





Press release

Hamburg, 22 August 2018

Sustainability

Eco-friendly power for container ships

Becker Marine Systems, Hapag-Lloyd and HHLA test alternative power supply at the Port of Hamburg.

Hamburg is taking a further step toward improving air quality at its port. Innovative technology developed right here in the city is set to enable large and very large container ships to switch off their auxiliary diesel supplies during lay time and instead draw the power they need for on-board operations from a new kind of mobile generator. Becker Marine Systems, Hapag-Lloyd AG and Hamburger Hafen und Logistik AG (HHLA) have been testing the new technology as part of a joint pilot project since the start of the year.

Technology supplier Becker Marine Systems developed the mobile power generator, then partnered with Hapag-Lloyd and HHLA for the test phase. The Becker LNG PowerPac® supplies eco-friendly power to container ships at the HHLA Container Terminal Burchardkai (CTB). Over the past few weeks, a prototype has been successfully tested multiple times with some of Hapag-Lloyd's giant 20,000 TEU container ships. Together with Hapag-Lloyd, HHLA is using the project to intensify its efforts to keep Hamburg's air clean.

Developed by Becker Marine Systems and its subsidiary Hybrid Port Energy (HPE), the Becker LNG PowerPac® is a compact system the size of two 40-foot containers. The unit comprises a gas-powered generator and an LNG tank, which provides the energy for the generator. As soon as a container ship docks, a container gantry crane lifts the mobile 1.5-megawatt power generator from the quay into position at the stern of the ship. Once there, it is connected to the ship's power system and can supply the electricity needed for on-board operations while the ship is docked. Thanks to this innovation, harmful emissions such as the sulphur dioxide, particulate matter and nitrous oxides that would normally be generated while the ship is running on auxiliary diesel can be either reduced significantly or avoided entirely.

Dirk Lehmann, Managing Director at Becker Marine Systems, says, "We can safely say that the pilot phase was a complete success, and we thank our partners for the great teamwork. The Becker LNG PowerPac® represents a straightforward solution for the reduction of harmful emissions in the port and has the potential to be implemented internationally. We are in conversation with a variety of European and Chinese ports, and we are confident that the Becker LNG PowerPac® can be successful on the market."

The Federal Ministry of Transport and Digital Infrastructure awarded a seven-figure sum to fund the development of the new technology as part of the government's mobility and fuel strategy. Enak Ferlemann, Parliamentary State Secretary of the Federal Minister of Transport and Digital Infrastructure, remarks, "Air pollution control is very important, especially in ports in







Press release

densely populated areas. We therefore support sustainable and alternative power units and innovations like the LNG power packs, which contribute to modernising shipping and reducing emissions."

Hamburg's Senator for Economic Affairs, Frank Horch, comments, "The use of PowerPacs as an alternative power supply for container ships while on layovers in the port makes a valuable contribution toward reducing harmful emissions in Hamburg."

"As a global company based in Hamburg, we were more than happy to support the tests. Shore-side power is an important component in our extensive efforts to make our business even more sustainable," says **Anthony J. Firmin, Executive Board Member for Shipping at Hapag-Lloyd**.

HHLA has acted as an expert partner and handling service provider for the project since its launch in early 2016. Hamburg's largest terminal operator defined the technical and process-related requirements for both ship-side handling and the handling of the PowerPac at CTB. **HHLA Executive Board Member Jens Hansen** says, "We are delighted to add our experience and expertise to this important pilot project for the Port of Hamburg. From what we can see, the tests have been very successful so far. PowerPac handling might well be integrated into our terminal processes."

The following photo is available for download on the HHLA website under 'Press', Photos & Films/ Current Press Photos: **klick here for download.**



A video showing the handling of the Becker LNG PowerPac is available here: **klick here to start the Youtube video**

You can download a presentation about the Becker LNG PowerPac here: klick here for download

Further inquiries

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