Onshore Power Supply (OPS)

Loading quay for ore (quay 16)

Through the Energy Optimized Port Cluster 2030 program, Gävle Hamn AB works together with terminals and partners to achieve the goals of the Paris Agreement. As an important part of this joint effort, Port of Gävle strieves to provide renewable fuels and fossil-free electricity for goods handling and transports via the port.



Almost eighty percent of the climate-affecting emissions within the sailing route and port area in Gävle come from vessel engines, and a large part of these emissions occur at the berth in connection with loading and unloading, when the vessels auxiliary engines drive fans and pumps, etc. Gävle Hamn AB therefore works purposefully together with calling vessel companies and the port's various terminals to enable electrical connection of vessels (On-shore Power Supply, OPS) at various quays in the port area.

By offering electrical connection for vessels at the quay, the vessels are given the opportunity to have their auxiliary engines switched off during the time in the port. It greatly reduces carbon dioxide emissions and sulfur dioxide and nitrogen oxide emissions are reduced to a minimum. In addition, it provides a quieter port environment and a better working environment for both the crew and the staff on the quay. In order to enable OPS, both investments in electricity and transmission equipment on the quay as well as investments in the vessels that will receive the electricity are needed. The solutions that are created should suit the different vessel types that call at the quay and harmonize with corresponding solutions in other ports in the world. There also need to be handling and safety rules that work for both ports, vessel companies, terminals and that are accepted by national authorities as well as classification societies.

The loading quay for lead and zink (quay 16) in Port of Gävle is approached by a number of different shipping companies that transport ore from Bolidens mine in Garpenberg on to various enrichment plants. Through a close collaboration between Boliden, the vessel companies and Gävle Hamn AB, there will be a ready-made OPS facility at the quay from the beginning of 2023, which will be tested during the year.



From the quay, there are two connection cables that are stretched over the vessels deck with the help of a stationary jib crane on the quay. Via this, the vessels own cable is connected and on to the boat's intake in the stern. The OPS facility supplies 2x125 A.

The goal is that electricity connection can be offered to all calling vessels that meet the requirements in 2023. The facility has been installed with financial support from the Swedish Environmental Protection Agency via Klimatklivet and will enable greatly reduced greenhouse gas emissions at the quay for the vessels that choose to connect. In parallel, several vessel companies are equipping their newly built vessels to be able to receive electricity at the quayside.

For more information: <u>https://gavlehamn.se/en/service-and-terminals/</u>



