

Optimising Lifecycle Management in Electric Fast Ferries

CFA 2025 Conference & Trade Show
Michael Eaglen, 3 November 2025



The ferry problem

Public transport is not as clean as we want to think and boats are the worst offenders.

75% of Auckland Transport's ferry services burn more fuel than the car journeys they displace.

Some ferry services have 2.5 times the emissions of cars, and 5 times those of diesel buses, for the same passenger trips

The city's emissions would reduce if you cancelled most of the ferries and put people back onto the roads.

A woman with long, dark hair is shown in profile, looking out a window. Her hand is resting on her chin, and she has a thoughtful expression. The background is a bright, slightly blurred view of water and a distant shoreline.

But life is better...

... with ferries

**Great public transit is
better for everyone**

**Ferries are consistently
the preferred transit mode**

**Let's bring ferries to
their full potential, at
the heart of our cities**



EV MARITIME



2025: Launched first of two, 200-passenger, fully-electric fast ferries for Auckland



MNZ 143376

NGA TAIKI TAMAKI



TM4
2
TM
3
JYY



EVM200 Platform

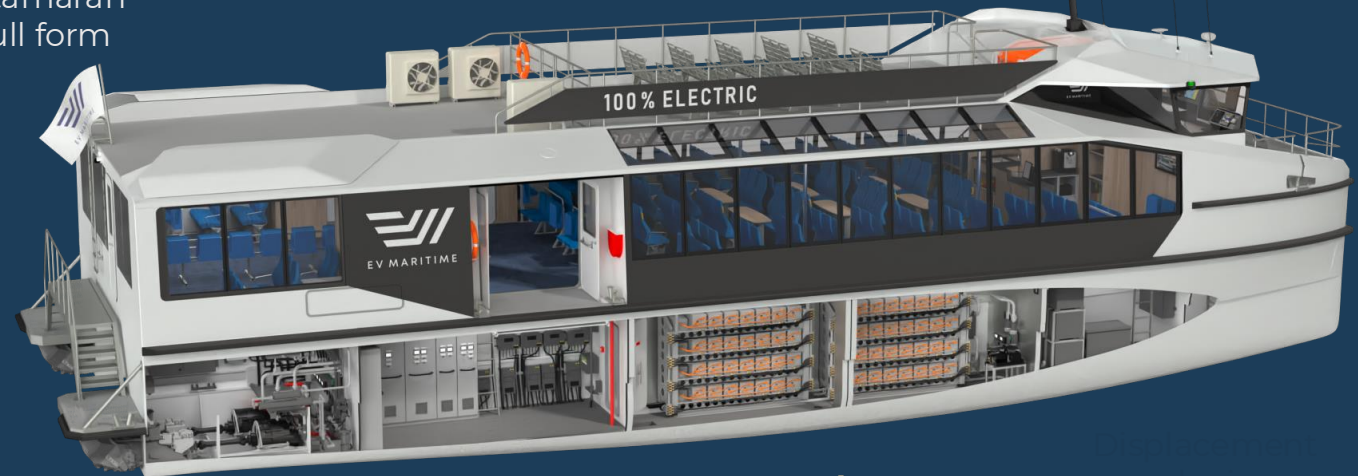
Proven pathway to confidence in ferry transition

Optimised **low wash** semi-displacement catamaran hull form

Enhanced operational reliability through dual redundant ships' systems to eliminate single point failure

Extensive PLC alarms, monitoring and control with live ship/shore link and remote data intelligence

Carbon fibre construction for light weight strength & longevity



4 x HamiltonJet LTX36 Waterjets for efficiency, reliability and manoeuvrability

Flexible power electronics package

Long range battery pack options up to 1500 kWh



0% emissions
100% capable

25 knots fully loaded

20 nautical miles

Rapid charge

Foil assist option



EV MARITIME

Delivering
clean-tech
maritime
innovation
with confidence

Design, Engineering, Integration:

- 24m Electric Fast Ferries – Auckland
- 19.5m Plug-in Hybrid Tourism Vessel – USA
- 18m Electric Fast Ferry – USA
- 9m Electric Fast Water Taxi – USA

A better ferry future for Atlantic Canada with:

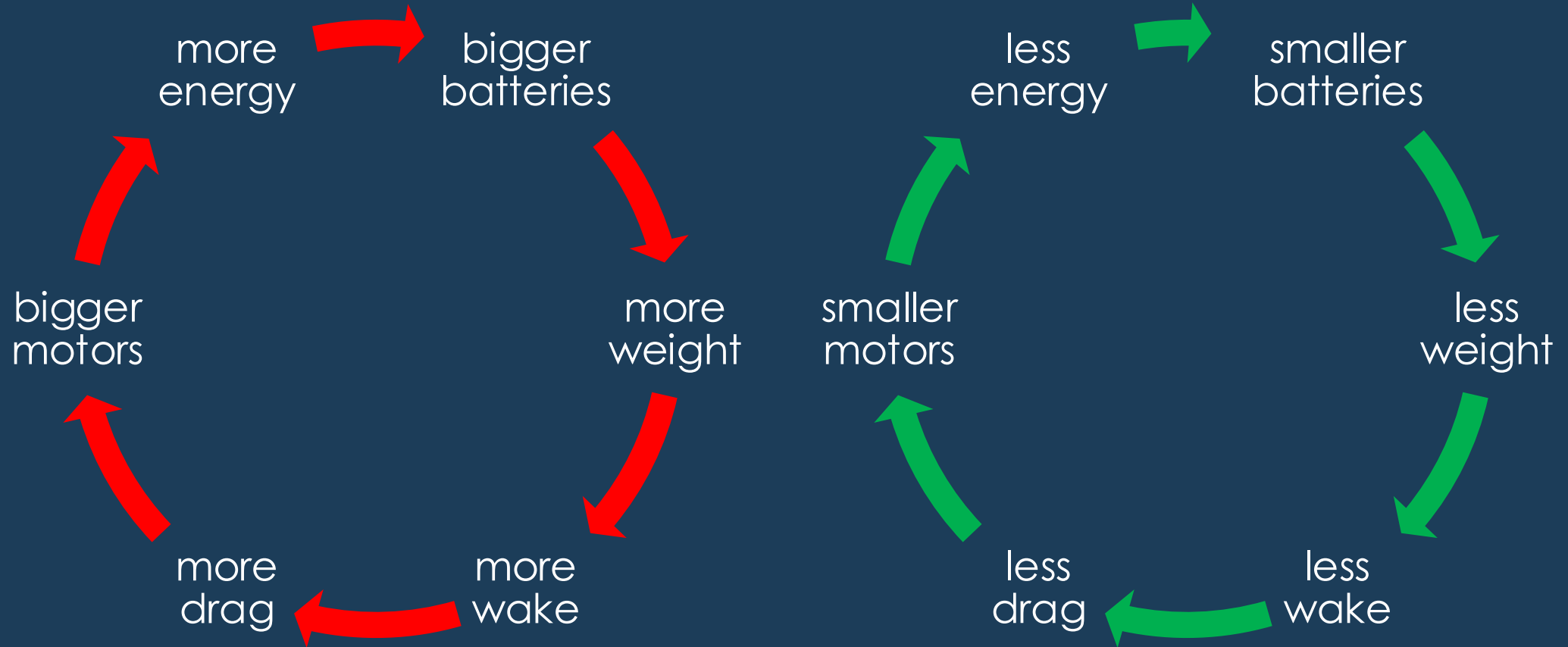
A.F. Theriault
& Son Ltd.
Quality Boats Since 1938



EV MARITIME

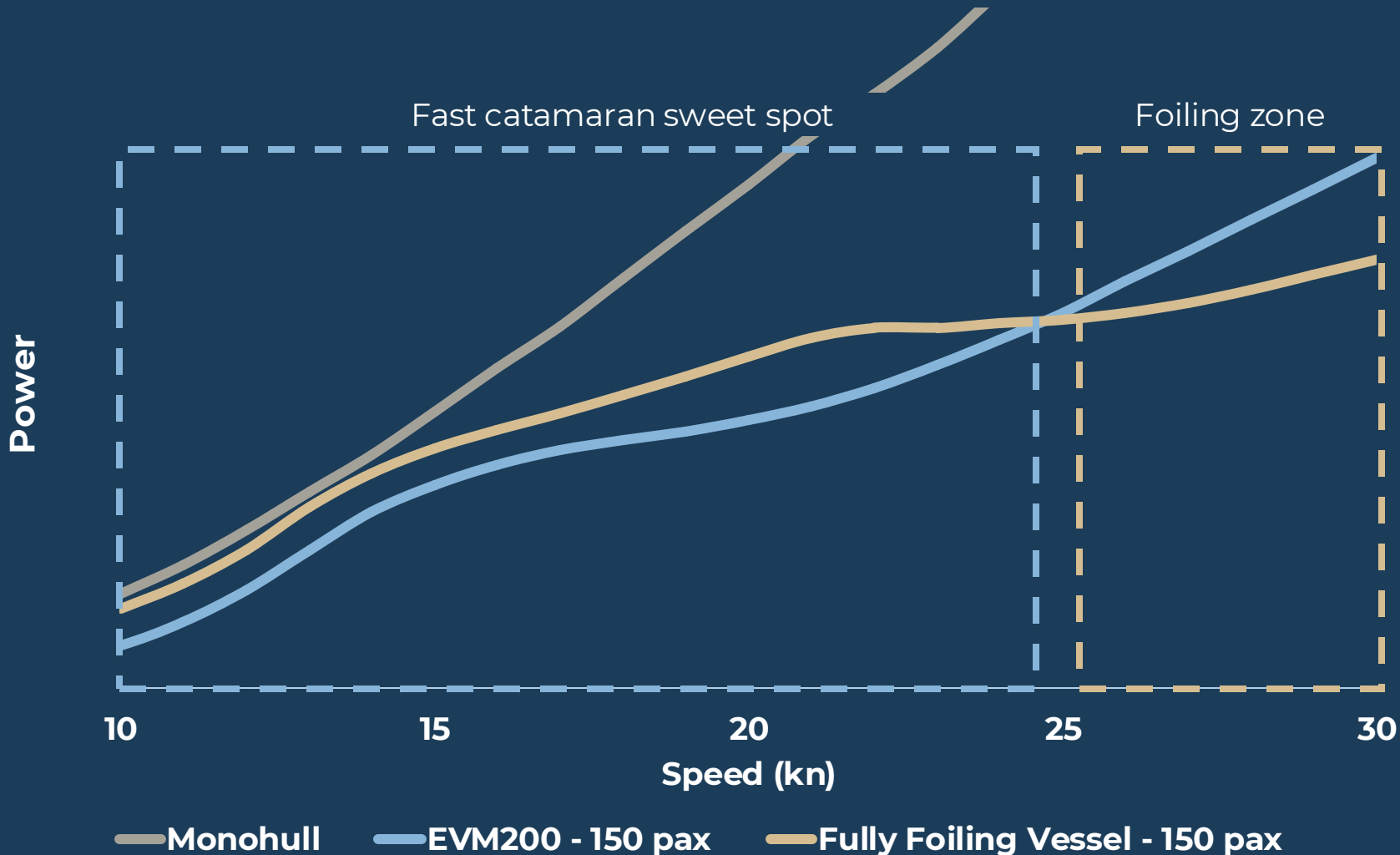
Designing an electric or hybrid vessel

ENERGY



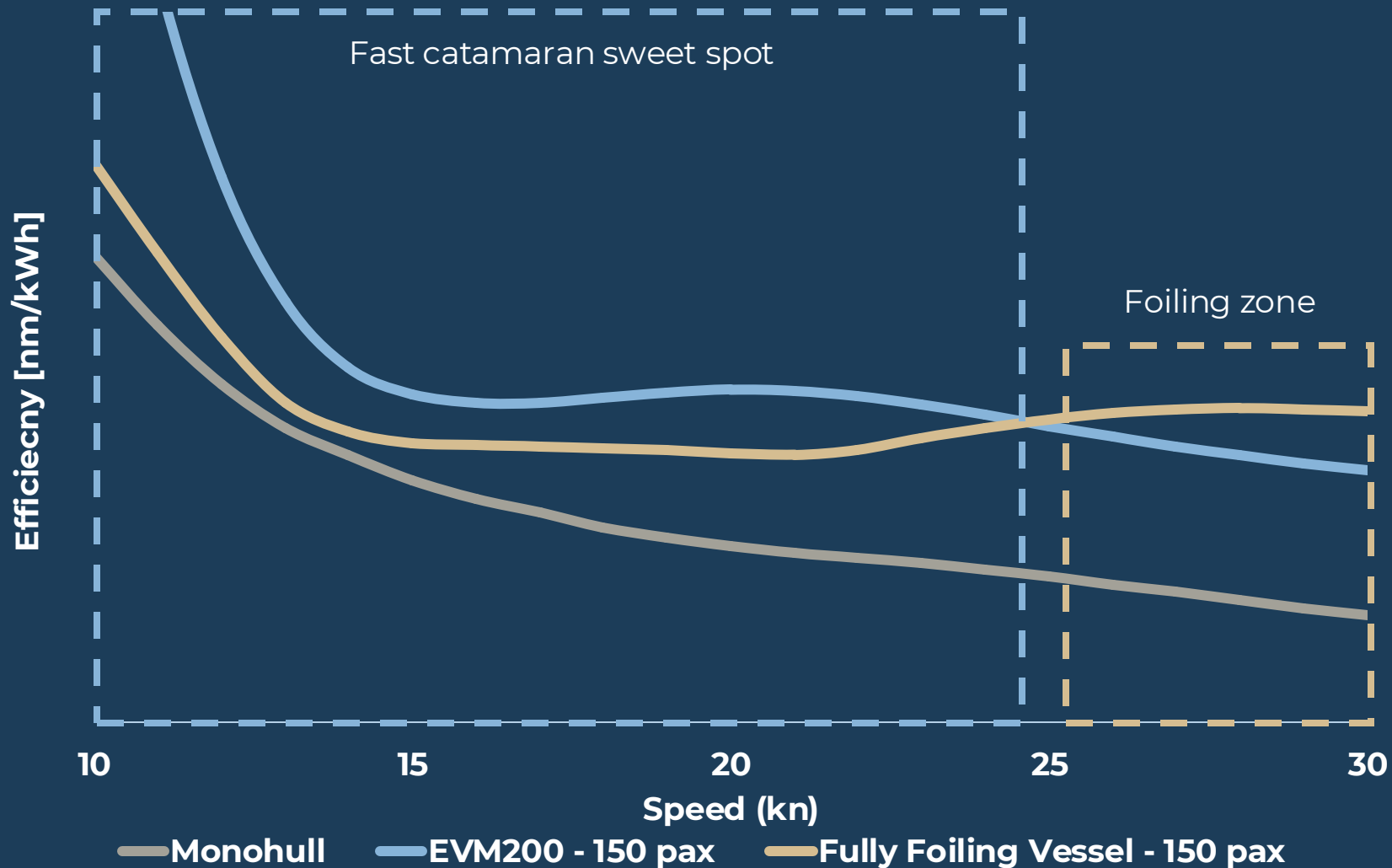
Monohull vs Multihull vs Foiling... What's the difference?

ENERGY



Monohull vs Multihull vs Foiling... What's the difference?

ENERGY



Carbon Fibre

Stronger, stiffer, lighter

Formable to complex shapes

Reduced internal structure

Corrosion-free

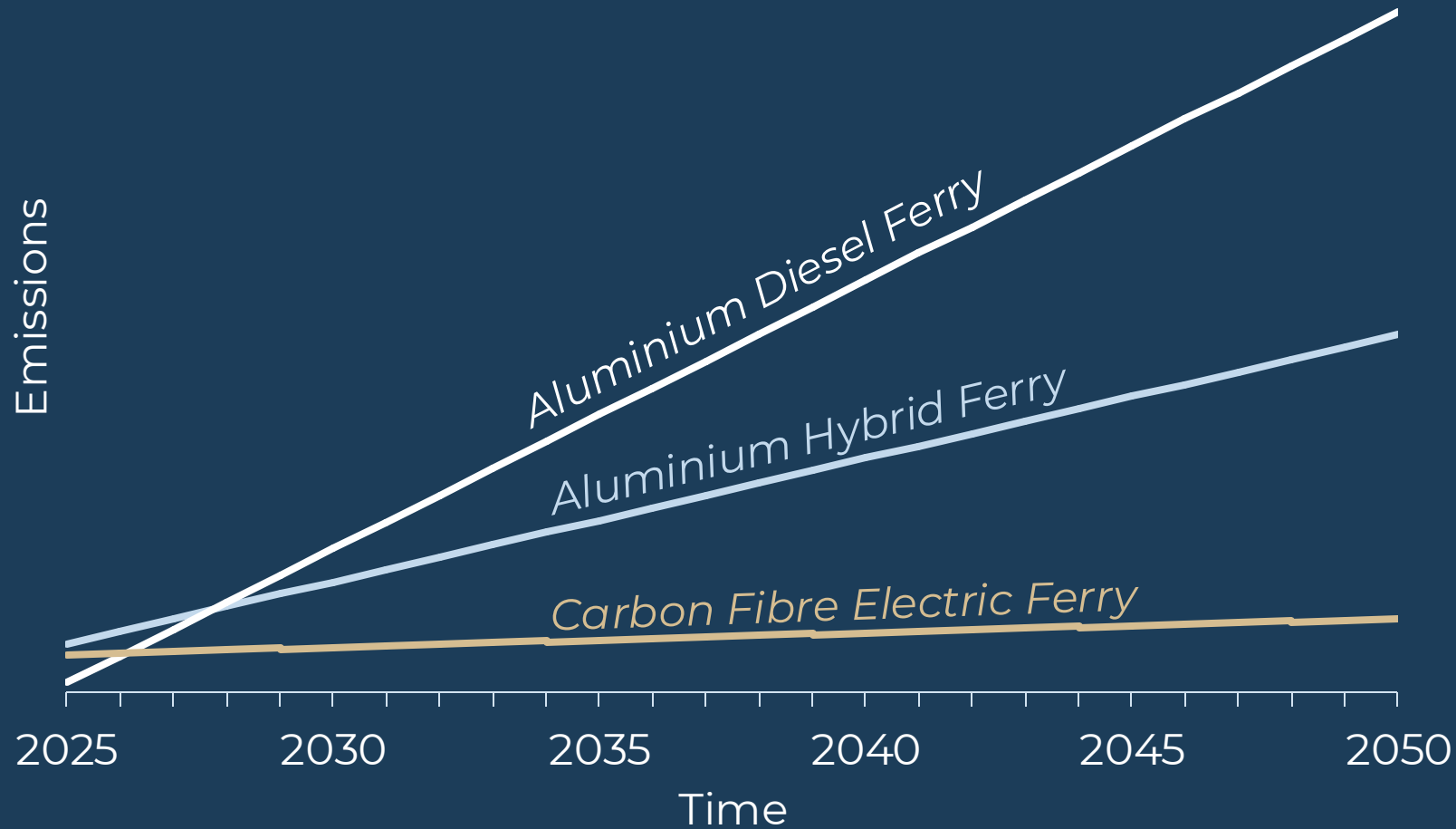
Fatigue-free

Sustainable



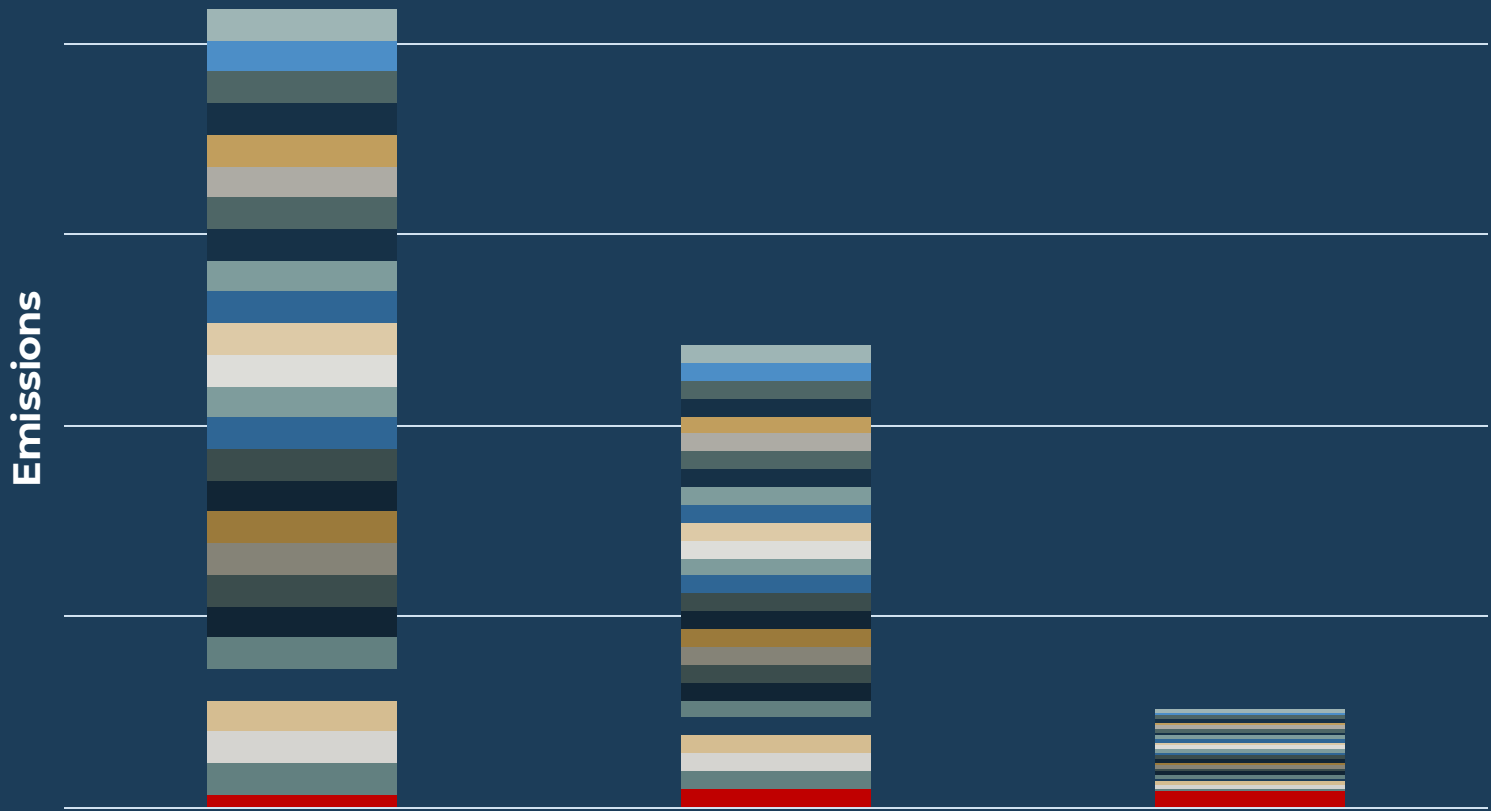
An electric ferry offsets its extra manufacturing emissions quickly through cleaner daily operation

LIFE CYCLE



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Electric ferries are 8 x cleaner than diesel



Aluminium Diesel

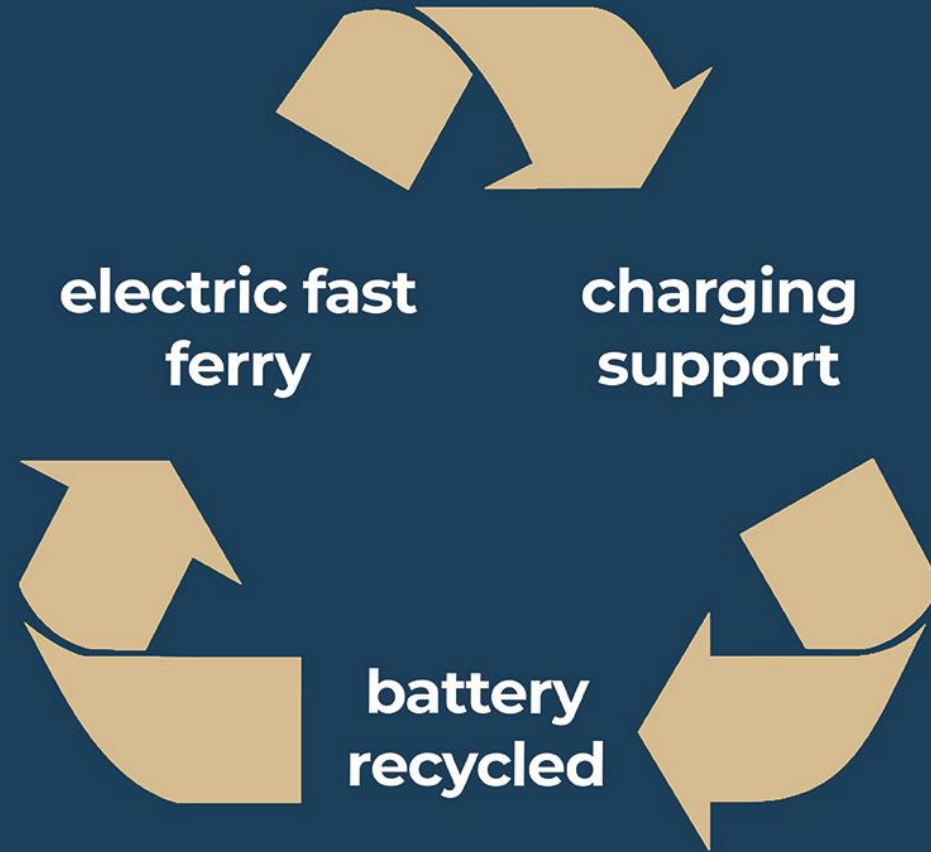
Aluminium Hybrid

Carbon Electric

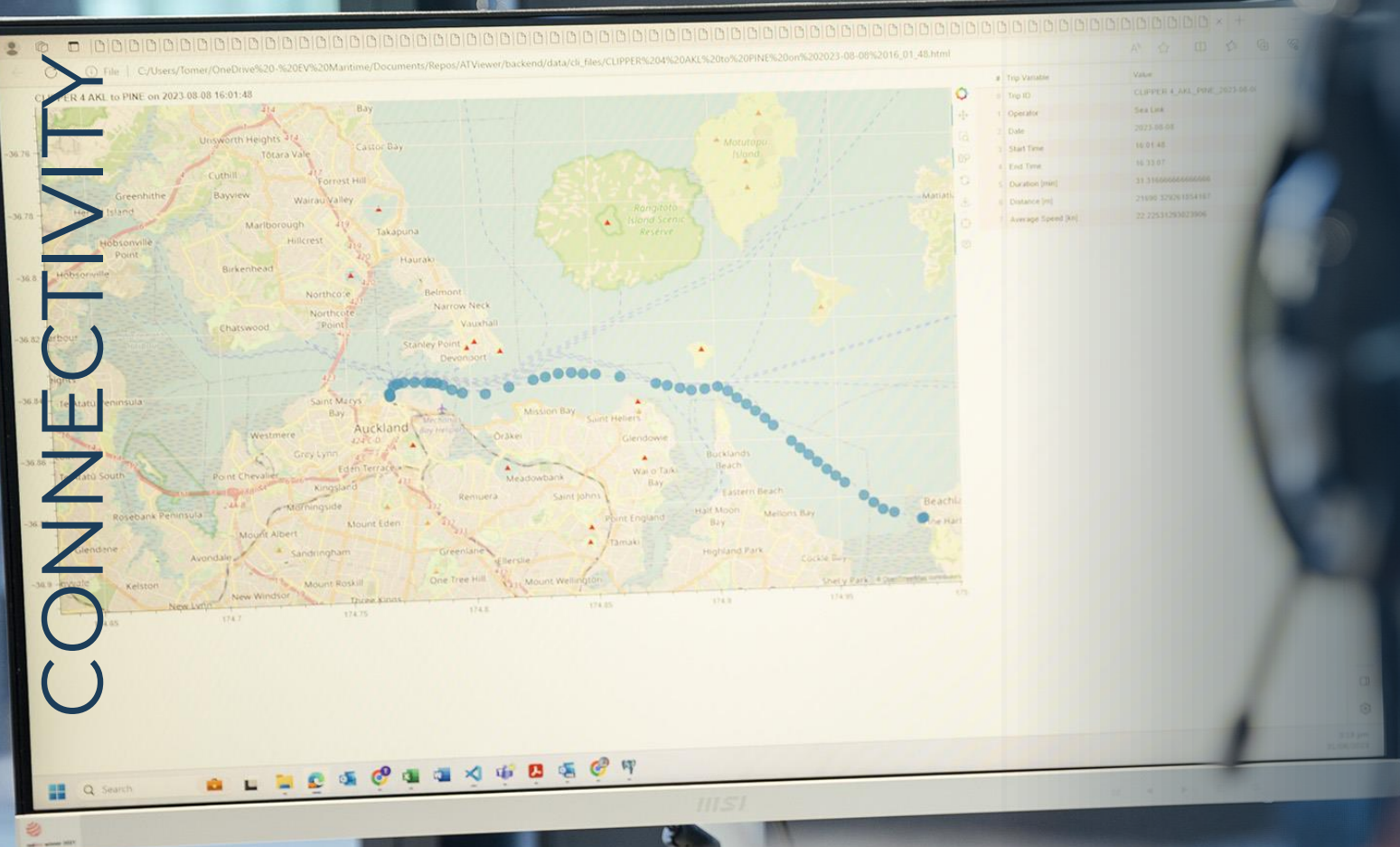
- Build
- Year 1
- Year 2
- Year 3
- Year 4
- Year 5
- Year 6
- Year 7
- Year 8
- Year 9
- Year 10
- Year 11
- Year 12
- Year 13
- Year 14
- Year 15
- Year 16
- Year 17
- Year 18
- Year 19
- Year 20
- Year 21
- Year 22
- Year 23
- Year 24
- Year 25

Electric ferry batteries have a second life ashore

RECYCLING



CONNECTIVITY



Data Intelligence

In-depth fleet understanding & support

Mixed fleet Vessel & Infrastructure Analysis

Delivering integrated onboard systems

EV Metrix

In-depth fleet understanding & support

Live view + Historic Analysis

Trip recognition

Utilization

Punctuality

Predictive maintenance

Vessel Scheduling

1143

Classified trips

30

Vessels

114300?

Passengers

79 %

On time departure

47 %

On time arrival

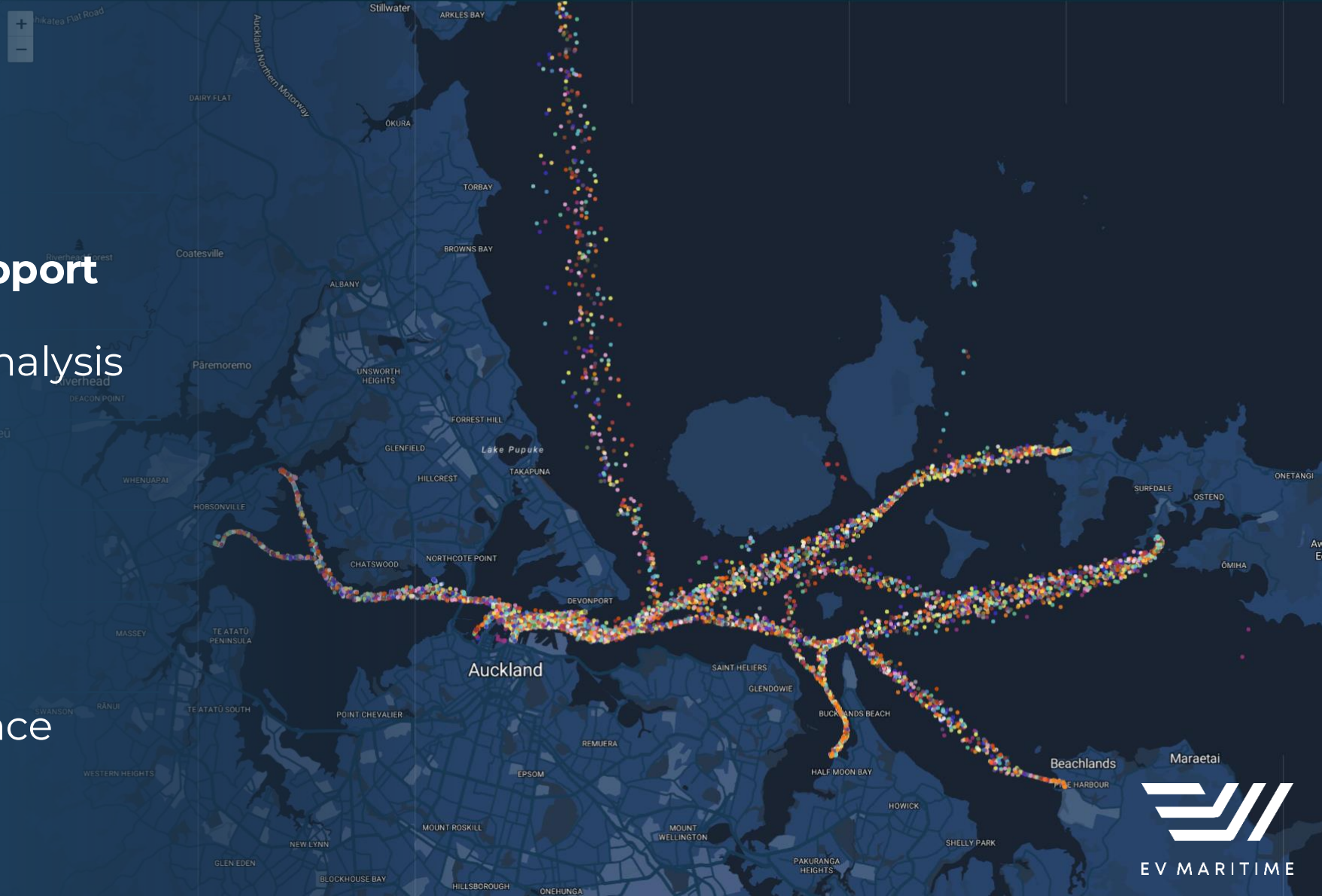
114,632 L

Fuel burned

456,090 kWh

Energy

Map Table Destination Counts Punctuality



FASTTM x rEVOTM

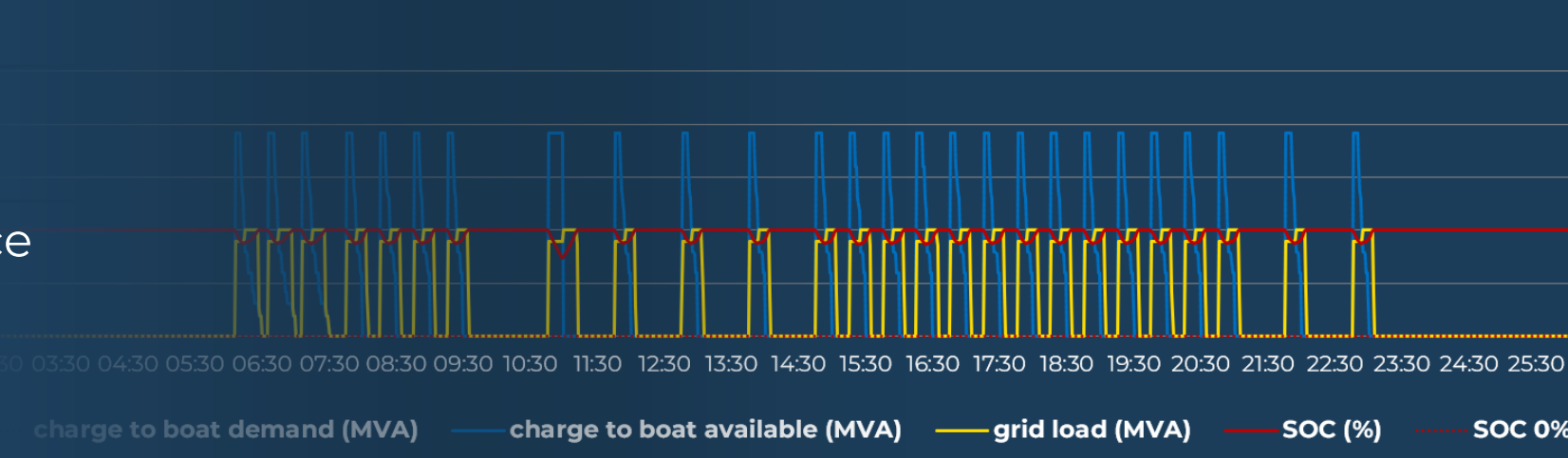
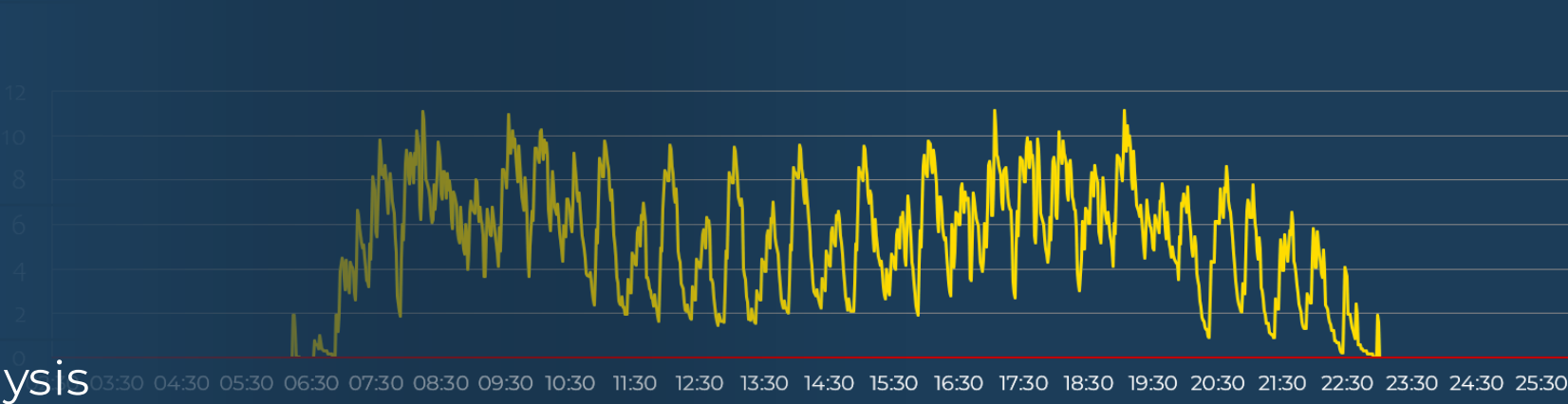
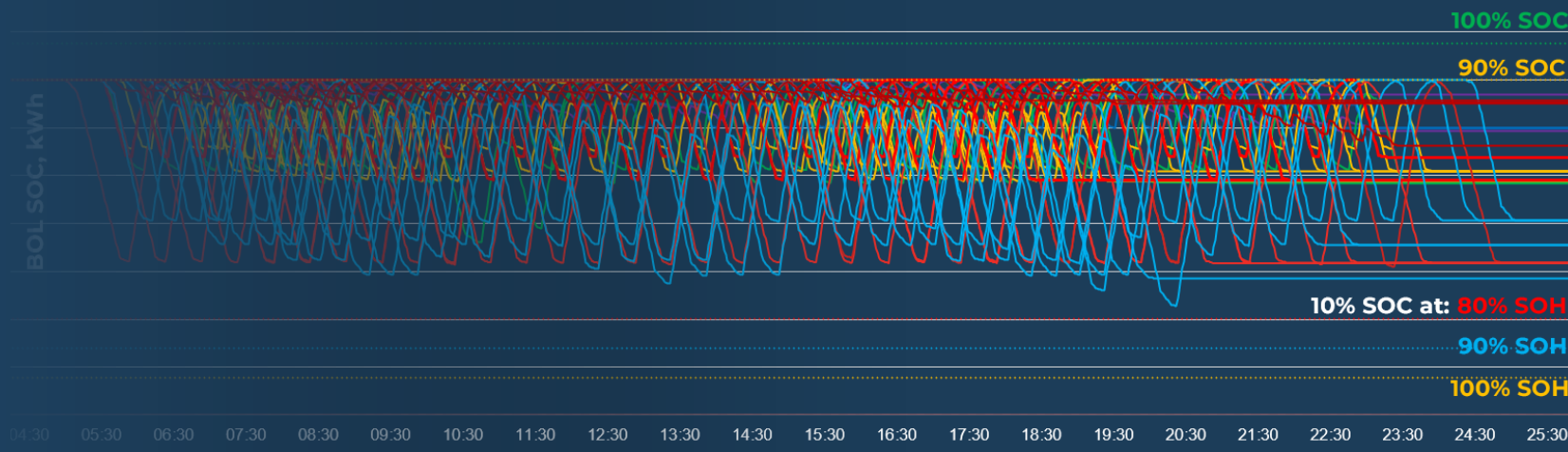
Mixed Fleet Vessel & Infrastructure Analysis

Vessel Energy Modelling

Schedule & Timetable Analysis

Infrastructure Demand

Fleet Operational Resilience





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Range: **11.4 nm**

Range @12kn: **16.3 nm**

Schedule: **Valid**

Actual: Expected:

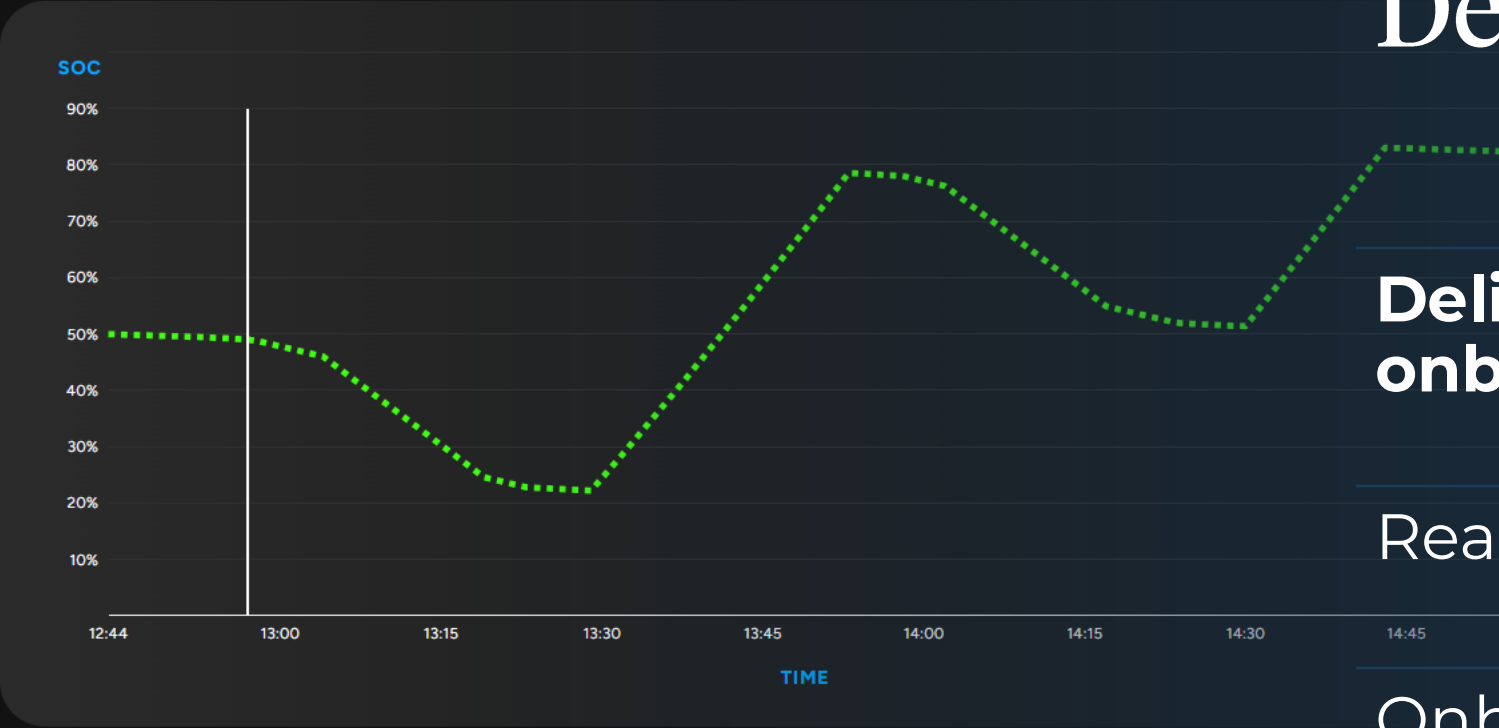
18H 12H 6H

Speed: **13.9 kn**

Target Speed: **0.0 kn**

Deputy™

INTELLIGENCE



Delivering integrated onboard systems

Real-time feedback

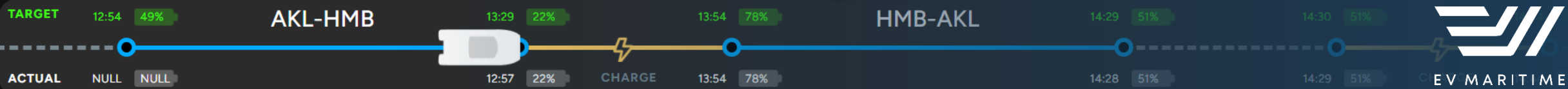
Onboard schedule solver

Remote schedule uploading

Efficiency: **36 nm/MWh**

Today's Min SOC: **22%**

Departure Min SOC: **>0%**



EV MARITIME

Lead with purpose

More than decarbonisation

Platform confidence

Better business

Better cities

Better future



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Delivering a better ferry future, today

Michael Eaglen
Cell +64 27 275 4467
michael.eaglen@evmaritime.com



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