

HYBRID ELECTRIC MARINE RESEARCH VESSEL

PNNL-Sequim to host first hybrid vessel in the Department of Energy fleet.

In 2023, a new plug-in hybrid research vessel will be coming to PNNL-Sequim, the only marine research facility in the Department of Energy (DOE) Complex.

The research vessel, equipped with both standard diesel engines and electric motors, will be the first hybrid vessel in the DOE fleet. When operating in battery electric mode, the vessel will be nearly silent and without emissions. It will be less intrusive for studying fish and other wildlife and will also reduce air pollution and carbon dioxide emissions.

Plugging into next-generation blue economy technology

With funding from DOE's Water Power Technologies Office, the hybrid vessel represents the next generation of blue economy technology and will enable future research and testing to support renewable power from the ocean. As a hybrid vessel, the investment will advance long-term opportunities for energy innovation and decarbonization of marine transportation.

The plug-in hybrid vessel, which will be built by Snow & Company in Seattle, Washington, will be able to operate quietly on electric power at lower speeds and cruise at 20 knots using diesel power. It will have laboratory space with multiple science stations, a large deck, an A-frame and a knuckle crane to help move research equipment.



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