



Nation's First Plug-in Hybrid Electric Inland Towing Vessel Christened in Houston

August 25, 2023 at 11:00 AM EDT

HOUSTON, Aug. 25, 2023 (GLOBE NEWSWIRE) -- Kirby Inland Marine, LP christened the GREEN DIAMOND, the nation's first plug-in hybrid electric inland towing vessel, at a ceremony in Houston on Friday, August 25, 2023. Following the ceremony, the vessel will be time chartered by Shell Trading (US) Company, which will use the boat to push barges throughout the Houston port region. Shell Energy Solutions (PUCT #10174) is providing electrical power matched 100% by Green-e[®] certified renewable energy certificates to charge the vessel's battery system. Kirby Inland Marine is a subsidiary of Houston based Kirby Corporation (NYSE: KEX).

"We are excited to be the first to market with a plug-in hybrid inland towing vessel," said Christian O'Neil, President of Kirby Inland Marine. "Barge transportation is already the cleanest and greenest way to move a wide variety of cargoes in America, and we are working to make it cleaner and greener. Our customers who are focused on reducing their emissions want more efficient options. This solution is available today."

The GREEN DIAMOND is the product of collaboration among many Kirby-owned companies. The vessel was constructed by San Jac Marine, LLC, Kirby's shipyard in Channelview, TX. Stewart & Stevenson Manufacturing Technologies, another Kirby company, designed and installed the power management, control and propulsion systems. A host of vendors provided other key systems for the first-of-its-kind vessel.

Propulsion is provided by two 575 KW Danfoss electric motors that can be driven either by the Corvus Orca series battery system, which provides 1243 KWH of power, or, if needed, onboard Caterpillar generators. A Shell New Energies US-owned charging system purchased from Zinus will be used for dockside charging of the battery system, allowing the vessel to operate on trips within the Houston area without ever needing to start the generators. According to Kirby's modeling, when operating on shore supplied power, the fuel use can be reduced by almost 80%, resulting in an estimated 88-95% reduction in emissions of nitrous oxides, carbon monoxide and hydrocarbons. Engine run time can be reduced between 93 and 98% compared to a conventional inland towing vessel. When in hybrid mode with the generators running, the boat is expected to have an estimated 27% reduction in emissions compared to a conventional towing vessel.

"The plug-in hybrid design offers numerous advantages for towboats in certain trades," said Mitch Jones, Vice President of San Jac Marine. "We are already looking at building follow-on vessels." Stewart and Stevenson Executive Vice President Chad Joost added, "As a leader in electric fracturing equipment, Stewart & Stevenson already has a proven track record of high horsepower electric systems that save energy and reduce emissions in the oilfield. We were able to adapt that patented technology to the marine environment and enable this vessel to operate on shore power and charge the batteries while on dock, then get underway on battery power. On extended trips, the generators will be used to supply power to the motors and charge the batteries. All of this happens seamlessly through Stewart and Stevenson's power management system."

"We expect the GREEN DIAMOND, with its unique "Eco-Tug" logo, to be a fixture in the Port of Houston for years to come," O'Neil concluded.

Forward-Looking Statements

Statements contained in this press release with respect to the future are forward-looking statements. These statements reflect management's reasonable judgment with respect to future events. Forward-looking statements involve risks and uncertainties. Actual results could differ materially from those anticipated as a result of various factors, including adverse economic conditions, industry competition and other competitive factors, adverse weather conditions such as high water, low water, tropical storms, hurricanes, tsunamis, fog and ice, tornados, COVID-19 or other pandemics, marine accidents, lock delays, fuel costs, interest rates, construction of new equipment by competitors, government and environmental laws and regulations, and the timing, magnitude and number of acquisitions made by the Company. Forward-looking statements are based on currently available information and Kirby assumes no obligation to update any such statements. A list of additional risk factors can be found in Kirby's annual report on Form 10-K for the year ended December 31, 2022.

About Kirby Corporation

Kirby Corporation, based in Houston, Texas, is the nation's largest domestic tank barge operator transporting bulk liquid products throughout the Mississippi River System, on the Gulf Intracoastal Waterway, and coastwise along all three United States coasts. Kirby transports petrochemicals, black oil, refined petroleum products and agricultural chemicals by tank barge. In addition, Kirby participates in the transportation of dry-bulk commodities in United States coastwise trade. Through the distribution and services segment, Kirby provides after-market service and genuine replacement parts for engines, transmissions, reduction gears, electric motors, drives, and controls, specialized electrical distribution and control systems, energy storage battery systems, and related equipment used in oilfield services, marine, power generation, on-highway, and other industrial applications. Kirby also rents equipment including generators, industrial compressors, high capacity lift trucks, and refrigeration trailers for use in a variety of industrial markets. For the oil and gas market, Kirby manufactures and remanufactures oilfield service equipment, including pressure pumping units, and manufactures electric power generation equipment, specialized electrical distribution and control equipment, and high capacity energy storage/battery systems for oilfield customers.

Notes:

1. MP2 Energy Texas LLC does business as Shell Energy Solutions TX PUCT #10174
2. For more information about Green-e[®] certified renewable energy, visit www.green-e.org

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Source: Kirby Corporation