

# Shore power: Cruise ships to get charged up at Port Everglades

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In the name of greener shipping, Broward County's venerable Port Everglades is moving to join a small but growing group of ports worldwide that allow visiting cruise ships to plug into shore-based power

sources for electricity.

It's an effort to reduce [greenhouse gas emissions](#) by allowing massive ships idled at ports to shut down their engines and rely on local power grids.

While recovering from a financially devastating shutdown forced by COVID-19, the cruise industry says it is making serious efforts to become more energy-efficient and sensitive to the environment as more ships return to the open seas and resume calling at ports worldwide.

One of those measures, dubbed "shoreside power," was repeatedly articulated by company and port executives during last week's Seatrade Cruise Global conference in Fort Lauderdale.

Every ship being built today for member companies of the Cruise Lines International Association is expected to be "plug-in ready," the Washington-based trade group says. Thirty percent of the vessels have the capability now; another 30% are being retrofitted.

Twenty-nine cruise ports worldwide have at least one berth with onshore power, the association says, and 20 others are either funded or plan to have the service by 2025.

But the numbers represent a small fraction of the cruise ports worldwide, CLIA acknowledges in a 2023 "State of the Cruise Industry" report.

"Less than 2% of the world's cruise ports have onshore power; by 2025, 3% will have shoreside power," the CLIA report says.

Now, Port Everglades is among those ports that is committed to a major—and expensive—project to provide visiting [cruise ships](#) with shoreside power.

According to the proposed master plan, the project, which would be rolled out in two phases, would cost more than \$160 million and ultimately cover all eight of its cruise terminals at \$20 million per terminal. The projected implementation date of the first phase covering five terminals may be completed in early 2027.

Construction of land-based power sources could start in the middle of next year.

## **Big cost burden**

Despite the huge price tag, industry officials say the result at Port Everglades would be worth the expense, which would be covered by a variety of sources including the cruise lines themselves, FPL, the port and federal and state grants.

To illustrate, the port noted in a statement that the project would cut emissions by the equivalent of removing 2,770 cars from the roads each year.

"It's an extremely expensive proposition," Jonathan Daniels, CEO and director of Port Everglades, said in an interview Thursday.

"There's a financial burden but ultimately [with] the responsibility we have to the environment it's incumbent upon us—it's the port, it's the state. it's the [federal government](#), it's the lines as a whole—that need to bear financial responsibility to be able to deliver a resilient and sustainable industry," he said.

"All of the lines are touting what their ESG [environmental, social, governance] strategy is," Daniels added. "The first part of that is the environment."

He said the port does not want to put itself in "a position where we overwhelm the environment."

The Port Everglades master plan, released last month, was conducted by Moffatt & Nichol, a global advisory firm, in collaboration with FPL, Carnival Corp., Disney Cruise Line, and the Royal Caribbean Group.

A review of cruise ships now serving the port showed a majority of the 41 vessels calling there are either equipped to use shore power or eventually will be retrofitted to do so.

The study suggested initial implementation of the first phase by 2026, but another port official said it's more likely to be a little later.

"I would say realistically if we start today, I don't believe we could implement prior to '27," said Neil J. Kutchera, assistant port director for energy and innovation.

Kutchera's job is not only to help shoreside power move forward, Daniels said, but to make sure that the port's users are transitioning into cleaner fuels over time. Ships, for example, started out using heavy fossil fuels in the port's early days, then moved on to diesel and are now being equipped to use liquid natural gas.

Shoreside power is expected to become a reality at PortMiami this fall with five cruise lines participating. Miami-Dade County launched its project in 2021, also in league with FPL as well as with Carnival Cruise Line, MSC Cruises, Norwegian Cruise Line, Royal Caribbean and Virgin Voyages,

The idea is hardly novel, and ports and cruise lines have experimented with it for years, with limited commitments in the early 2000s. In the meantime, they were not known as friends of the environment

## Early initiatives elsewhere

A 2004 report by the National Resources Defense Council called "Harboring Pollution" rated the nation's ports for air quality, noting they were major sources of pollution. Besides ships, the named offenders included trucks, dock equipment and railroad locomotives, which all used diesel engines.

The report ranked the top 10 ports nationwide. Port Everglades was unranked, but PortMiami received an "F" on air pollution for "minimally proactive efforts" to control it.

Later, it was mainly West Coast ports that installed limited shoreside power for visiting ships. As early as 2007, ships operated by Princess Cruises used shoreside power at the Port of Seattle, courtesy of the city's municipal utility.

In 2010, the Port of San Diego installed its first landside power source. The port expanded the system this past January with a second source, allowing two ships to charge up simultaneously for the first time.

Ports in California, Washington and Alaska all used alternate power supplies for visiting ships.

But East Coast [ports](#) including South Florida's took little action, the South Florida Sun Sentinel reported at the time.

Daniels said that in 2008, Port Everglades conducted a study of shoreside [power](#) but "it just was not the right application at that time. It was still new technology at that moment, it was extremely costly."

By now, he added, it was likely that the port "would have either replaced that or abandoned it as new technology came online that's more efficient

or more cost effective."

Some 15 years later, Port Everglades has a local government mandate to act.

During conversations last year with Broward County commissioners, Daniels recalled, it was made clear to [port](#) management that carbon reduction "will be one of your priorities moving forward."

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