It’s not a stretch to say that a small building located near the entrance of the Port of L.A.’s Main Channel plays a significant role in U.S. the economy. That’s because all ship traffic coming and going in and out of America’s #1 cargo gateway does so under the guidance of the 24/7 operation headquartered there -- the Marine Exchange of Southern California.

The seaborne equivalent of an air traffic control center, the Marine Exchange’s primary services are its Vessel Advance Arrival Reports and its Vessel Traffic Service that monitors all ship movements within 100 miles of the San Pedro Bay.

“We’re the glue that holds shipping operations together,” said Captain Richard McKenna, Executive Director of the Marine Exchange.

From the Marine Exchange’s hilltop headquarters on Coast Guard property, operators use state-of-the-art technology to track nearly 5,000 vessels annually – everything from containerships to pleasure craft -- calling at America’s busiest port complex. Everyone from the docks to the cargo’s final destination relies on its real-time data to pinpoint the position of inbound and outbound vessels.

The Marine Exchange is also an information broker whose extensive database allows it to generate detailed reports upon which the maritime industry has come to rely. In a data-driven world, its clients circle the globe and include port authorities, shipping lines, cargo owners, tugboat operators, insurance companies, law firms, government, and all levels of law enforcement.

A longtime trade partner to all in Southern California’s goods movement industry, the Marine Exchange has detailed records of every inbound and outbound ship since it launched operations in 1923. In those early days, the Marine Exchange relied on professional “lookouts” perched in a shack on the roof of a waterfront warehouse. Their tools were signal lights, flags, binoculars, and megaphones to announce arriving ships and alert dockworkers. In time, telephones were added.

Whether it’s locating a single ship, supporting search-and-rescue missions or furnishing data for long-range business planning, the Marine Exchange prides itself in being a forward-looking service provider. In today’s world, that includes going green.

“We’re going to be totally energy independent,” McKenna said.

Two years in the making, its Green Energy Project is poised to tap into vast solar and wind resources of the Marine Exchange’s high-tech base atop Angels Gate Park to power everything from radar operations to indoor lighting. By spring, 286 solar panels and one wind tower – designed with a vertically mounted generator for maximum bird protection – will produce its electricity.

“We’re installing an entire solar array around our building. The wind component is experimental, but the combination ensures that we will be entirely self-sufficient,” McKenna said.

Uniquely positioned to go off the grid, the Marine Exchange sits on one of the highest points in San Pedro with unobstructed southeast exposure. The building overlooks what locals know as Hurricane Gulch, whose powerful winds offer some of the best windsurfing in Southern California.

By partnering with the Los Angeles Department of Water and Power and the Port of Los Angeles, the Marine Exchange, a nonprofit organization, was able to make the project a reality.

To finance the solar and wind equipment, the Marine Exchange’s power costs will continue at their current rate for the next six to seven years. After that, its annual electricity bill will be history.

In its 89th year, the Marine Exchange is part of the fabric of San Pedro, whether it’s partnering with authorities on matters of national security or hosting community meetings. With its Green Energy Project, the Marine Exchange hopes to add environmental leader to its numerous roles. “We’re hoping to be a showcase project for terminal operators and others,” McKenna said.

For more information about the Marine Exchange of Southern California, visit www.mxsocal.org.