

PORT DECARBONISATION AND ENVIRONMENTAL SUSTAINABILITY

10:15 – 11:45

Port Eco Systems, Current Status and Future Directions

Onshore Power

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In association with **Redshift Associates**



Port Decarbonisation and Environmental Sustainability Workshop

Onshore Power

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www.portofaberdeen.co.uk



**‘Scotland's premier port facility,
at the heart of Energy capital‘**

Oldest Business in UK Est 1136

Port of Aberdeen is a Trust Port

Largest Berthage in Scotland

World leading port infrastructure

Net Zero by 2040



OUR PURPOSE

**To create prosperity
for future
generations**



OUR VISION

**To become Scotland's
premier net zero port,
offering world class
facilities and services, at
the heart of the nation's
energy transition efforts**



OUR MISSION

**To connect our customers to
what they need, where and
when they need it, through
innovation, commitment, and
environmental sustainability**

2023 By Numbers



110 CURRENT
EMPLOYEES

Over £60,000

Donated to
local community
groups



42 INTERNATIONAL
TRADING
COUNTRIES

Total Vessels

7226



Number of
Ferry Passengers

175000



Total Vessel
Tonnage

26,218,459
gross tonnes



North Harbour



97% of vessel emissions are attributed to vessels



78% of emissions from vessels at berth



High impact berthing across 19 key berths



Annual power demand ~53GWh/year by 2030

South Harbour



99% of vessel emissions are attributed to vessels



Annual power demand ~28GWh/year by 2030



Significant infrastructure requirements inc. 24 MVA primary substation

North Harbour – Point Law Project



DEFINE OBJECTIVES:

Project Objectives and critical success factors
Strategic case



OPERATOR ENGAGEMENT:

Vessel power demands
Frequency / duration of vessel calls
Transition to shore power ready



DEMAND ANALYSIS:

High demand berths



SUPPLIER ENGAGEMENT:

Case study analysis
Technical solutions
Optioneering



SOLUTION DEVELOPMENT:

Infrastructure spatial coordination
Technoeconomic modelling
Economic case



COMMERCIAL MODELLING:

Commercial and procurement models
Funding options
Heads of Terms



FINANCIAL MODELLING

P&L model
Key sensitivities



MANAGEMENT CASE

What happens next
Delivery plan
De-risking activities

North Harbour – Point Law Project



Centralised System
7 berths supported
4MVa power upgrade
>£4m Capex

Challenges



Business Case viability



Green power and Grid capacity



Policy support



Funding support

THANK YOU

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**PORT OF
ABERDEEN**
EST. 1136

