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£8m project aims to deliver first retrofit E-CTV with offshore and onshore charging

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A seemingly groundbreaking project aims to deliver the world's first retrofit electric crew transfer vessel (E-CTV) – retrofitting a diesel CTV to be fully electric while also developing infrastructure to charge the E-CTV onsite directly from a wind turbine.

The design and engineering phase of the project is being undertaken by Tidal Transit, a supplier of purpose-design crew transfer vessels for the offshore wind industry.

The initiative has received £6.3m funding from the Zero Emissions Vessel and Infrastructure (ZEVI) competition, which opened in February 2023 as part of Innovate UK and the Department of Transport's strategic plan to develop, deploy and operate clean maritime solutions. Ten flagship UK projects were chosen to split more than £80m in funding, with the aim of unlocking an industry-led transition to Net Zero.

Over the next 15 months, Tidal Transit will retrofit a diesel-powered Mercurio 20m vessel, Ginny Louise, with over two megawatt-hours (MWh) of battery capacity, electric motors and propulsion pods. The finished product, e-Ginny, will not only be 100% zero emissions in operation, but also boast increased manoeuvrability while being near-silent for passengers and passers-by, according to the firm.

As existing shoreside charging capabilities are severely limited, the project will expand vessel charging infrastructure by installing both an onshore charging station from Artemis Technologies, and an offshore wind turbine based-charger from MJR Power & Automation to allow for direct E-CTV charging on location, greatly increasing the time and range that electric vessels can stay in operation without returning to port.

The e-Ginny project is being undertaken in partnership with Goodchild Marine Services, Artemis Technologies and MJR Power & Automation. Key equipment suppliers also include Volvo Penta, Danfoss and the battery system from Corvus Energy. Upon completion, the E-CTV will be begin service on a UK windfarm for a period of 3 years.

Leo Hambro, commercial director of Tidal Transit, commented: "This project is a significant step forward in propelling the offshore transport industry into a new zero-carbon era. As a Norfolk based company, we're delighted to be working locally with our project partner Goodchild Marine and, alongside our other incredible design and engineering partners operating nationwide, continuing to lead the way in sustainable and decarbonised offshore transport."

For more information about Tidal Transit, visit https://www.tidal-transit.com/ or follow on LinkedIn: https://www.linkedin.com/company/tidal-transit-limited/.