

USA - California 2019 - 2021 Battery and hydrogen ferries



2019 Some 425 miles northwards along the Californian coastline, at San Francisco, one boards the Enhydra, (a tribute to the California sea otter), a 128-foot-long hybrid ferry operated by Red & White Fleet, a tour guide company that's one of San Francisco Bay Area's oldest businesses.

The boat can shuttle up to 600 passengers for over an hour using lithium-ion batteries developed by Corvus Energy, a company that makes energy storage solutions for the maritime industry. BAE Systems integrated some of the technology, which also includes gear from Cummins Red & White Fleet plans to have a 4-strong zero-emissions fleet by 2025. the first aluminum hulled, lithium-Ion battery plug-in hybrid vessel built from the keel up under US Coast Guard regulations.

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Commuter Ferries



'Water-Go-Round' Golden Gate Zero Emission Marine ferry

The Enhydra can cruise in all electric-mode at 7 knots for 2+ hours, consuming less than 8 gallons per hour. With near silent operation, the Enhydra comes equipped with elegant interior finishes, clear handrails for maximum viewing capacity, a state-of-the art sound system and personal audio headsets for audio tours in 16 languages. In 2021 R&W are planning their first hydrogen fuel cell powered vessel.

The 84-passenger e-ferry was under construction at the All American Marine shipyard in Bellingham, WA using private funding from SWITCH and a \$3 million grant from the California Air Resources Board (CARB).

While Hornblower Group's Vessel Construction Management Team was overseeing and ensuring the successful construction of this innovative vessel, the project was leveraging technology from partners including Golden Gate Zero Emission Marine, BAE Systems, and Hydrogenics. Scaling this zero-emission technology will only be possible with significant investment in new fueling infrastructure.

SWITCH is partnering with Clean Marine Energy (CME) to develop electric charging and hydrogen fueling infrastructure onshore. Backed by the same founders, CME plans to make clean fueling infrastructure available in multiple ports across the US.