



## Battery Powered Vessels – Five Year Landscape

This infographic shows the trend of annual additions to the onboard installed battery systems (MWh) done in the last five years.

The total onboard installed battery capacity of ships annually decreased in 2021, due to Covid-19 restrictions, but is expected to increase again in 2022 to at least about 180 MW.

Around 600 ships in the world rely on batteries for propulsion. There is an increasing demand for the use of high-capacity batteries.

Although there has been a significant increase in the installed battery capacity of all electric vessels, till date, their energy density has been too low, which means the batteries cannot store enough energy in relation to their size and weight.

Approximately 25% of battery-powered ships are currently solely battery-powered, 25% are plug-in hybrids, and 50% are hybrids without the ability to be charged by a shore-based charging system. The average on-board battery capacity in 2022 is 1.2 MWh, and the charging power required by ships is often in the MW range.

