

# Think Tank

## Future of Ferry Ports

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# Future of ferry ports

## Main Challenges:

- Zero Emission
  - Production
  - Operation
- Digitalization / Automation
- Sustainable Growth

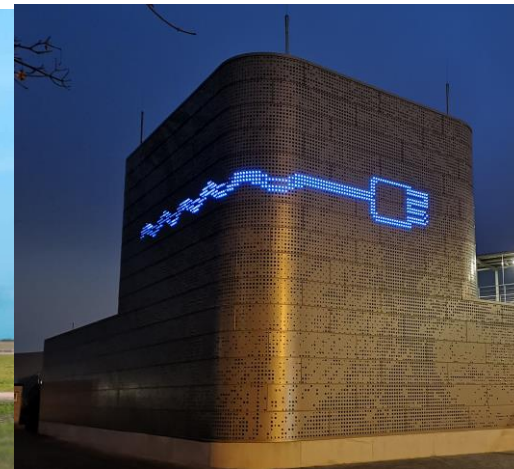
# Zero Emission

## Production of green energy

1. In the port by PV, Wind Mill or Air borne System
2. At sea by vessel operations , Wind Offshore Systems, Tide power stations

A new solar park in the Baltic's climate-smartest port

17 June, 2020



Port of Trelleborg, Port of Kiel, Grimaldi, Sky Sails, Ocean Energy Europe

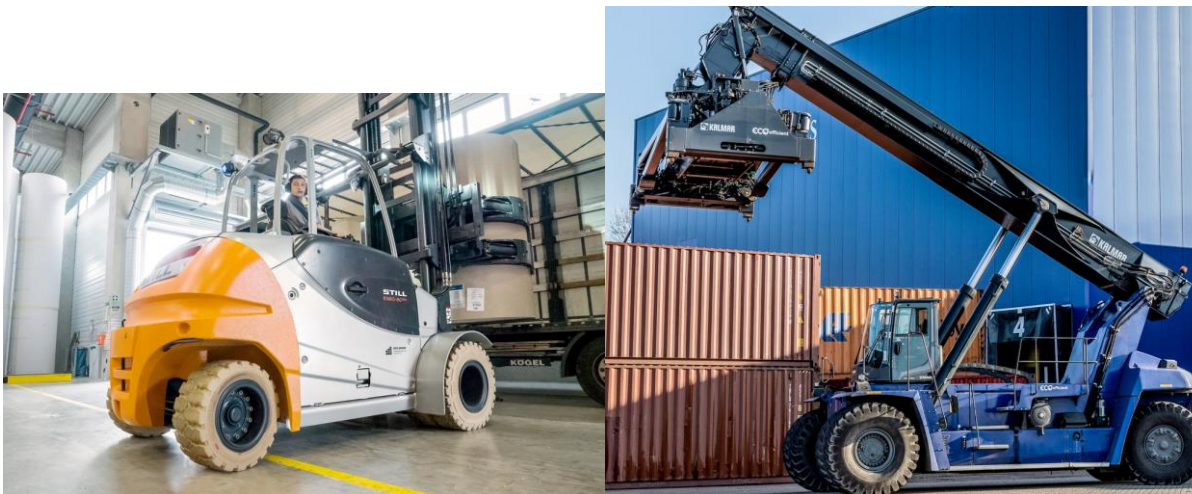
23.09.2021

FerryShipping Summit 2021 Jan Philip  
Eckmann

## Zero Emission

### Port Handling Operations:

- Tug Master with Hydrogen (PSA Antwerp, Port of Valencia at Grimaldi Vessels)
- Electric Tug Master
- Hydrogen Reach Stacker
- Electric Forklift and Container Spreader



The Port of València will be the first port in Europe to incorporate hydrogen technologies to reduce the environmental impact of its operations



# Digitalization / Automation

Challenges for RoRo and RoPax port operators in the future:

- less personal
- Optimazition in vehicle operation
- Digitalization by data processing
- 5 G Standard



Terberg, Volvo Group, DFDS



Terberg AutoTUG™ Automation Architecture

# Sustainable Growth

Ports need more space

- Gaining space through compression (Lübeck, Kiel, Rostock)
- Gaining space through land reclamation (Ystad, Trelleborg, Hirtshals, Barcelona, Valencia, Tanger etc.)





***Thank you very much!***