



ShorePower can reduce emissions by more than 90% when ships are moored at berth.

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## The Five Steps to Take Charge of Portside Pollution

The shipping industry is responsible for more than [2.5%](#) of the world's emissions. If the shipping sector were a country, it would be the [sixth largest](#) polluter in the world.

But we can change this. We have the technology today that can be retrofitted to existing ships to reduce harmful emissions. We also have the technology to upgrade our ports to reduce pollution. All it takes is us deciding to take charge of how we operate and to invest in the future of our planet.

ShorePower is one of those technologies that can reduce emissions by more than 90% when ships are moored at berth.

Every day, more and more ports are seeing the benefits of reducing pollution and improving the environment for the communities they serve.

If you are one of those ports, here are five practical steps to take charge of your environmental footprint.



[Watch video on YouTube here](#)

## **1. Find the technology that matches your operations**

Designing a ShorePower infrastructure requires an analysis of vessel and traffic flows throughout a port. Port owners need to calculate how regular the shipping traffic is; which vessels are ready for utilising a shore power infrastructure; how much time vessels spend at berth; and which berths are the closest to highly populated areas. Those that are nearest population centres have the highest value in reducing emissions and noise.

There are also operational constraints to take into consideration. Ports need to consider the location of onboard connection points and onshore facilities. Space is also a consideration to bear in mind, especially for busy container terminals where cranes operate along the berths. There are also safety requirements to bear in mind, especially for public access points, where equipment needs to be secure and clear of hazards.

At Cavotec, we have technology and the know-how to match the solution to your specific situation. We make it possible to modernise existing port infrastructures with minimum disruption to day-to-day operations.

## **2. Optimize the electrical architecture**

When designing the electric infrastructure for ShorePower, we need to understand vessels' expected power needs and the port's electrical characteristics to design the best electrical architecture. That includes the frequency, power availability, and existing electrical distribution set-up.

At Cavotec, all our designed ShorePower solutions are optimised for each specific port and follow international electrical shore connection standards for maximum safety and ship compatibility.

## **3. Try to blend into the environment**

Environmental pollution should not consider just emissions or noise levels. We also need to examine how the equipment looks and affects the surroundings, especially when it interacts with passengers and members of the public. It is important for technology to be aesthetically pleasing to blend in with the environment as much as possible.

At Cavotec, we have put as much thought into the design and look of our shore power solutions as we have with the engineering.

## **4. Adopt a holistic approach for a fit-for-the-future infrastructure**

A port sustainability roadmap should give as much thought to other technologies that could give existing and new terminals a smaller environmental footprint.

This includes integrated automated mooring and ShorePower systems and even fully automated charging for e-vessels.

At Cavotec, we can provide a full suite of integrated shore power and automated mooring systems. Our [MoorMaster NxG automated mooring system](#) enables even the biggest ships to moor automatically in just a few

minutes, ensuring a faster and cleaner connection to ShorePower systems.

## 5. Find the right partner, at the beginning of your Shore Power journey

Find a company that will be a partner through the whole shore power project, from design to installation and even operation.

The right partner needs to have a deep understanding of shore power applications and with knowledge of the standards, the stakes, and the challenges with complex infrastructure projects. Find a company with the right references and best practices.

At Cavotec, we have more than 40 years' experience of successfully designing and installing ShorePower at hundreds of ports around the world.

Let's Take Charge of our future, today!  
[ShorePower](#) from Cavotec.

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Cavotec is a leading cleantech company that designs and delivers connection and electrification solutions to enable the decarbonization of ports and industrial applications..

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