

Boat To Grid: Collective Self-Consumption Innovation Solution for Recreational Harbours

Littoral Énergies Partagées brings together complementary professionals in boating, renewable energy and electrical grids. The company develops the innovative Boat To Grid solution: a system that produces, stores and supplies renewable energy in port areas.

The project's ambition is clear: to transform ports into energy hubs capable of producing, storing and redistributing electricity generated locally by existing resources such as boats and dormant infrastructure.

Jean Pierre Nicol and Bertrand Castelnérac, co-founders of Littoral Énergies Partagées and initiators of the Boat to Grid concept, start from a simple observation: most pleasure boats are energy self-sufficient at sea, but 90% of them remain in port 90% of the time, and around 20% have production and storage capacities—sometimes substantial—that are largely unused. By pooling expertise, it is possible to create a virtuous collective self-consumption system, adapted to marinas and transferable to other infrastructures undergoing modernization, reducing consumption and improving real-time electrical flow management.

In this partnership, Groupe Snef, a recognized expert in electrical engineering and energy management systems, contributes its expertise to the design and integration of intelligent energy management systems, ensuring optimal and secure use of available resources. A demonstrator at pontoon scale is currently being tested.

The principle is simple: turn boats and port infrastructure into genuine energy stakeholders serving the local area.

This innovation fully aligns with reuse, circular economy and coastal decarbonization objectives.

By combining energy transition, intelligent grid management and local energy valorization, Boat To Grid concretely illustrates the power of collaboration between public and private stakeholders to build a more sustainable coastline.

This pioneering approach has earned the Boat To Grid solution its nomination for the Energaia 2025 Innovation Trophy in the Ecosystem category.