The Port of Barcelona connects the first ship to the BEST terminal's OPS system

- **This connection represents a genuine milestone, as it was the first time a ship could turn off its engines while moored at the Port of Barcelona.**
- **The OPS was completed this August with a cable management system (CMS) that allows the connection to reach the point on the wharf where the ship is moored.**

For the first time, a ship could turn off all its engines while moored at the Port of Barcelona, in what was the first emission-free port of call for a container ship. This key milestone in the process of decarbonising port activity was made possible thanks to the new Onshore Power Supply (OPS) system at the Hutchison Ports BEST container terminal, which made its debut by supplying 100% renewable energy to the MSC Mette, a 24,000-TEU capacity container ship, during the three days it was moored at the Port of Barcelona. Despite it being the very first time it was used, the connection and provisioning process was successful and ran smoothly.

The operation took place at the BEST terminal OPS, the first electrical supply system to ships in a container terminal in a Mediterranean port, which was completed in August with a cable management system (CMS) that takes the connection to the point of the wharf where the ship is moored. This system has been custom-designed to avoid interfering with the usual container loading and unloading operations and is a key element for adapting the electricity supply to the specific needs of each ship and the terminal.

The connection performed on Tuesday therefore made it possible to test the ensemble of systems that make up the OPS under real-life conditions and to confirm that it is compatible with the ship and terminal operations. Once connected, it was also possible to test the synchronisation between the OPS and the ship's electrical systems, which worked flawlessly. The power needs of each ship can vary depending on factors such as size or number of refrigerated containers it carries, and one of the key functions of the OPS is that it adapts the energy it receives through the medium-voltage network to these needs. In this case, the OPS supplied the MSC Mette with a total of 103,200 kWh.

The first two years of operation of the OPS, which is part-financed by the Sustainable and Digital Transport Support Programme under the Recovery, Transformation and Resilience Plan, will represent

Communication department. Press office.
T +34 93 306 88 40 | comunicacioport@portdebarcelona.cat | www.portdebarcelona.cat

a pilot phase that will provide real-time data and experience concerning the operation of this system and the best way to integrate ship power supply into port operations. Armed with this knowledge, the Port will continue to roll out the OPS as efficiently as possible under the Nexigen plan, which aims to electrify the main wharves at the Port of Barcelona over the next five years.

"Connecting a container ship to the electricity grid for the first time is a key step forward in the rollout of the Nexigen plan and the decarbonisation of port activity. As of today, we are effectively already eliminating emissions generated by ship engines, a process that will be greatly increased once we roll out the rest of the OPS thanks to the experience that this pilot test will provide us", assured Port of Barcelona president Lluís Salvadó.

The rollout of the Nexigen plan, involving an investment of €200 million, will continue with the entry into service of the first OPS in a Ferry terminal, scheduled for this winter. In parallel, it also involves building a new electrical substation from which a new medium-voltage network will be deployed throughout the port, including an underwater pipeline to connect the supplies from the Energy Wharf and the Adossat Wharf, making it possible to electrify all cruise, ferry and container terminals by 2030.

PHOTO. The MSC Mette was the first ship to connect to the OPS of the BEST terminal, making the first emissions-free call of a container ship at the Port of Barcelona.

Communication department. Press office.
T +34 93 306 88 40 | comunicacioport@portdebarcelona.cat |www.portdebarcelona.cat

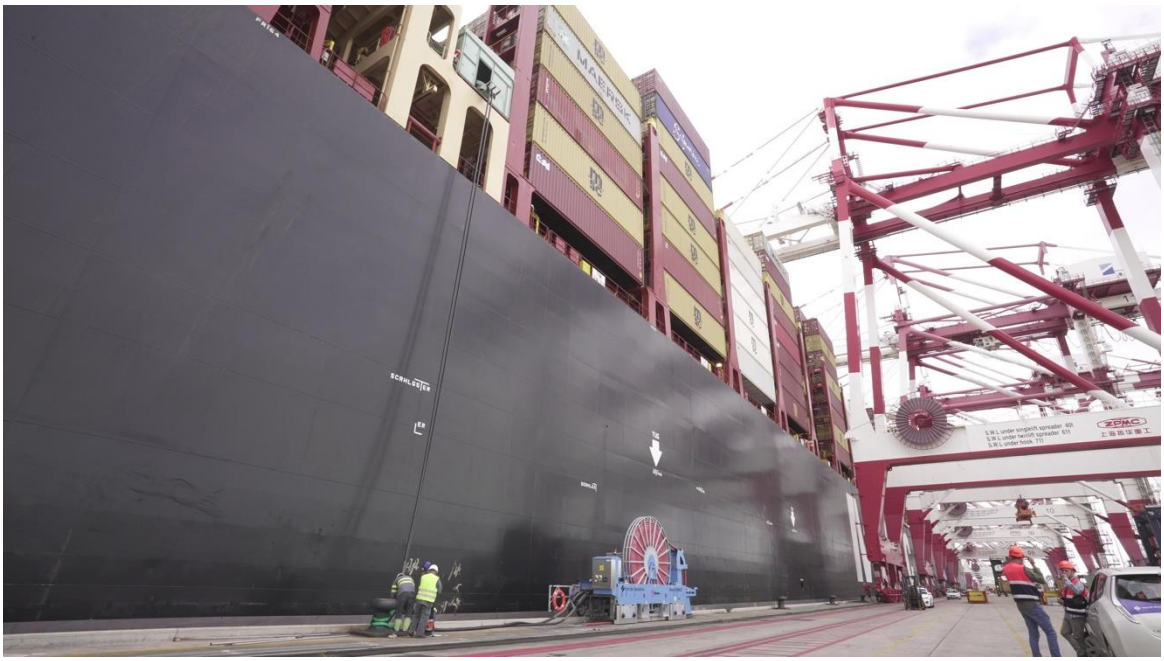
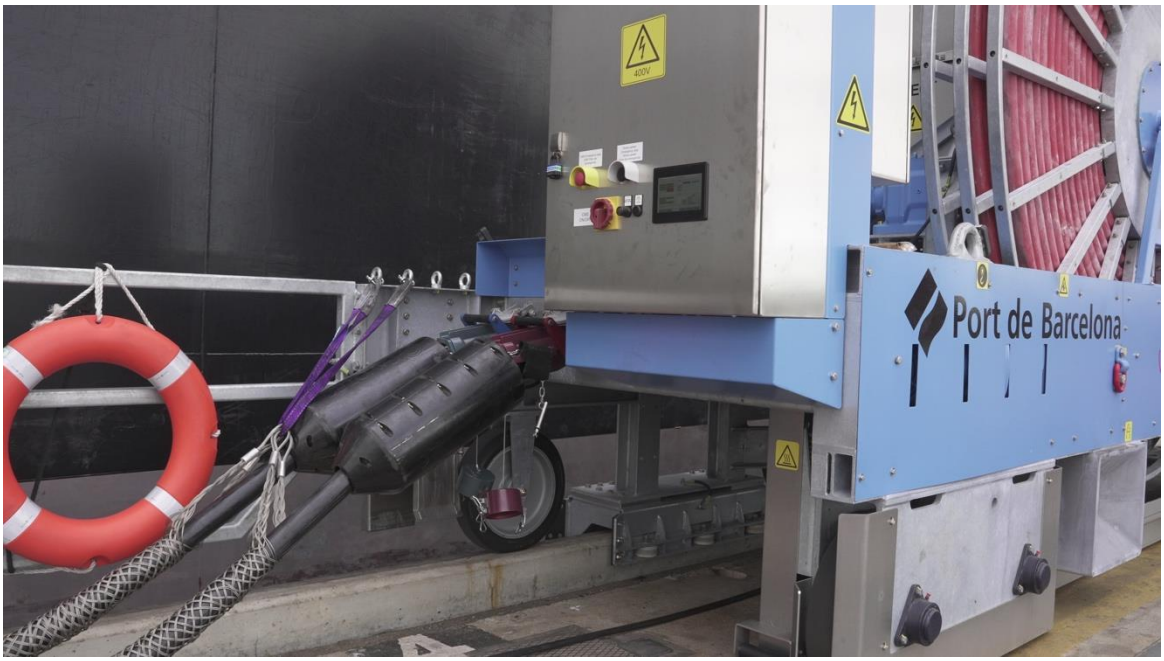


PHOTO. The CMS, a system installed this August, allows ships to be connected regardless of where they are moored.

Communication department. Press office.
T +34 93 306 88 40 | comunicacioport@portdebarcelona.cat |www.portdebarcelona.cat



Communication department. Press office.
T +34 93 306 88 40 | comunicacioport@portdebarcelona.cat |www.portdebarcelona.cat