

From Albert to Alb-E: London's First Fully Electric Workboat Sets Sail

[Cross River Partnership](#) (CRP), a non-profit and impartial partnership organisation, launched Alb-E, London's first fully electric workboat, at Butler's Wharf on 14th November 2023. CRP collaborated with the vessel's operator, [Net Zero Marine](#) to convert the vessel from diesel-to electric-powered.

Partially funded by [Defra](#), the project took about 6 months, with most of the work taking place on Eel Pie Island, London. The converted vessel has now been named Alb-E, from Albert originally.

Before work on the vessel started, CRP monitored its emissions to quantify how much air pollution would be eliminated by the conversion. An analysis of the data from the monitoring exercise showed that 2.34 tonnes of carbon dioxide, 41.58 kg of nitrogen oxides and 0.012 kg of particulate matter per year have been removed by switching the vessel from diesel to electric.

Another benefit is the potential long-term cost savings from running an electric vessel. Based on fuel pricing in September 2023, Alb-E can cover 75 nautical miles on a single charge at £58. The same distance would have cost £246 if it was still powered by diesel.

Alb-E has been received positively both domestically and abroad.

Miles Cole, Managing Director, Net Zero Marine, said: "The retrofit of the Alb-E shows how important organisations such as Cross River Partnership are for the River Thames. The marine sector has taken a step forward here and we hope that many workboats will follow in the footsteps of Alb-E."

Jonathan Angus, Director, TMS Engineering, said: "We are pleased to have successfully helmed the creation of London's inaugural carbon-neutral, electric vessel project. Our dedicated and passionate team met the challenge, working relentlessly to bring to life the vision of our partner, Net Zero Marine Services. Our team designed the electrical package to ensure a speed and range compatible with the needs of a workboat operating on the Thames. Alb-E sets a new benchmark with its capability to traverse the full length of the tidal Thames on a single charge."

Sefinat Otaru, Project Manager, Cross River Partnership, said: "We are delighted to see the completion of Alb-E which used to be diesel-powered and is now London's first fully electric workboat. We are grateful for the funding provided by Defra which enabled us to work with the vessel owner, Net Zero Marine, to eradicate the vessel's emissions. We hope the project and Alb-E itself inspire other operators and stakeholders to take similar actions to tackle air quality along the Thames."

The Thames is vital to London's economic, environmental and social well-being. For several years now, CRP has explored reducing road traffic by using the river to move more light freight. Fewer delivery vans on the road means less traffic, less noise, and less air pollution.

However, shifting to river freight shouldn't mean shifting air quality, and CRP has worked with vessel operators to reduce air pollution. Previous projects include [Clean Air Thames](#) in which we refitted vessels' exhaust systems to reduced NOx emissions.

For onward journeys away from the river, CRP continues to explore the use of zero- or low-emission last-mile deliveries and micro logistics hubs as part of its new [Smarter Greener Logistics](#) programme, which runs until December 2024.

CRP is unlocking potential and supporting innovation to provide London with alternative, clean freight modes, and delivering solutions that make London fairer, greener and safer. This initiative supports CRP's vision to make London a better place to live, work and visit.

ENDS

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NOTES TO EDITORS

Alb-E Case study: <https://crossriverpartnership.org/wp-content/uploads/2023/10/CALL-Deep-Dive-From-Albert-to-Alb-E.pdf>

Cross River Partnership

[Cross River Partnership](#) (CRP) is a partnership delivering environmental, economic and community-focused projects. We support public, private and voluntary organisations to address creatively challenges around Air Quality, Transport, Placemaking and Wellbeing.

Defra

[Defra](#) is responsible for improving and protecting the environment. We aim to grow a green economy and sustain thriving rural communities. We also support our world-leading food, farming and fishing industries.

Net Zero Marine

[Net Zero Marine](#) (NZM) finances, builds and operates integrated renewable power systems specifically designed for the marine sector, working in partnership with landowners and operators to share the benefits. The company also provides shore power solutions to help port and marine operators reduce emissions at berth and future-proof their services for electric vessels.

TMS Engineering

[TMS Engineering](#) is a dedicated team of highly qualified marine engineers with expert knowledge and good working relationships on the Thames with both commercial and non-commercial customers in the maritime industry. TMS Engineering carries out projects of all sizes, ranging from electrical and mechanical engineering to refits, builds and project management.

Smarter Greener Logistics

[Smarter Greener Logistics](#) (SGL) is a Defra-funded project led by Westminster City Council in collaboration with 26 project partners. The project aims to minimise the impact of freight on noise, air quality, traffic and pavement space in London by making improvements across 15 London boroughs and 4 London Business Improvement Districts (BIDs). SGL is building on the success of CRP's [Clean Air Logistics for London](#) (CALL). Before that CRP also delivered a Mayor of London Air Quality-Funded project [Clean Air Thames](#).

Further Information

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Image to accompany Press Release

