

Abstract

This study focuses on the shore connection of merchant ships. We live in a society where ecology and the environment are at the heart of discussions, we will analyze this innovation to reduce the emissions of fine particles from merchant ships.

We analyze this pollution problem through a theoretical study of electricity generation on land and on board.

We have studied in detail the general system that is already in place in some European ports.

We reproduced this system with a smaller scale model to make practical measurements to identify defects of such an installation.

Finally, we analyzed the ecological and economic aspects of the system to conclude its long-term profitability.