



Suomen Lauttaliikenne Oy

Stella – From Diesel-Electric to Battery-
Hybrid Future

Mathias Karlsson



FinFerries:

- **Suomen Lauttaliikenne Oy / Finlands Färjetrafik Ab**
- **Suomen Saaristovarustamo Oy / Finlands Skärgårdsrederi Ab**
- **Ålands Skärgårdsrederi Ab (AxFerries, 50% ownership)**

**Over 400 employees + 80
employees on Åland**

**Transports more than 4 million
vehicles and approximately 10
million passengers per year**



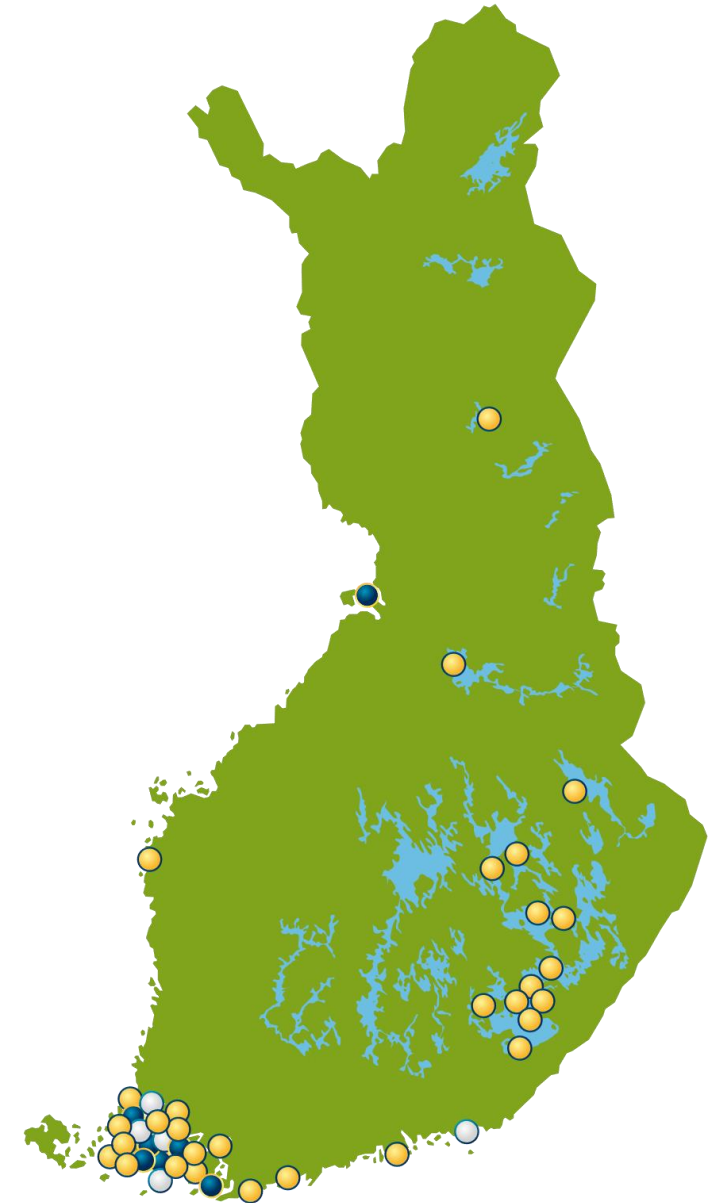
From the very south to the north of Finland and Åland Island

51 routes + 4 routes on Åland

- Cable ferry routes
- Ferry routes
- Commuter vessel routes

89 vessels + 8 vessels on Åland

- 59 cable ferries (3 electric, 14 electric under construction)
- 12 ferries (2 electric, 1 hybrid)
- 14 commuter vessel, 4 hovercrafts





2025

Optimizing Operations and Strengthening System Reliability

CO₂ -8%

2025 / 2027

Advancing Digitalization and Innovation

CO₂ -35%

2027 / 2030

Sustainable Transition and Responsibility

CO₂ -70%

2030 / 2032

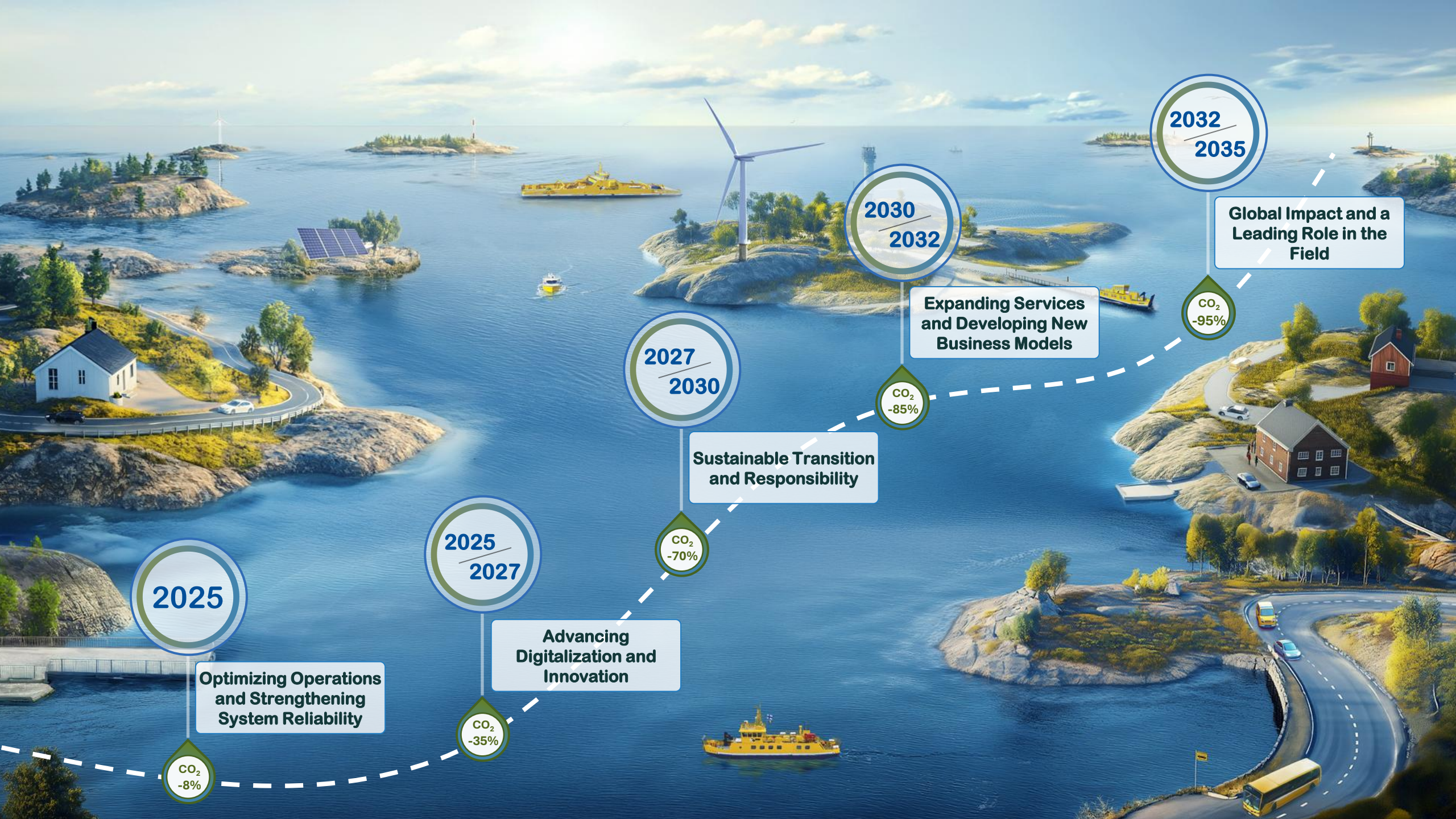
Expanding Services and Developing New Business Models

CO₂ -85%

2032 / 2035

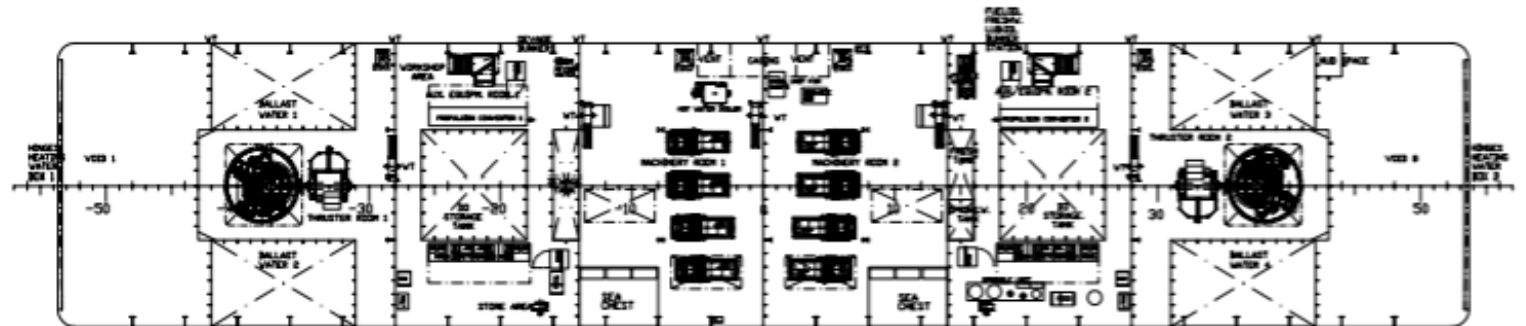
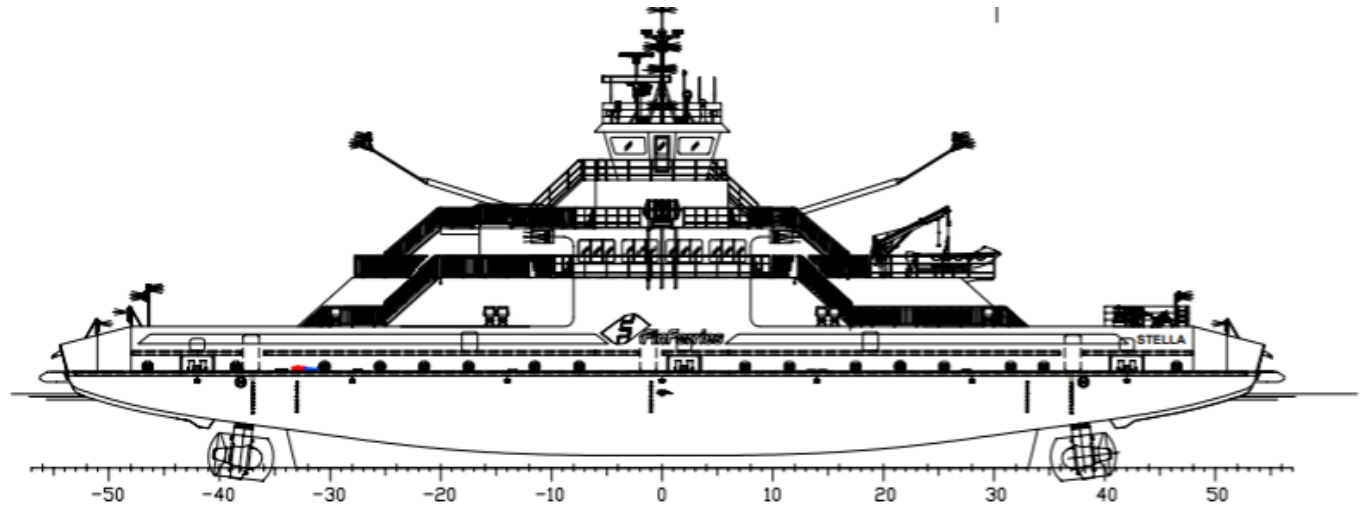
Global Impact and a Leading Role in the Field

CO₂ -95%



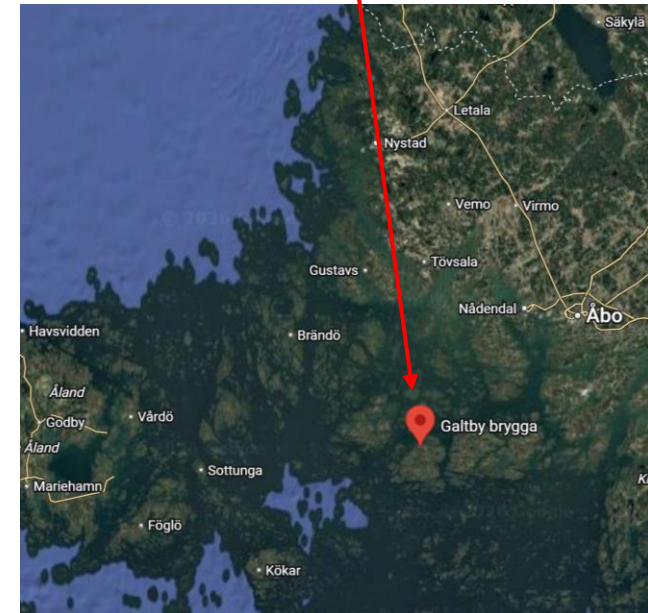
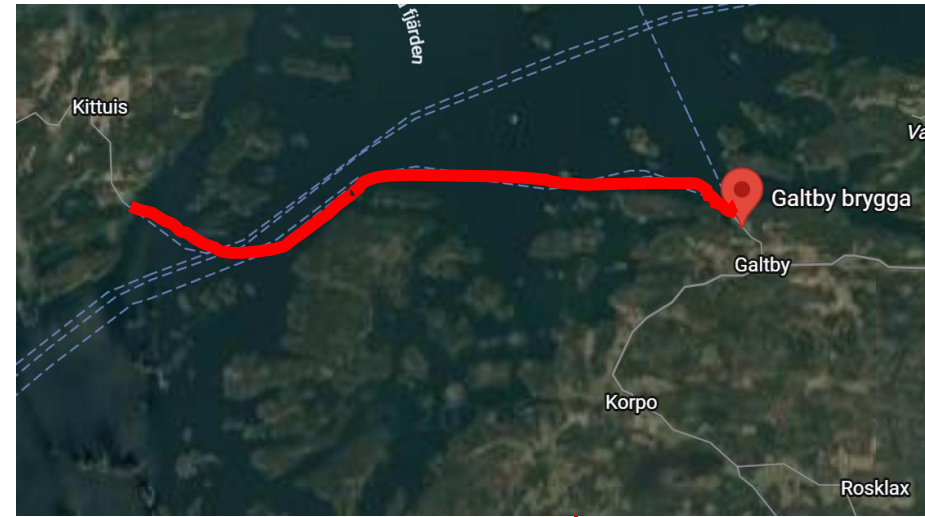
Stella

- Stella is built 2012 in Rauma, Finland
- Ice class 1A
- Length 65 m, breadth 12,8 m
- Car capacity: 65
- Passengers: 250
- Propulsion power: 2 x 1,3 MW
- 8 gensets of 450 kW/each



Route Galtby-Kittuis

- Stella operates between Houtskär (Kittuis) and Korpo (Galtby)
- Route length 5,2 Nm
- Duration ~30min
- 30 crossing / day summer time
- Crossing main fairway to Turku
- Ice walls during winter
- Lack of capacity in the grid



Modification

- 1,5 MWh pack installed (Corvus)
- Automation (IAS) renewed (SEAM)
- 4 x gensets removed
- Cabins for the crew installed
- Navigations equipment renewal
- Brand renewal



Benefits of modification

- Operation on 1-2 engines instead of 4-5 engines
- Less running hours on the engines
- Engine load higher, more efficient
- Possibility to charge batteries from grid
- No reliable fuel measurements due to short time frame



Future plans

- Full-electric development under work
- Adding of batteries onboard
- Grid upgrade in 2027
- Shore batteries
- Optimising schedule suitable for charging

Thank you



Finferries