

CASE STUDY

GoodWe Powers Historic MSO Marine Boatyard with Hybrid Solar and Storage System

Summary:

Brentford, West London — October 2025 — GoodWe, in partnership with Wagner Renewables Ltd., has successfully completed a bespoke solar photovoltaic (PV) and battery storage installation at MSO Marine, a historic boatyard located at the junction of the Grand Union Canal and the River Thames in Brentford, West London. The project combines rooftop and barge-mounted PV systems with a GoodWe ET 50kW hybrid inverter and a 112.6 kWh GoodWe BAT Series battery, delivering clean energy, cost savings, and enhanced resilience to the historic boatyard.

Key Challenges:

MSO Marine, known for blending traditional boatbuilding craftsmanship with modern technologies, faced significant energy demands. GoodWe and Wagner worked closely to design a tailored renewable solution capable of meeting these demands while preserving the site's heritage and addressing unique challenges, including flood risk on the riverfront.



Installation Information

Location: Brentford, West London

Inverter: ET 50 kW Hybrid Inverter

Battery: BAT112.6 kWh

PV: 30.21 kWp (8.85 kWp + 21.36 kWp)

Solution :

The installation comprises two main PV systems: one on the workshop roof and one on a barge. Both systems were designed to maximize energy generation while addressing shading, roof orientation, and the curved barge surface. The mechanically fixed design minimized structural load while ensuring optimal performance.

To complement the PV systems, Wagner integrated the GoodWe BAT112 battery, securely mounted on a custom-engineered steel plinth to protect against potential flooding from the nearby Thames. The battery operates seamlessly with the GoodWe ET 50 hybrid inverter, enabling efficient energy management between generation, storage, and consumption. With its high charge and discharge capability, the BAT112 supports the site's base load while providing peak shaving and ensuring reliable power availability. The result is a smart, robust energy system designed by Wagner and powered by GoodWe technology that delivers long-term performance and resilience for this historic riverside site.





The hybrid system now enables MSO Marine to increase self-consumption of solar energy, reduce reliance on grid electricity, optimize tariffs, and improve overall energy resilience. The bespoke design demonstrates how GoodWe's advanced PV and storage technology can be tailored to industrial and heritage sites alike, delivering both sustainability and operational efficiency.

Benefits:

- ✔ Clean, reliable energy for marine operations
- ✔ Cost savings and reduced energy dependence
- ✔ Enhanced resilience for historic facilities

Impact and Outlook:

The hybrid system now enables MSO Marine to increase self-consumption of solar energy, reduce reliance on grid electricity, optimize tariffs, and improve overall energy resilience. The bespoke design demonstrates how GoodWe's advanced PV and storage technology can be tailored to industrial and heritage sites alike, delivering both sustainability and operational efficiency.

> ***"Integrating solar and storage on both a workshop and barge required creativity, precision, and teamwork. The result is a showcase of technical excellence and sustainability in action."***
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> — Mark Wells, Technical Director, Wagner Renewables Ltd.

For more information on GoodWe's commercial solar solutions, please visit:
https://emea.goodwe.com/

For more information on Smart Commercial Solar, visit:
https://emea.goodwe.com/commercial-and-industrial-energy-storage-solution