It’s electrifying – Portsmouth International Port’s shore power system goes live

In a huge forward step for the UK maritime industry, ferries and cruise ships are now plugging into Portsmouth International Port’s shore power system, as it strives to become the country’s first zero-emissions port by 2050.

Brittany Ferries’ hybrid-electric ships, the St Malo and the Guillaume de Normandie – both part of a €550 million fleet renewal – were the first to charge up during the system’s final testing phase, marking a major milestone in the decarbonisation of the port, and of the country’s maritime industry.

Two cruise ships have also taken electricity while testing the system, with commissioning first taking place with AIDA’s AIDAsol, followed by Phoenix Risen’s Amera.

These are the first steps to the system realising its full potential, when three ships plug in simultaneously, which is expected to happen later this year.

Funded with £19.8 million from the Department for Transport and £4.6 million from Portsmouth City Council, it is the UK’s first multi-berth, multi-user, multi-frequency shore power system, that will allow up to three ships to plug in at the same time.

Any of the port’s customers’ ships can now plug into clean electricity, meaning they can turn off engines while alongside, helping to improve the city’s air quality. Those with batteries will also be able to enter and exit the harbour under electric power.

As well as improving air quality for Portsmouth residents, the system is projected to help avoid emissions of around 20,000 tonnes of CO2e from 2027, aiding in the goal to become the country’s first emissions-free port by 2050.

Mike Sellers, Portsmouth International Port director, said: “This is a huge moment not only for us, but also for the UK ports industry as a whole, as we are now the country’s first port to offer multi-berth, multi-user shore power.

“The clean electricity will have a big benefit to air quality in the city, and it also helps to future-proof Portsmouth port, aligning us with international moves towards electrification for all of our customers, meaning we can continue to be profitable and provide for essential services in the city.”

While electricity prices remain high, the port, the council and Brittany Ferries have worked hard together to strike a deal to ensure the company’s two shore-power-ready ferries can plug in.

Mike added: “There are still challenges we’re facing around the cost of electricity, and we’re continuing to lobby the government hard to ensure they address these and make electrification a more attractive business proposition for us and for ports across the country.”

Christophe Mathieu, chief executive at Brittany Ferries, said: “As we mark half a century of serving Portsmouth, it’s crucial that we look forward as well as back, and shore power does exactly that. This isn’t just leading-edge technology, it’s a concrete step in our decarbonisation journey and, perhaps most importantly, a commitment to being a good neighbour. The most immediate benefit is cleaner air for the people who live and work around the port. And for our customers too, it means greener travel.

“We’re grateful to everyone who’s worked so hard to make this a reality: the teams at Portsmouth International Port, Portsmouth City Council, the Sea Change partners, and the UK government. Portsmouth is a city that has always thrived on its sea links, and together, we’re making a difference that people who live in it can breathe.”

In addition to the funding for construction of the system, Portsmouth City Council also provided £3 million to secure the power that was needed from the grid.

Cllr Steve Pitt, leader of the council, said: “I want to congratulate everyone involved in this huge undertaking, which sets Portsmouth apart in the UK cruise and ferry market, cements our sustainability ambitions, and contributes to our ongoing commitment to the health of people across the city.

“There are always risks when being early adopters of new technology, and I want to thank our partners at Brittany Ferries for working closely with our team at the port to ensure we can plug in their fantastic hybrid ships to the benefit of all who live and work here, and their passengers.

“As the first mover in electrification, we have had a number of challenges to get to this point, but the team at the port and all of the partners have been absolutely determined to make this work, for the industry but primarily for the people of Portsmouth. Our priority with the shore power system has always been helping to improve air quality in the city, for those who live and work here.”

Aviation, Maritime and Decarbonisation Minister Keir Mather said: “Backed by almost £20 million in Government funding, this is a major milestone in decarbonising UK shipping, placing Portsmouth firmly in the future as it celebrates 50 years in operation.

”Nationally, shipping is the backbone of the economy, and government is playing its part, investing £448m to drive innovation in clean fuels and technologies, creating skilled jobs, cutting emissions, and driving long-term growth.”

The shore power system, also known as the Sea Change project, is the result of the work of a number of partners, including Barter 4 Things, Brittany Ferries, MSE International, Swanbarton, and the University of Portsmouth.