



Oceanvolt Electric Propulsion

Electric Ocean Oy
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Electric Propulsion - Underlying magic

- Electric drives are silent and non polluting
- Motor has few moving parts and needs minimal maintenance
- Electric; hard to store but easy to make

Energy per nautical mile

Displacement

5 knots

0.1 kWh per nautical mile per 1 tonn of boat weight

8 knots

0.4 kWh per nautical mile per 1 tonn of boat weight

Planing

15 knots

1.7 kWh per nautical mile per 1 tonn of boat weight

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Energy for 20 nm trip

Displacement

5 knots



2.0 kWh

Planing

15 knots



12.6 kWh

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Efficiency

- Power losing points: propeller, transmission, motor, controller, batteries

	Worst	Best
Propeller	40%	65%
Gears	75%	95%
Motor	50%	93%
Electronics	75%	95%
Total	11.3%	54.6%



Oceanvolt products

- 8.6kW saildrive in production
- 4.3 and 14.2kW versions available later this year
- Research on electric waterjet ongoing



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