



How we handle energy onboard directly impacts performance, fuel efficiency, and emission output. Yacht owners and operators are increasingly looking for ways to be more efficient and reduce their carbon footprint.

Lürssen intelligent energy management systems offer a way to optimize energy use and distribution onboard. By integrating this technology with other smart systems, we can create a more efficient and sustainable way to manage energy on the yacht.

Intelligent energy generation and distribution energy on board Lürssen yachts

Reducing emissions without compromising owner comfort is a key focus of Lürssen's ongoing innovations. Through extensive data gathering and analysis, the builder has now created an automated platform so that its projects' energy generation, distribution, and consumption can be managed intelligently and efficiently.

The platform is an automated energy and battery management system with an open-interface architecture. As a system integrator, Lürssen has designed this technology to incorporate the many individual technologies unique to each project. By using the sophisticated control and monitoring system Allviu, developed by its partner company besecke GmbH & Co. KG, the yacht can receive and process all relevant information, status reports, and faults and perform automatic or semi-automatic energy management tasks.

Unlike a traditional ship's power management system – where power generation is the main focus – Lürssen's system only

connects the relevant consumers. Frank Schröder, head of electrical design at Lürssen, comments, "Depending on the power demand, the load of the energy storage, and the load of the active power generator, the system will automatically optimize the consumption in different modes. Two modes are provided as standard – Comfort Mode enables energy supply without restriction on the consumer side, and Eco Mode ensures the lowest possible energy consumption – but any other modes in between are also possible to set up."

These energy management tasks ensure the power supply of the yacht by controlling the number of generators connected to the grid according to the amount of energy required at one time. With the use of batteries and the intelligent control of selected consumer groups, temporary starts of generators can be avoided by calculated forecasts, thus optimizing the use of individual generators.

The main benefit of this system is that the yacht can be free from interfaces between the many individual systems on board, with all the information on one platform. Furthermore, the system is scalable depending on the project and the number of systems, and Lürssen can create customized functions and modes according to owner usage.

Until now, energy supply and distribution on board yachts has been primarily independent from automated systems or energy management. However, Lürssen's solution brings the two together, resulting in an efficient energy supply and the optimal utilization of machinery on board.



