

Knowledge Miles: The 695th Lord Mayor's Lectures



Thames Vision 2050 – A Safe, Sustainable And Thriving Port For London

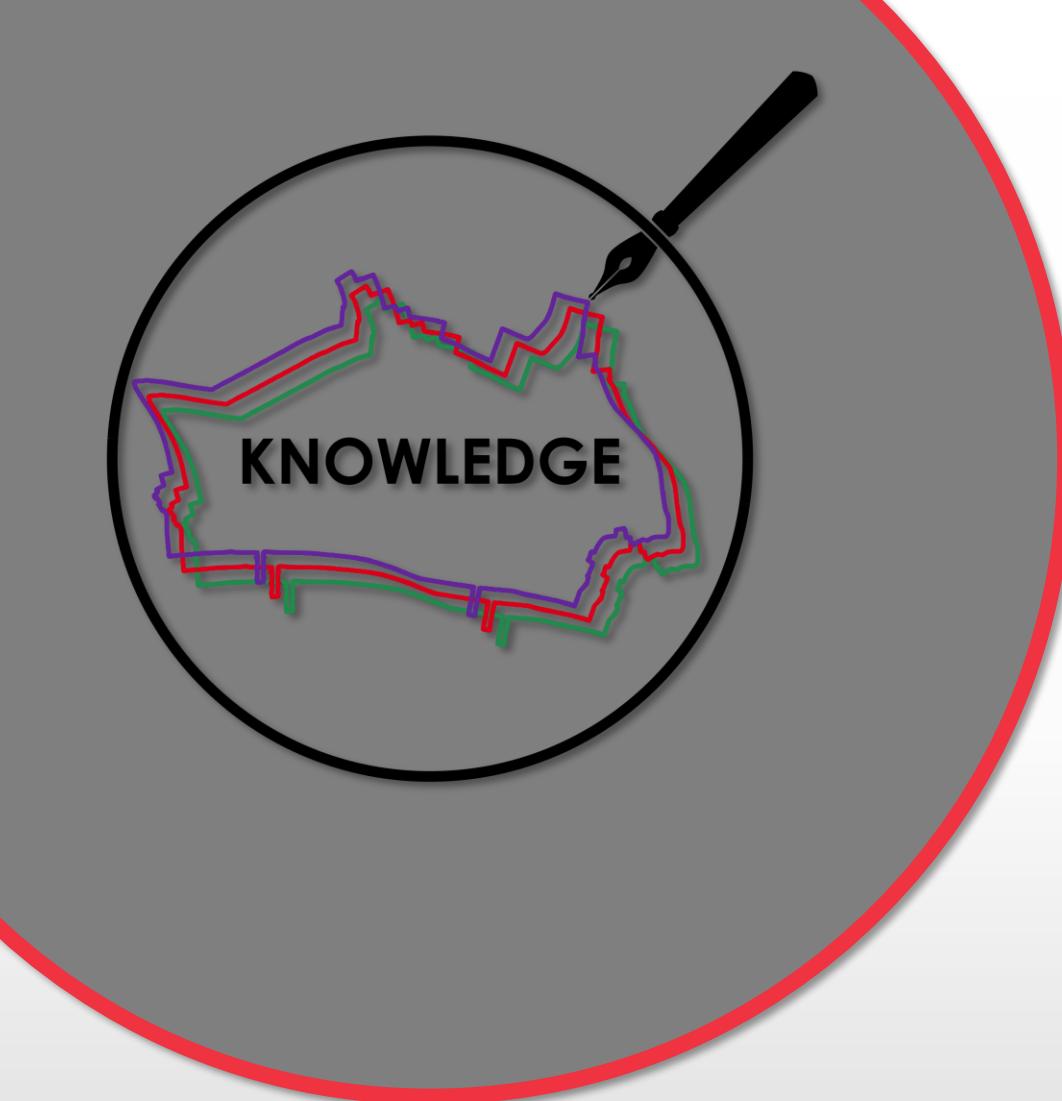
Siân Foster | Director of Corporate Affairs, Port of London Authority

Port of London Authority

Free online lecture

11:00, Friday, 13 September 2024



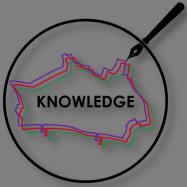


A Word From Our Convenor

Professor Tim Connell

Emeritus Professor
City, University of London

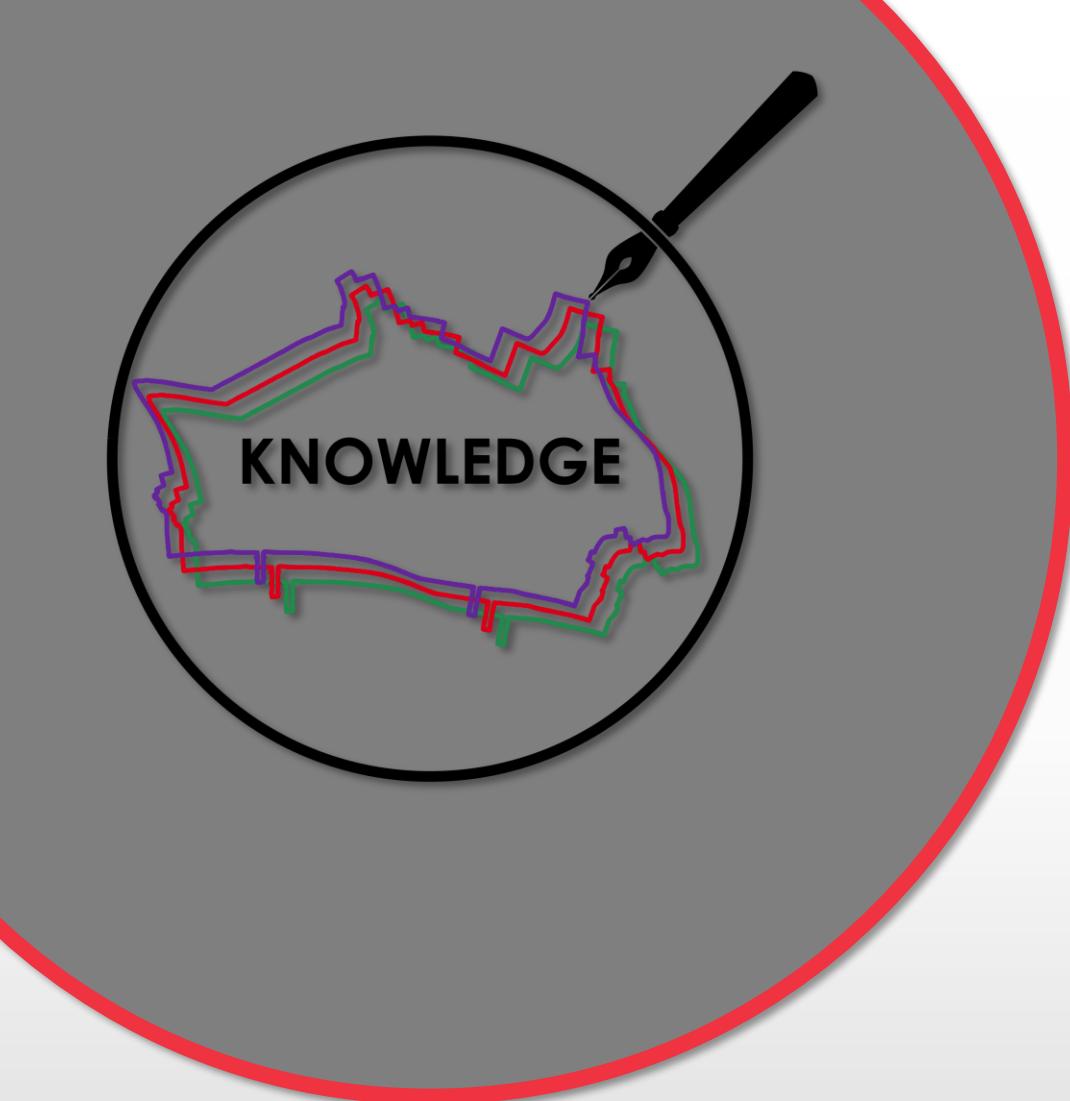




Today's Agenda



- 11:00 - 11:05 Chairman's Introduction
- 11:05 - 11:25 Keynote Presentation - Siân Foster
- 11:25 - 11:45 Question & Answer



Today's Speaker

Siân Foster

Director of Corporate
Affairs
Port of London Authority



A SAFE, SUSTAINABLE AND THRIVING PORT FOR LONDON

SIAN FOSTER
DIRECTOR OF CORPORATE AFFAIRS

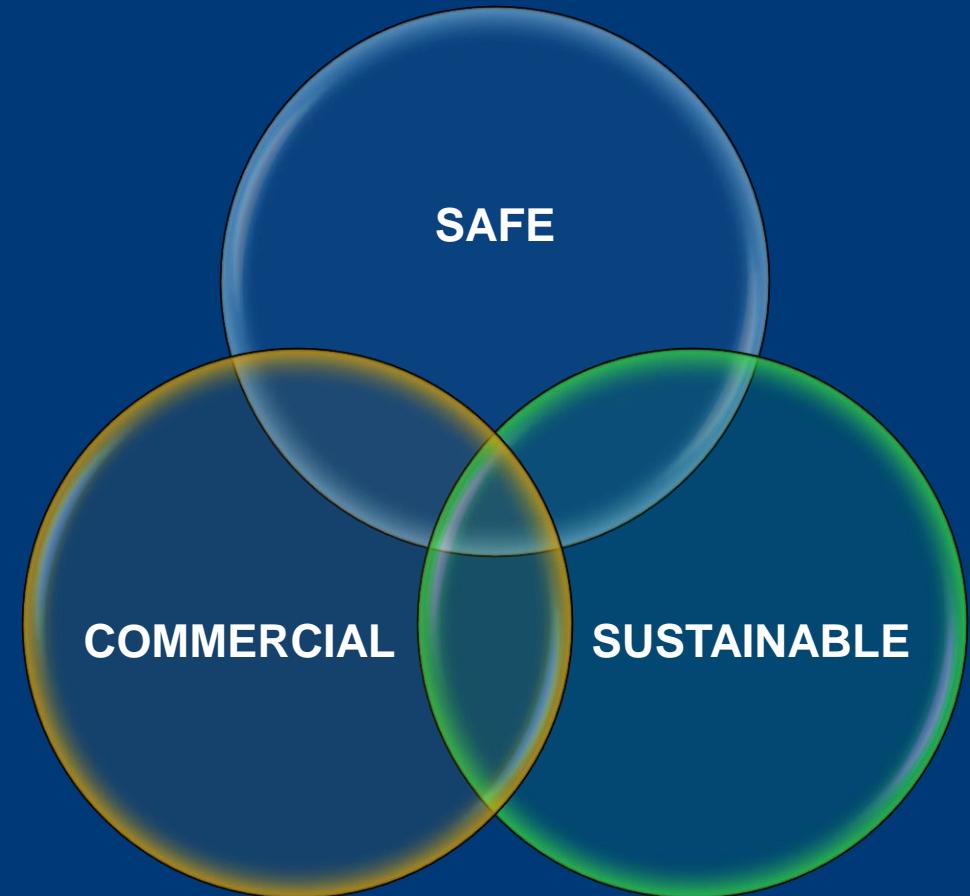


WE PROTECT
AND IMPROVE
THE TIDAL
THAMES FOR
ALL

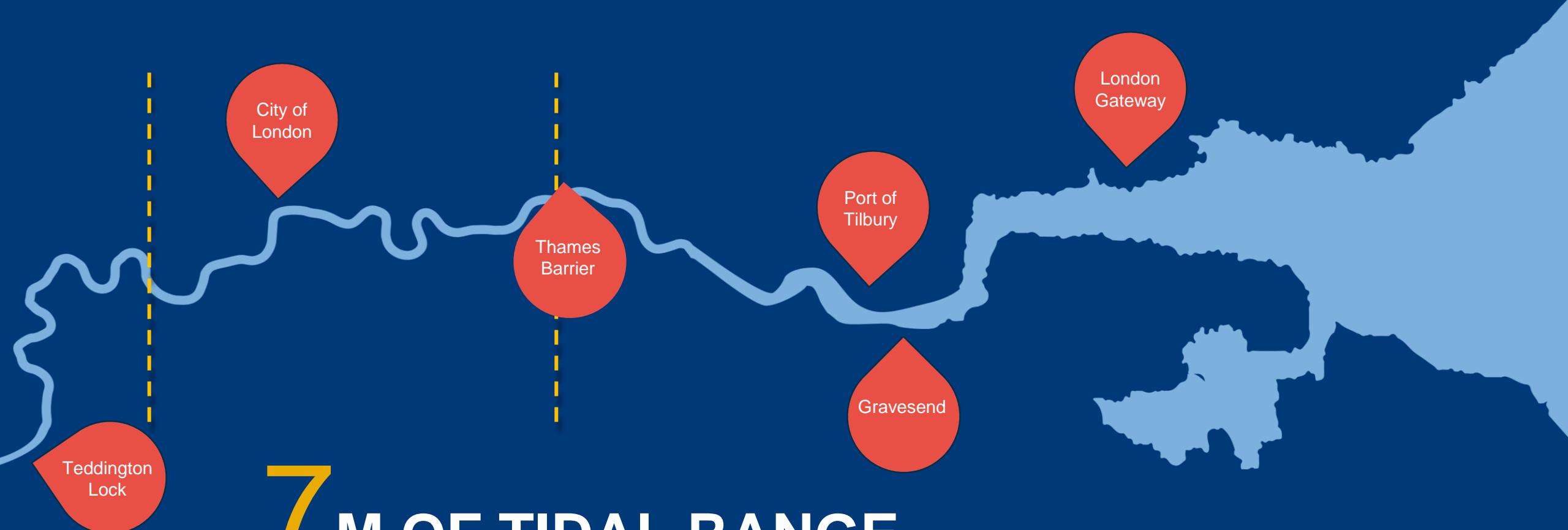
#1

THE PLA: WE PROTECT AND IMPROVE THE TIDAL THAMES FOR ALL

- Our mission: a thriving river, home to the UK's number one port
- We are a trust port. We have no shareholders and operate for the benefit of customers and stakeholders now and in the future
- We work with industry, environmental groups and government to achieve our joint vision for the river and the wider Thames Estuary region



150 KM OF FAST-FLOWING RIVER



7 M OF TIDAL RANGE

HISTORY OF THE PORT OF LONDON

1800s:
Rival wharves,
docks and river
users battle for
business

1908:
Port of London
Act – brings
“order to
chaos”

1910+:
Investment &
modernisation,
deepening river,
port coordination

1970s:
Closure of up-
river docks;
trade moves
downriver

2013:
London
Gateway opens
– now one of
world's fastest
growing ports

1964:
Peak trade
– 60m
tonnes

1992:
Privatisation of
Tilbury Docks;
PLA no longer
involved in
cargo handling

2024



51.6m

**TONNES OF GOODS
HANDLED IN 2023**

THE PLA IN NUMBERS 2023

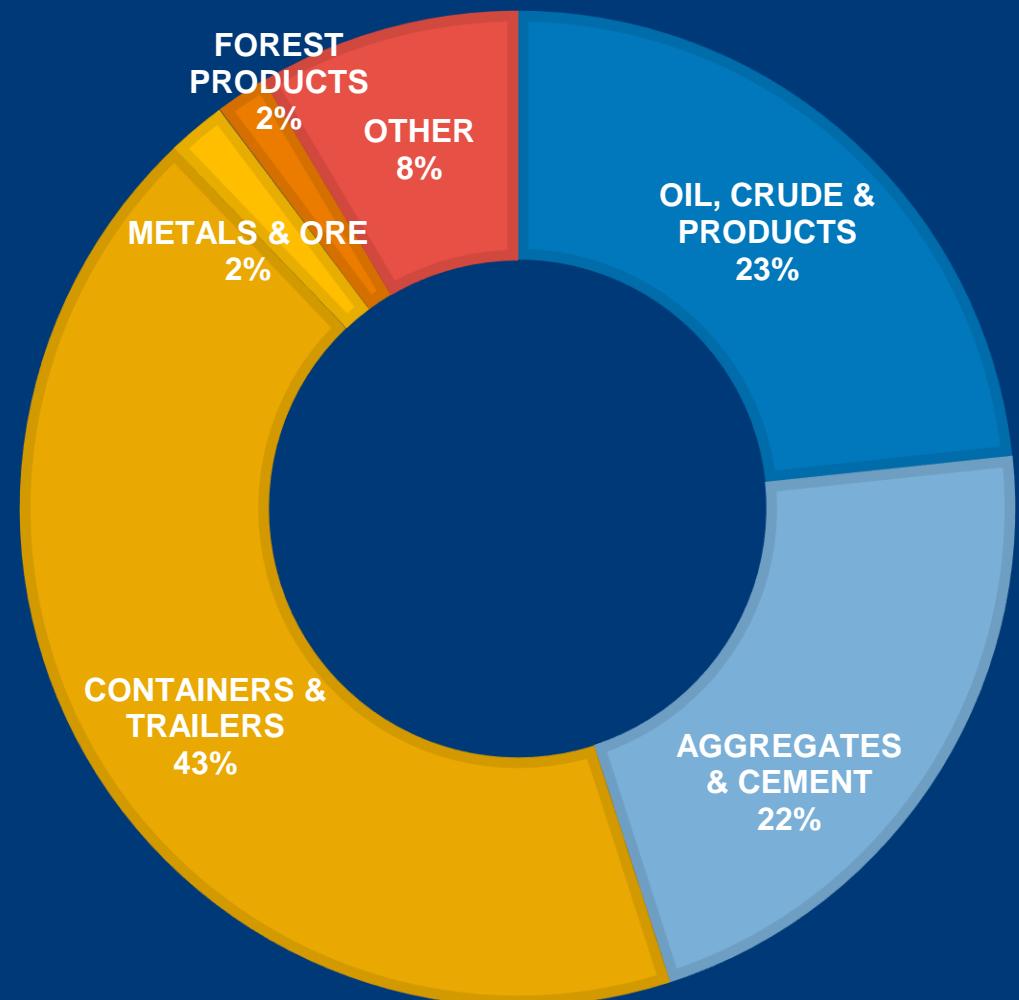
10k

PILOTAGE ACTS

99.6%

SERVICE LEVEL

TRADE BY TYPE



THE PLA IN NUMBERS

2023

9m

PASSENGERS

3.1 m

TONNES INLAND
WATERWAYS FREIGHT

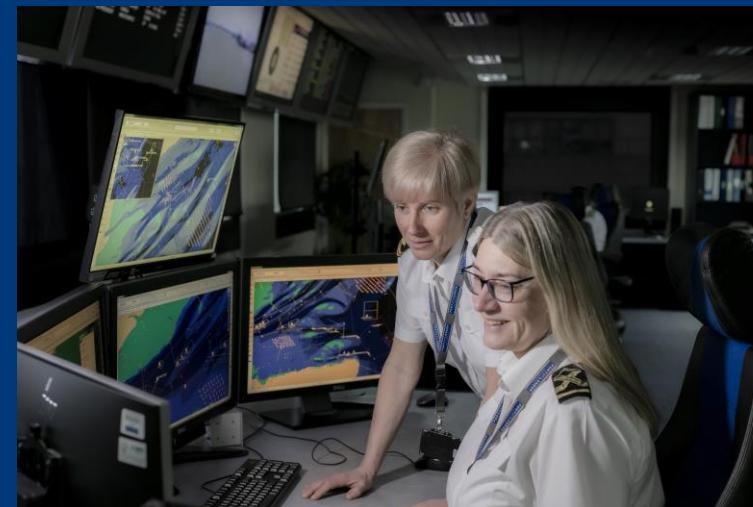
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SPORTING
EVENTS

SERIOUS
NAVIGATIONAL
INCIDENTS

SAFETY OF NAVIGATION

- Maintaining navigation channels
- Managing safe movement of vessels
- Hydrographic and marine services
- Pilotage
- Vessel traffic services



THAMES VISION 2050

THAMES
2050

PORT OF
LONDON
AUTHORITY



Trading Thames



**The No. 1 Net Zero UK
trading hub**

The country's largest and most competitive port, closest to the UK's biggest market, producing Net Zero emissions.



Destination Thames



**A place to live, visit,
play and enjoy**

Accessible to all, a national and international icon for the city and the country.



Natural Thames



**Clean air, water and
land supporting
diverse wildlife**

A clean river, free of sewage, waste and other pollution.



NATURAL THAMES

Clean air, water and land supporting diverse wildlife
A clean river, free of sewage, waste and other pollution



OVERVIEW OF SUSTAINABILITY



Improve the sustainability of the Port of London Authority operations



Improve the sustainability of the 150km of the tidal Thames



Support the wider sustainability transition in the UK

Climate

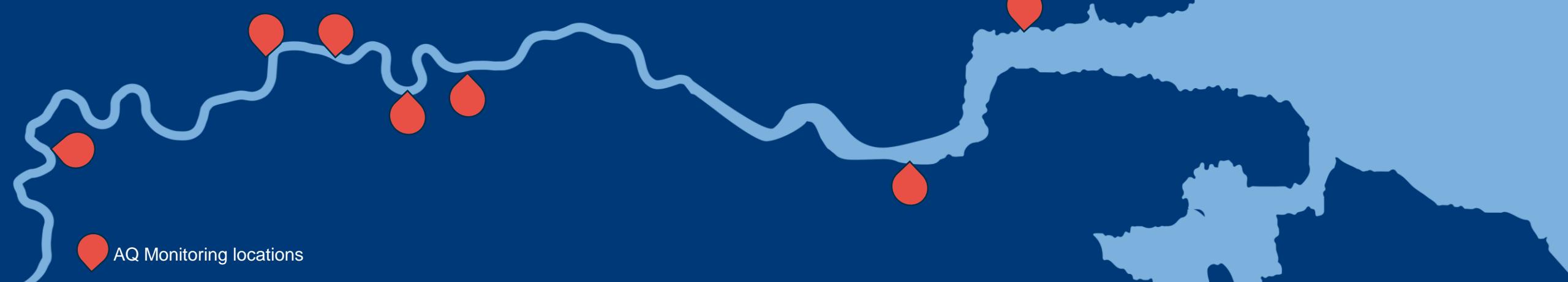
Air Quality

Water Quality

Biodiversity

AIR QUALITY STRATEGY

The Port of London was the first port to publish an **Air Quality Strategy (AQS)** in 2018. The Port's Air Quality Strategy (AQS) is an action plan for continued reduction in pollutants from river vessels on the Thames until 2050.



✓ River-side air quality monitoring network

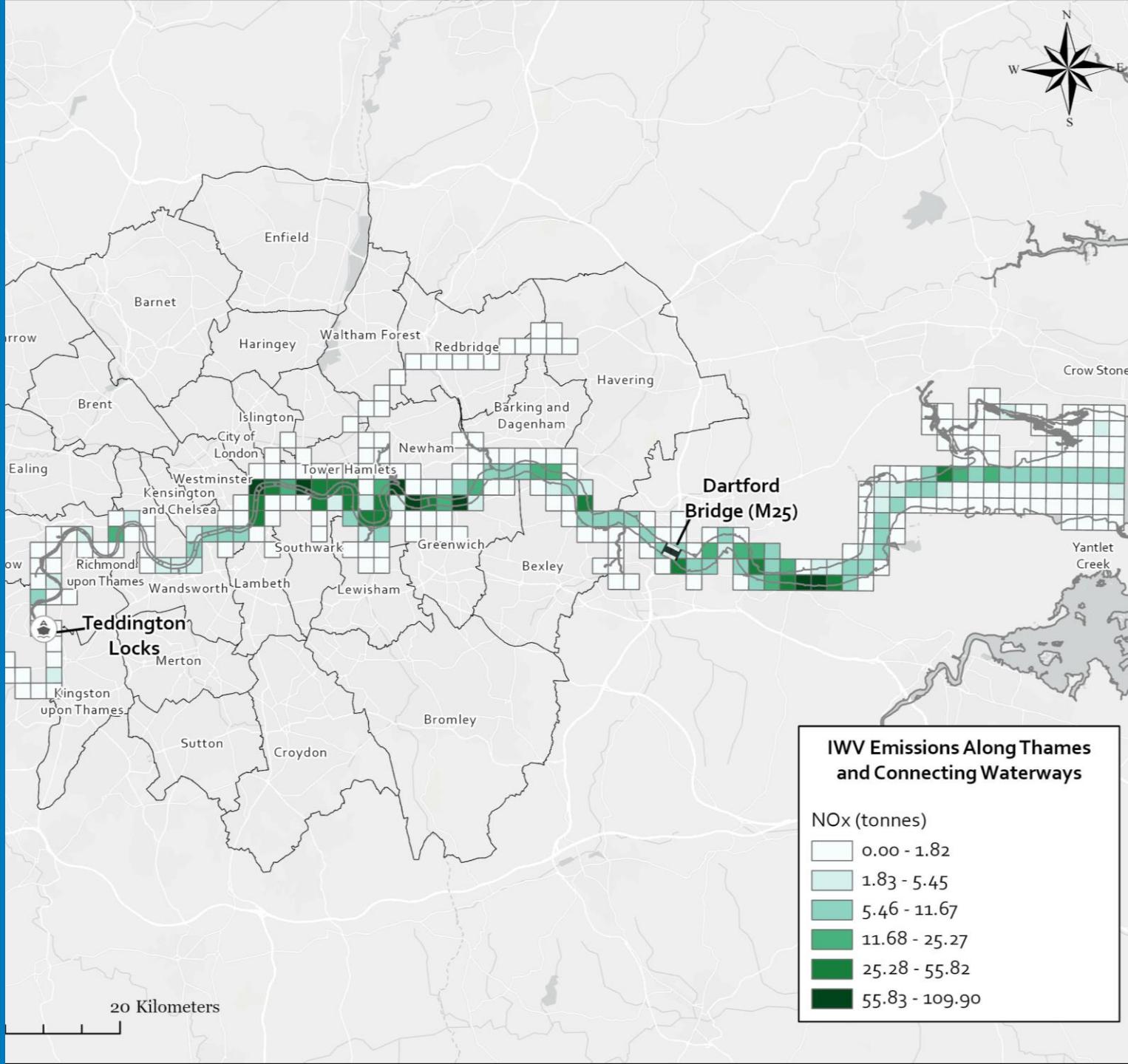
Passive and active monitors along the river have helped inform boroughs about the river-emission contribution of pollution and will allow us to track improvements.

✓ Emissions inventory

Emission inventory was undertaken most recently in 2021. This provided granularity of vessel activity on the river that is contributing to local pollution.

EMISSIONS INVENTORY

The 2021 EI was carried out using activity-based AIS data. Findings helped us identify hotspots on the river where we can direct future action toward emission reduction.



OUR PLAN FOR TACKLING AIR POLLUTION



1. Build on the evidence base on air quality

Actions will allow us to **baseline** emissions and make evidence-based decisions for emission reduction actions.



2. Target hotspots and areas of concern

Actions will allow **targeted** and influential actions to be made in the interest of human and environmental health.



3. Support the transition to low to zero emission fuels

Actions will allow us to facilitate **fleet transitions** to future fuels and technological solutions to reduce emissions.

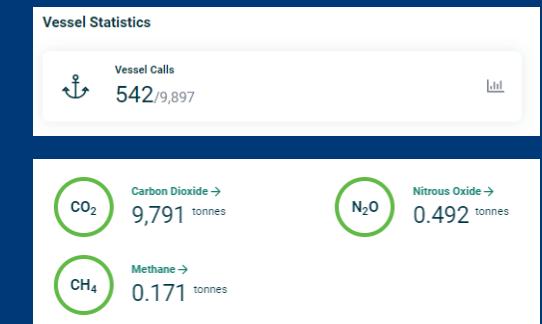
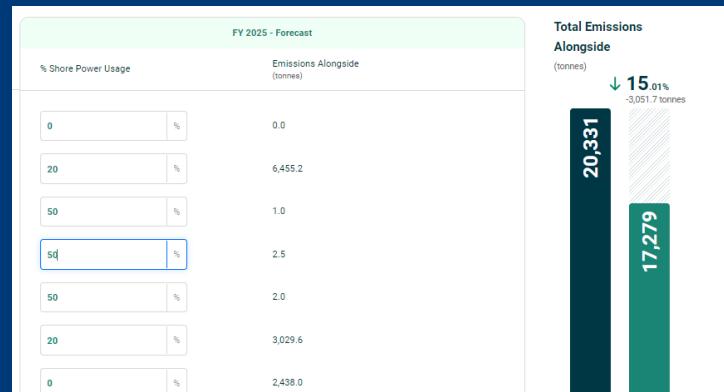
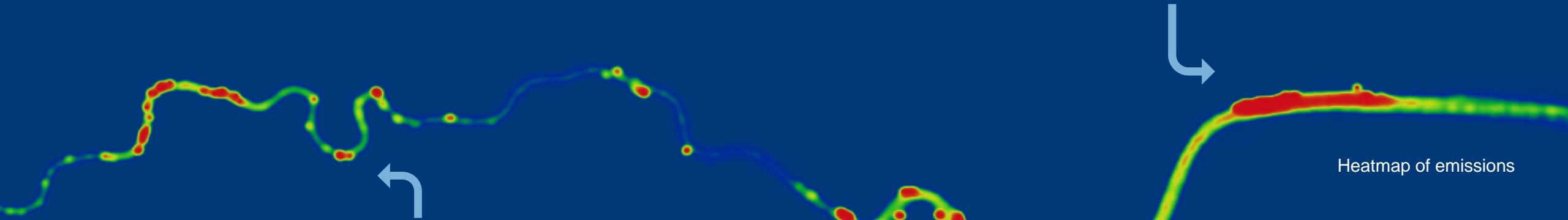


4. Advocate for better air quality on and around the river

Actions will allow us to **improve the perception** of the Thames as a polluted river and have a positive reputational impact.

Actions will allow us to change our internal and external **mindset**, taking air quality into consideration with operational needs.

MARITIME EMISSIONS PORTAL





MAERSK

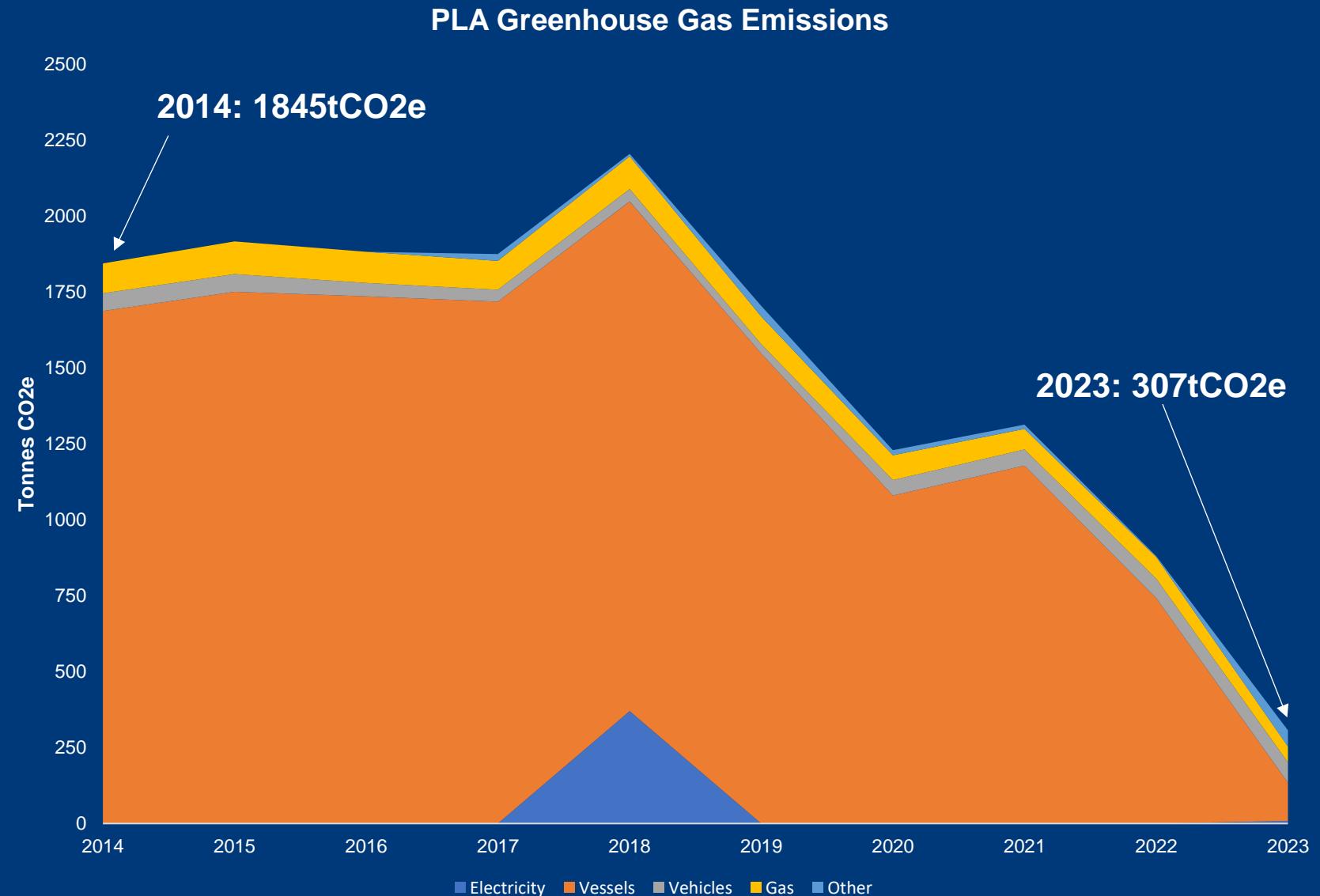
ALL THE WAY TO ZERO

DP WORLD

QC10

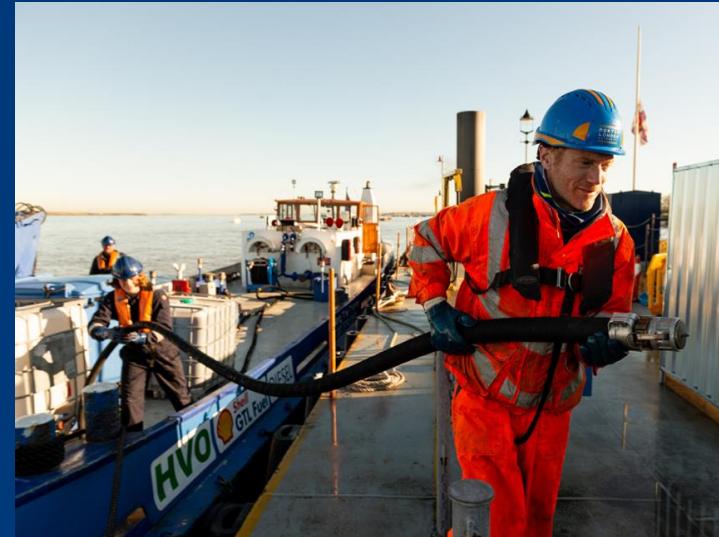
SWITZER

PLA CARBON FOOTPRINT 2014 – 2023



ACTIONS TAKEN SO FAR

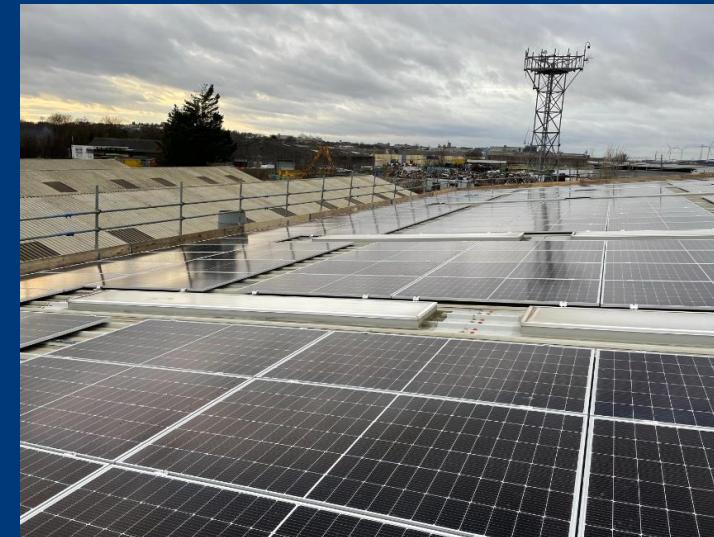
BIOFUEL TRANSITION



VEHICLE FLEET ELECTRIFICATION



SOLAR PHOTO-VOLTAIC



ELECTRIC VEHICLE CHARGING



THE NET ZERO RIVER PLAN

ACTIONS FOR 2024:

- ✓ Map current and future grid requirements
- ✓ Hydrogen demand study
- ✓ Green Corridor feasibility study
- ✓ PLA approval processes for green tech
- ✓ Regulator working group
- ✓ Academia/Industry sessions on alternative fuels

As part of the PLA's Thames Vision 2050, we made a commitment to convene a Thames Net Zero Coalition to produce an action plan to reduce emissions on the Thames.



Supporting the transition to alternative fuels and green technology



Working with regulators to promote the safe adoption of alternative fuels and green technology



Unlocking funding and financing for alternative fuels and green technology



Enabling the use of data for decision-making and collaboration

ELECTRIC THAMES



UK
Power
Networks
Delivering your electricity

+ LCPDelta



Decarbonising
the Thames

The need to decarbonise the Thames is clear



Appetite for
Change

100% of the vessel operators and 80% of the quay operators are interested in implementing measures to limit their environmental impact.



Cleaner Fuels

There is strong interest in electrification (50% of operators surveyed) and hydrogen (37.5%) to power vessels



Suitable Fleet

Power demands, usage profiles, and other factors were identified in determining suitable fleets: Tug Boat, Passenger Ferry, Cruise Vessel and Work Boat



Infrastructure
Corridor

A corridor of charging infrastructure will be needed, along with users, to enable a workable solution



Vessel-to-Grid
Opportunities

Vessel-to-Grid potential exists



Challenges

Installing power infrastructure, creating an integrated plan, technical vessel solutions and investment



Optimal
Outcomes

A whole system plan will speed up the transition, reduce impact on the electricity network and reduce the overall cost to network and river users



TRADING THAMES

The No. 1 Net Zero UK trading hub

The country's largest and most competitive port, closest to the UK's biggest market, producing Net Zero emissions.



Marine Centre Transformation Programme

- Future-proofing the port for 25 years of growth
- Focus on navigational safety
- £10m investment

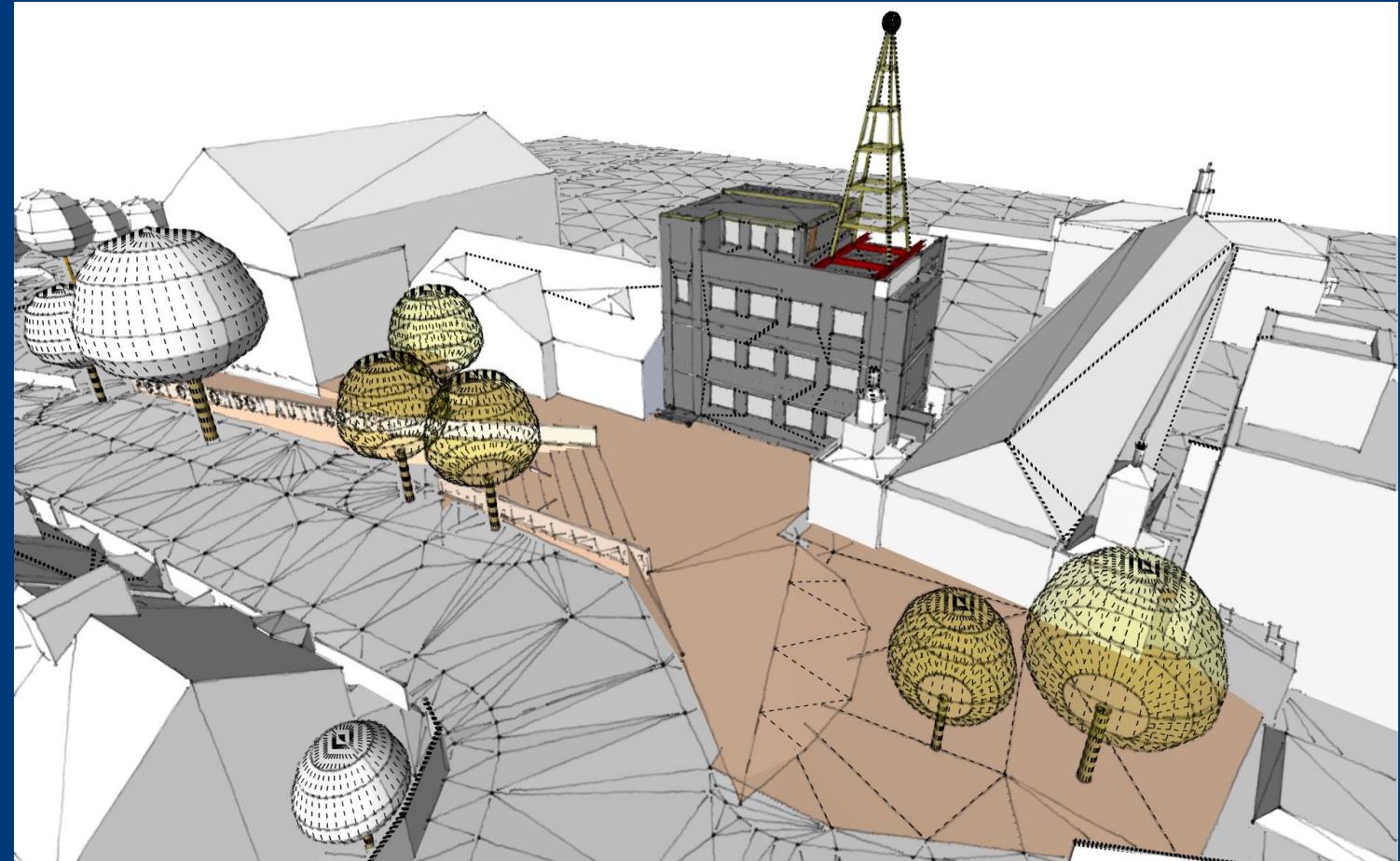
SMART AND RESILIENT



MARINE CENTRE TRANSFORMATION

PRIORITIES

- Resilience
- VTS System replacement
- Co-location of existing centres; one river, one port
- Improving operational efficiency
- Improved sustainability performance



MARINE CENTRE TRANSFORMATION

VTS SYSTEM: KONGSBERG

- Specification and procurement completed, installation underway
- Supported by new infrastructure including microwave and network replacement programme
- Future-proofing with system learning and readiness for increased vessel autonomy



WORKING ENVIRONMENT

- Provide high quality accommodation for VTS teams
- Ergonomics - designed with the people responsible for delivering our services
- Making the transition as seamless as possible, replicating most frequently used inputs

MARINE CENTRE TRANSFORMATION





DESTINATION THAMES

A place to live, visit, play and enjoy

Accessible to all, a national and international icon for the city and the country



ACTIVE THAMES

- In three years, so far: £430,000 to 56 clubs
- Encouraging active use of our unique blue space in London, Kent and Essex
- Particular focus on connecting new audiences with the river and waterways
- Walking, paddling, sailing and more...
- Next funding round opens later this month



TIDAL THAMES MASTERPLAN



- Mapping opportunity on the Tidal Thames
- Key deliverable in the Thames Vision Action Plan: 2030
- Bexley
- Newham
- Tower Hamlets
- Greenwich
- Gravesham

MASTERPLAN: BEXLEY RIVERSIDE

- Opportunity Areas are identified as growth areas in the London Plan; key locations with potential for new homes, jobs and infrastructure. Many are linked to existing or potential public transport improvements and are in the east of the Capital.
- Almost the entirety of Bexley's riparian frontage has this designation, providing an opportunity to fully achieve the goals of the Thames Vision within the Borough.



MASTERPLAN: BEXLEY RIVERSIDE

Search

Thames Path Improvements: Area between Erith Riverside Gardens and Corinthian Manorway [Explore](#)

Town Wharf [Explore](#)

Erith Causeway [Explore](#)

Erith Pier [Explore](#)

Fraser and Chalmers Wharf foreshore Area, Erith [Explore](#)

Erith Submerged Forest and Saltings [Explore](#)

Standard Wharf [Explore](#)

Anchor Bay Wharf [Explore](#)

Historic England Site

PLA Navigation Channels

Bexley Masterplan Key

- Cross Cutting Thames
- Destination Thames
- Natural Thames
- Trading Thames

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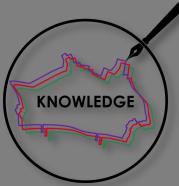
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WHAT'S NEXT?



Q & A





Comments, Questions & Answers





Forthcoming Lectures



- Tuesday, 17 September 2024 (15:00 - 15:45 BST) Innovation In Mental Health & The GALENOS Project: How To Look Back To Move Forward
- Thursday, 19 September 2024 (15:00 - 15:45 BST) The Lonely Brain: How Designing For Brain Health Can Help Tackle The Loneliness Epidemic
- Thursday, 26 September 2024 (11:00 - 11:45 BST) Ethical Digital Technology – Fact or Fiction?

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