

# Press release

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## Vattenfall and Echandia Marine cooperate on electric ferry with superfast charging

**Vattenfall and Echandia Marine have developed a new solution for electric ferries that is designed to minimise emissions and noise and at the same time lower operational and maintenance costs and provide superfast charging. The systems are installed on E/S Movitz that operates in central Stockholm and can be fully charged within 10 minutes with up to 500 kW charging power.**

Vattenfall and Echandia Marine have together developed a new concept that can contribute to a more sustainable transport solution for different types of boats and ferries.

“We are proud to be able to contribute to reducing emissions for transport also by sea through innovative and sustainable technology. The collaboration means that we can deliver value to the customer through our new functional solutions for fast charging, while at the same time providing great environmental and climate benefits for both society and residents in Stockholm,” says Torbjörn Johansson, head of Vattenfall Network Solutions in Sweden.

The solution is called "Power as a service" and means that the ownership and management of the equipment, which includes the charging station, the battery system and the driveline, lies with Vattenfall with long experience of owning and operating electric power systems. This includes, among other things, operation and maintenance, electrical safety responsibility and any further investments during the contract period.

### **State-of-the-art battery system**

Echandia Marine operates the shipping company Green City Ferries and has now upgraded its electric passenger ferry E/S Movitz with a new battery system, "Echandia LTO", based on state-of-the-art battery technology, that among other things enables superfast charging.

“Echandia’s core business is emission-free energy systems for the demanding marine market, which has been successfully demonstrated in recent years with the electric boat E/S Movitz. We have developed our own electric propulsion systems, including a new battery system based on Toshiba’s new generation LTO battery modules (Lithium Titanium Oxide) that enables higher power and faster charging than before. The fast charging station in central Stockholm provides considerably higher charging power than those available for charging electric cars”, says Bilal Malla at Echandia Marine.

**Facts:** The electric ferry E/S Movitz, carrying up to 98 passengers, runs in shuttle service in central Stockholm over a distance of about 10 km. As the world’s first supercharged electric passenger ferry of its kind, it only needs to be charged for ten minutes for one hour of operation.



**Caption:**

The electric ferry E/S Movitz provides less CO<sub>2</sub> emissions and quieter operation than conventional diesel-powered boats. The boat is sponsored by the real estate companies Vasakronan and Humlegården who want to offer their tenants along lake Mälaren sustainable commuting opportunities.

**For further information:**

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