



# Vattenfall Network Solutions

Your Marine Infrastructure Partner

# Vattenfall Network Solutions for your marine infrastructure



Vattenfall Network Solutions has developed Power-as-a-service for low-carbon vessels.

This new service reduces business risk as Vattenfall takes full financial and functional responsibility for the charging and power delivery of your boats.

## Our offer to you:

### We provide capital investment

- We contribute the CAPEX required for your green propulsion system
- We work with new vessels or retrofits
- Technology agnostic. We can work with hybrid, all-electric, hydrogen and other green propulsion technologies

### We remove your risks

- You will pay a fixed service fee. Which is agreed beforehand
- If there is a fault on the assets, we will repair them at our cost.

### We take responsibility of your assets

- We take full responsibility for your electrical needs by owning the propulsion equipment and managing all compliance, safety, regulatory and environmental issues
- 5-10 year plus contracts
- Manage planned and unplanned maintenance

Vattenfall Network Solutions takes ownership responsibility for the green powertrain and associated equipment (e.g chargers).

For new and existing vessels, we invest our capital to deliver the green powertrain infrastructure of your vessels. We will work together with your preferred shipyard and technology providers.

Vattenfall's responsibilities also covers operation, maintenance, and repairs. Our service is a long-term collaboration with contracts normally running for 5-10 years.

At the end of the contract period you can sign a new agreement with Vattenfall or buy back the assets at agreed terms.

Vattenfall is responsible for the powertrain complying with all requirements in applicable legislation and regulations, and also takes ultimate responsibility for the safety of the powertrain

# Case Study

## Electric Ferry - E/S Movitz



Vessel Green Propulsion

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.

We invested on the green propulsion system retrofit and guarantee the function of the batteries (Toshiba LTO) and the electric propulsion onboard.



On-shore infrastructure

Vattenfall also invested on the onshore charging infrastructure which enables the ferry to be fully charged within 10 minutes with up to 500 kW charging power.



Long-term and reliable partner

Vattenfall and Echandia Marine worked together to 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.



Service provision at a fixed cost

Providing our Power-as-a-Service solution means that the ownership and management of the equipment, which includes the charging station, the battery system and the drivetrain, lies with Vattenfall with long experience of owning and operating electric power systems.

**Want to see our service in action? [Click here to see our video](#)**