

Port Cluster Decarbonisation

Overview

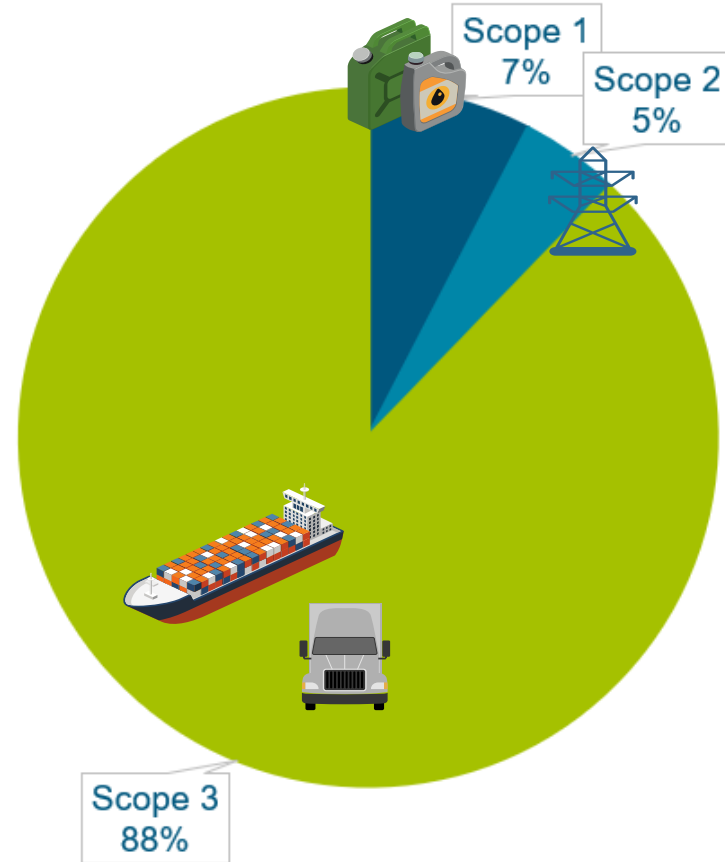
April 2025



Carbon Focus

- Focus on Scope 1 & 2 – to steer actions
- But can create gaps
- Port emissions are mostly 'by others' – how to support?

Marine Digital



activities

Port Clusters – Working Together

- **Challenge is shared...**
 - Policy
 - Supply chain pressure
- **Solutions are shared...**
 - Infrastructure
 - Electrification
 - Process integration



Decarbonisation Pathways

Reduce

Maximise value of energy/fuel used

Replace

Upgrades – equipment, infrastructure

Renewables

Land and water use to generate low-carbon power

Decarbonisation Pathways

Reduce

Save fuel & power...

- ✓ Routing & planning
- ✓ Telemetry for equipment
- ✓ Driver behaviour



10 to 30% fuel saving



Decarbonisation Pathways

Replace

Electrification.....or replace diesel

- ✓ Maximise life of diesel plant
- ✓ Drop-in Hydrotreated Vegetable Oil
- ✓ Bridge until replacement with electric



Decarbonisation Pathways

Renewables

Carbon positive...

- ✓ Solar, wind or hydro
- ✓ Use 'idle' resources
- ✓ Generate revenue

30 MW ~ 6500 t CO₂eq



e-on

PEELPORTS
GROUP

Teamwork Adds Value

- Decarbonisation is difficult
- Lessons
- People & resources
- Integrated port-wide commercial offer
- Non-competitive agreements
- Group investment planning
- Practise control on scope 1 & 2.....

Scope 3 Challenges

- **Shore Power for Vessels**
- EU2030 / AFIR
- Shipping expectations will spread
- Ship -> Port -> Generator
- Long-term investment

**R'DAM
SHORE
POWER**



Scope 3 Challenges

- **Trucking**
- EV infrastructure
- On-port charging
- ***But first...***
- Fleet permits
- Visit bookings
- Community systems



Set Collaborative Goals...

