

PowerCell joins European GAMMA project to accelerate the green transition in shipping

PowerCell Group has joined the European GAMMA project, a €17 million Horizon Europe funded initiative aimed at accelerating the decarbonization of deep-sea shipping through climate-neutral fuels and fuel cell-based power generation.

The GAMMA project (Green Ammonia and Biomethanol fuel MARitime Vessels) brings together 16 European partners to retrofit a 60,000 DWT bulk carrier from TOPIC Fleet. The vessel will serve as a full-scale demonstration of how hydrogen-based fuel cell systems can replace fossil fuel auxiliary generators, enabling zero-emission power generation onboard large ocean-going vessels.

PowerCell's contribution

PowerCell will contribute a 1 MW class fuel cell power system to the project, enabling the demonstration of hydrogen produced onboard from green methanol and ammonia as a reliable source of electrical power for maritime applications.

The system will be integrated into the vessel as part of the auxiliary power architecture and operated under real-world conditions, validating performance, safety, durability and system integration in a demanding deep-sea environment.

“This project represents exactly the type of industrial learning that the maritime sector needs right now,” says Richard Berkling, CEO of PowerCell Group. “GAMMA allows us to move beyond theoretical studies and demonstrate how fuel cells, hydrogen carriers and onboard reforming can work together in a commercial vessel. That operational experience is what will ultimately de-risk adoption and unlock large-scale deployment.”

Demonstration driven decarbonization

While batteries can address certain maritime applications, they cannot meet the full energy and endurance requirements of deep-sea shipping. Hydrogen and hydrogen carriers such as methanol and ammonia, combined with fuel cell power systems, offer a scalable pathway toward zero-emission auxiliary and eventually main propulsion power.

The GAMMA project will generate critical operational data on efficiency, reliability, safety, maintenance and integration, supporting future regulatory frameworks and commercial investment decisions.

“Shipping is a conservative industry for good reason,” Berkling adds. “Vessels are built to operate for decades. Demonstration projects like GAMMA are essential because they allow shipowners, yards and regulators to see real systems operating under real conditions. That is what builds confidence and accelerates adoption.”

A European partnership for global impact

The five-year GAMMA project is supported by €13 million in EU funding and is led by Icelandic engineering company Verkís. The consortium includes ANT Topic, Fraunhofer, Aurelia, Sea Green Engineering, Energy Cluster Denmark, SINTEF, Solbian, Amethyste, Elkon Elektrik, Politecnico di Milano, ARM Engineering, RINA, Amnis Pura, Epipoli Tech, and now PowerCell.

A 60,000 DWT bulk carrier will be retrofitted with fuel cell systems, hydrogen carrier reformers and supporting technologies, creating one of Europe's most advanced demonstrations of climate-neutral auxiliary power for ocean-going shipping.

"This project will show that methanol, ammonia, hydrogen and fuel cells can work together to decarbonize shipping in practice," says Freyr Ingólfsson, GAMMA Project Coordinator at Verkís. "The time for large-scale demonstration is now."

For further information, please contact:

Richard Berkling
CEO
Phone: +46 31 720 36 20
Email: richard.berkling@powercellgroup.com

Anders Düring
CFO
Phone: +46 31 720 36 20
Email: anders.during@powercellgroup.com

About PowerCell

PowerCell is a world leader in hydrogen electric solutions with unique fuel cell stacks and systems. With decades of experience, we use our expertise to accelerate the transition to an emission-free, more sustainable world. We target industries such as aviation, marine, off-road, on-road and stationary power generation. With our cutting-edge products we help our customers to reach net zero emissions already today.

We are headquartered in Gothenburg, Sweden with sales globally. PowerCell is listed on Nasdaq Stockholm.

To read more about our products and services, visit powercellgroup.com.

Attachments

[PowerCell joins European GAMMA project to accelerate the green transition in shipping](#)