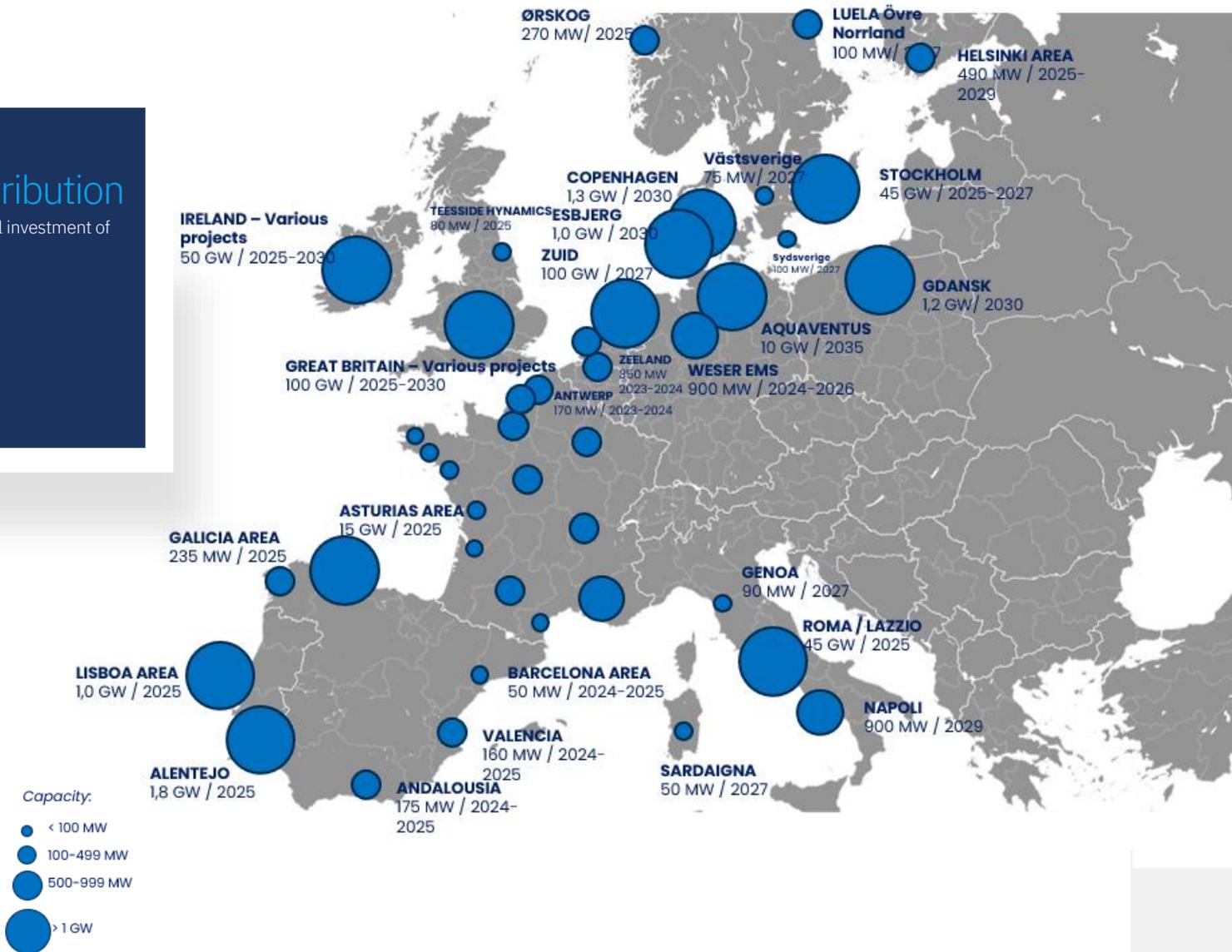
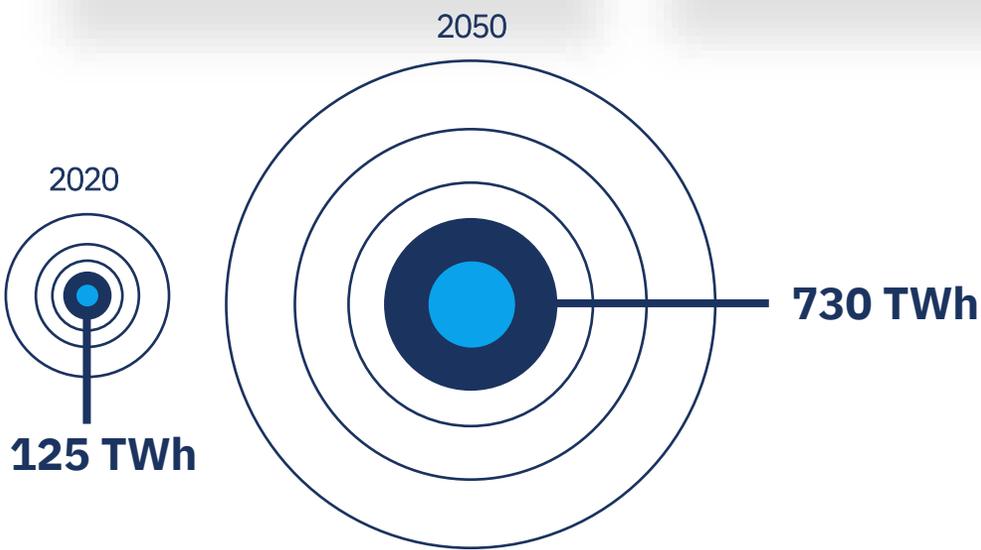
Hydrogen demand expected to increase significantly by 2050 with 42% demanded by ports.

[Clean Hydrogen Partnership 2023](#)

Production & Distribution

Over 1000 projects globally with total investment of \$320 bn

[Hydrogen Insights 2023](#)



Product: XPM-100, Market Fit

Energy Intensive Offshore to Deep Sea Vessels

SOFC-LNG Modular Power Integration: Efficient, Low-Emission Maritime Energy

XPM-100 Product Features

- Solid Oxide Fuel Cell (SOFC), high temperature technology
- 100 kW modules / scalable to multi-MW
- >60% lifetime average efficiency
- **30-40% fuel saving** compared to latest, high efficiency ICE gensets (LNG)
- **Fuel flexible:** LNG / bio-methane / methanol / hydrogen. Adaptable for ammonia
- >30% reduction in CO₂ relative to ICE (LNG-fuelled vessel)



Propulsion & Auxiliary Auxiliary / Range Extender

Workboat

Heavy duty Tugs, Dredgers, Workboats

Early Commercial 2027 - 2035

Ferries

Inc. Ro-Pax, Short-Sea Vessels: quick refuelling cycles & tight operational control

Early Commercial 2027 - 2035

Yachts

Superyachts

First Movers 2025 - 2035

Offshore

Offshore Service Vessels

Early Commercial 2027 - 2035

Cruise

Inc. Expedition Vessels: Auxiliary, low pollutants

Early Commercial 2025 - 2035

Shipping

LNG Tankers, Container Ships, Bulk Carriers

Early Commercial 2027+



Key Fuel LNG Maritime Future.

The EU is the world's biggest importer of LNG. In 2024, the EU imported over 100 billion cubic meters (bcm) of LNG.

+40yrs

LNG carriers have been using gas cargo vapours as fuel for propulsion.



LNG enables the reduction of key air pollutants

Sulphur Oxide (Sox)

a reduction of up to 90%

Particulate Matter (PM)

a reduction of up to 90%

Nitrogen Oxides (Nox)

a reduction of up to 80%



LNG Infrastructure – mandatory in the TEN-T Network

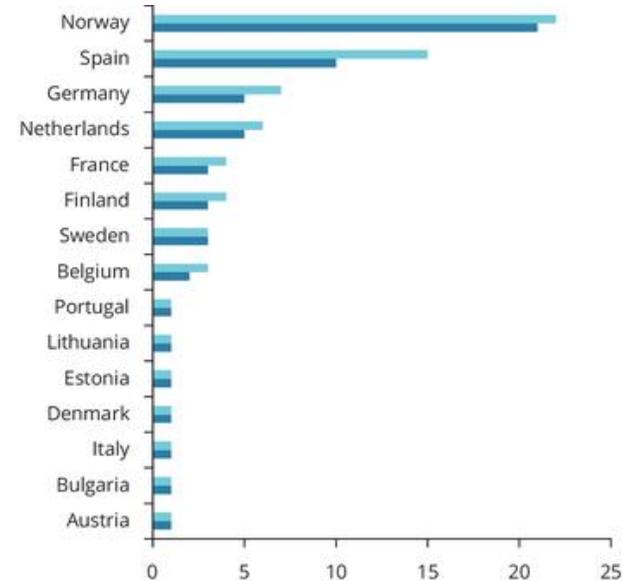
- The European Union requires that core maritime ports must offer LNG bunkering/refuelling infrastructure by end-2025.
- 59 ports in the EU already equipped with LNG stations.

Rodolphe SAADE • Following
Chairman & CEO chez CMA CGM
1d •

On the occasion of the twentieth edition of the Assises de l'économie de la mer, I was pleased to announce that **CMA CGM** will place ten of the world's largest ships under the French flag by 2026.

Powered by liquefied natural gas, they will serve the ports of Le Havre and Dunkirk, at the heart of the Asia-Northern Europe line.

Liquefied Natural Gas (LNG) facilities in the EU - 20 Sept 2024



Reference data: ©ESRI



Addressable Market Segments & Power.



HPM-40

- TAM: 40,000 vessels
- SOM: 10,000 units by 2040



XPM-100

- TAM: 127,000 vessels
- SOM: 15,000 units by 2040



AUXILIARY (ONBOARD) POWER



PROPULSION POWER



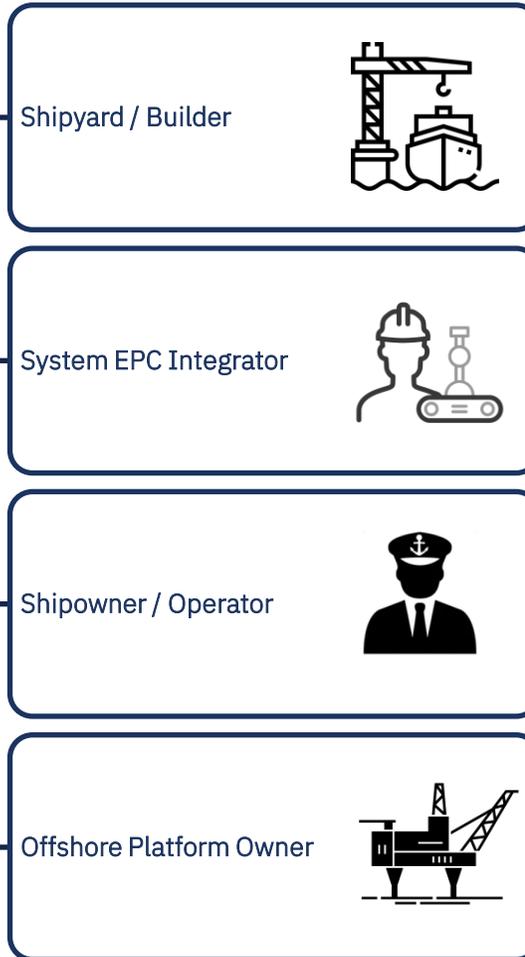
<p>Propulsion: 50 – 250 kW Auxiliary: 1 – 15 kW</p>	<p>Propulsion: 0.4 – 1 MW Auxiliary: 100 – 200 kW</p>	<p>Propulsion: 4 – 12 MW Auxiliary: 0.5 - 5 MW</p>	<p>Propulsion: 10 – 80 MW Auxiliary: 1 - 10 MW</p>	<p>Propulsion: 40 – 80 MW Auxiliary: 10 - 20 MW</p>
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Clients Across the Value Chain.

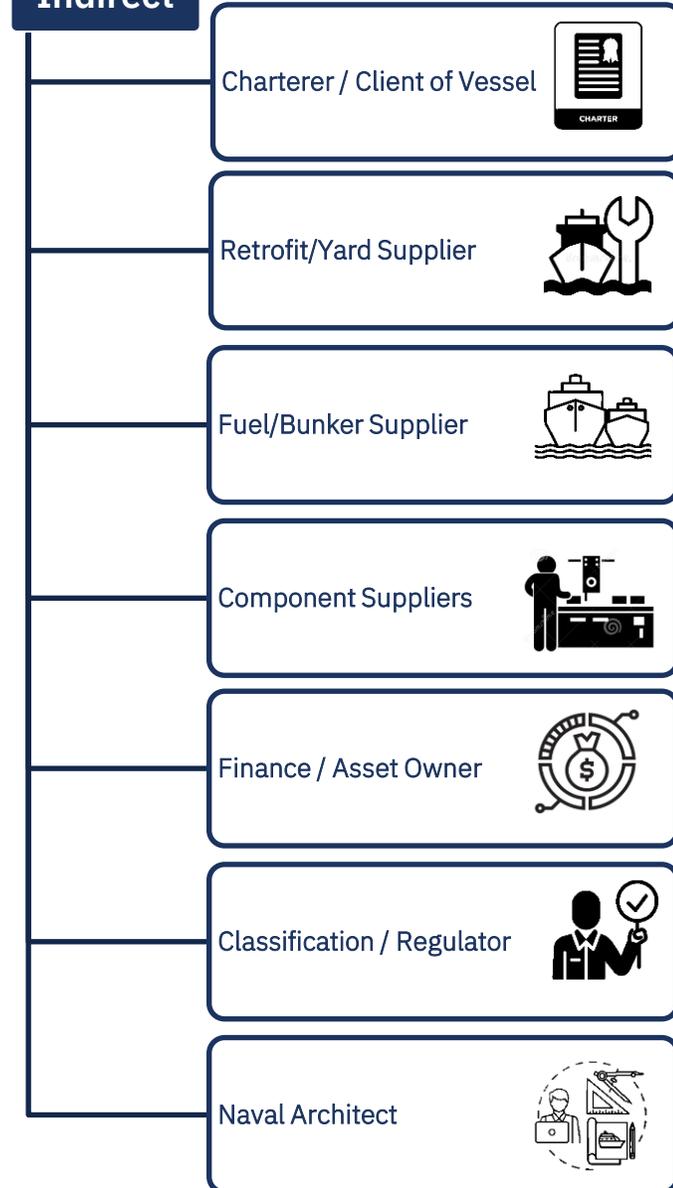
Genevos engages in both upstream (stack/manufacturer), midstream (direct clients) and downstream (fuel, regulatory, financing) stakeholders.

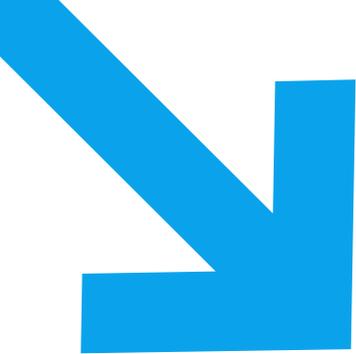


Direct



Indirect





Our Portfolio

Current Clients & Pipeline.

3

Launched

1 – 2 modules per client



horizon europe



4

Current projects

2 – 4 modules per client



+70

Pipeline

5 – 20 modules per client



Delivered Projects: Hydrogen-Electric Dayboat

28 KN

Top Speed

15 kn cruising speed

65 NM

Autonomy

8 kg H₂ storage at 350 bar

180 kW

Total Power

1X HPM-40 + 63 kWh battery



Delivered Projects: Hydrogen Support Vessel



50 KN

Top Speed

100+ nm range | 30 kn cruising speed

160 KW

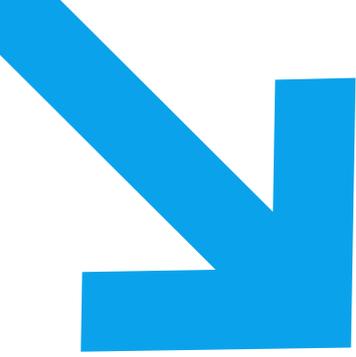
Hydrogen System Power

2X HPM-80 | 32 kg H₂ 350 bar

580 KWH

Total Energy

Incl. 63 kWh battery



Active Project: 45m Port Tanker Vessel



24/7 OPERATION

Hydrogen-Electric

45% extended range | 8 kn average speed

80 kW / 1 MWH

Hydrogen System

2X HPM-40 | 60 kg H₂ 350 bar

2 MWH

Battery Pack





horizon
europe



ATOZ
GROUP



VA WILZHME-UNIVERSITY
OF APPLIED SCIENCES



Active Project: 12m Coastal Fishing Vessel

FULL

Hydrogen-Electric

45% extended range | 8 kn average speed

80 kW / 700 kWh

Hydrogen System

2X HPM-40 | 40 kg H₂ 350 bar

SUMMER 26

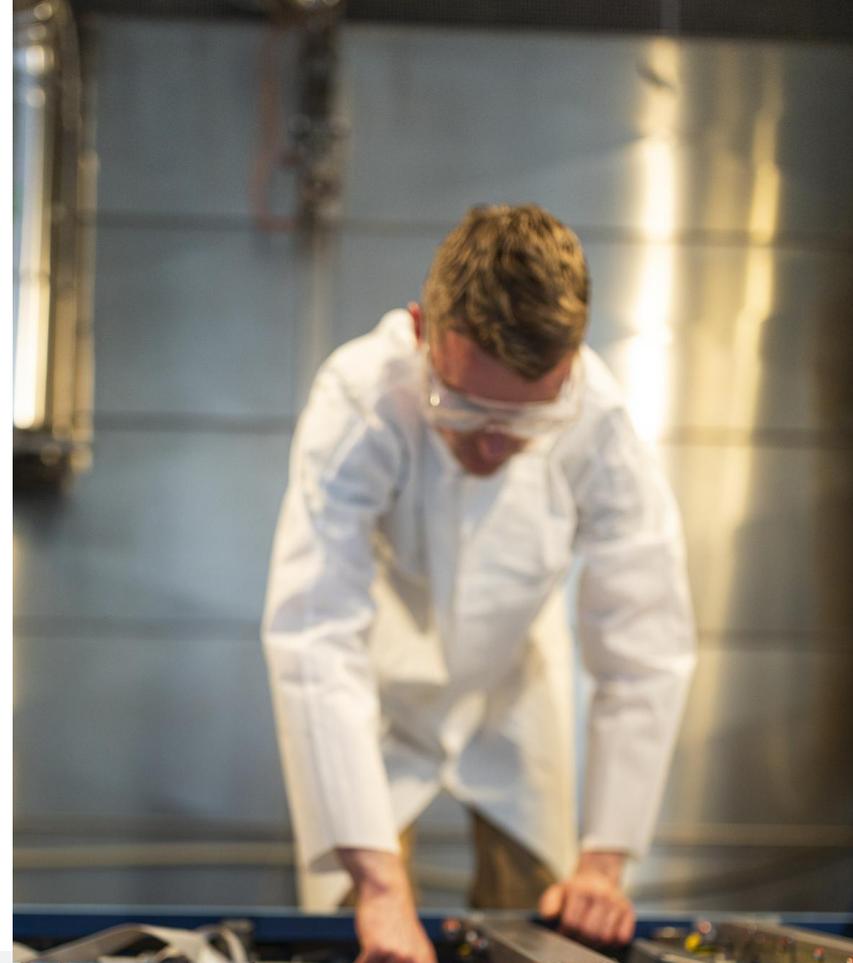
In service



Certificates & Awards.

Key Product Certificates

The image displays four key product certificates for the HPM-40 fuel cell system. From left to right: 1. 'Statement of Fact' issued on 10 November 2023, detailing the design and construction of the HPM-40 fuel cell system. 2. 'Design Appraisal Document' issued on 01 March 2023, providing a detailed technical appraisal of the system. 3. 'Approval in Principle' issued on 27 January 2023, certifying the system's compliance with relevant standards. 4. 'Approval in Principle' for the HPM-250 Fuel Cell, issued on 16 May 2024, certifying the system's compliance with the Classification of Ships, July 2023 and other relevant standards.



Awards

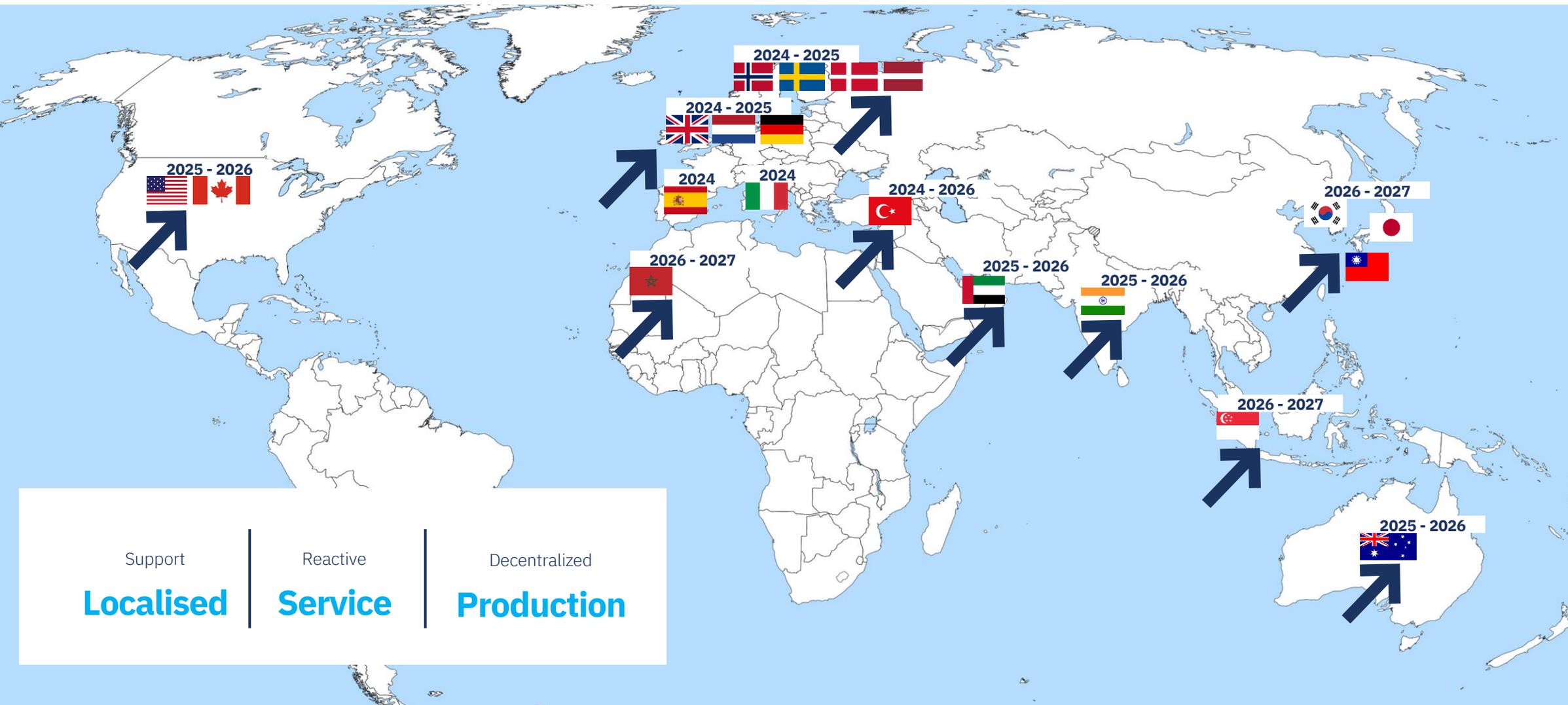
- 2025 'Environmental Achievement of the Year in Propulsion System Design'
- 2025 'Marine Industry Supplier of the Year'
- 2024 'Hydrogen Breakthrough Technology of the Year Award'
- 2023 'Hydrogen Breakthrough Technology of the Year Award'
- 2022 'Monaco Prize for Innovation in Renewable Hydrogen and Transportation'
- 2022 'Propulsion System of the Year Award'
- 2020 'Solar Impulse Efficient Solution Label'

A collection of award logos and medals. At the top left is the 'SOLARIMPULSE EFFICIENT SOLUTION LABEL'. Below it is the 'INNOVATION MARITIME SUD OUEST' logo. To the right are five gold medals, each with a crown and the text 'electric & hybrid marine'. At the bottom left is the 'MONACO HYDROGEN ALLIANCE' logo, featuring a green lightning bolt. The medals are arranged vertically, with the bottom one labeled 'WINNER'.



Internationalization Strategy

Expanding Abroad. Targeted Countries.





Make an Impact Join us.

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GENEVOS

