

Knowledge Miles:

The 695th Lord Mayor's Lectures



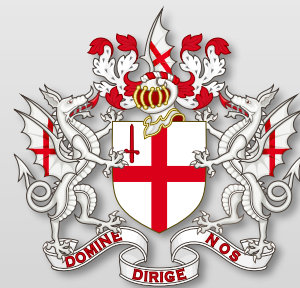
Thames Vision 2050 – A Safe, Sustainable And Thriving Port For London

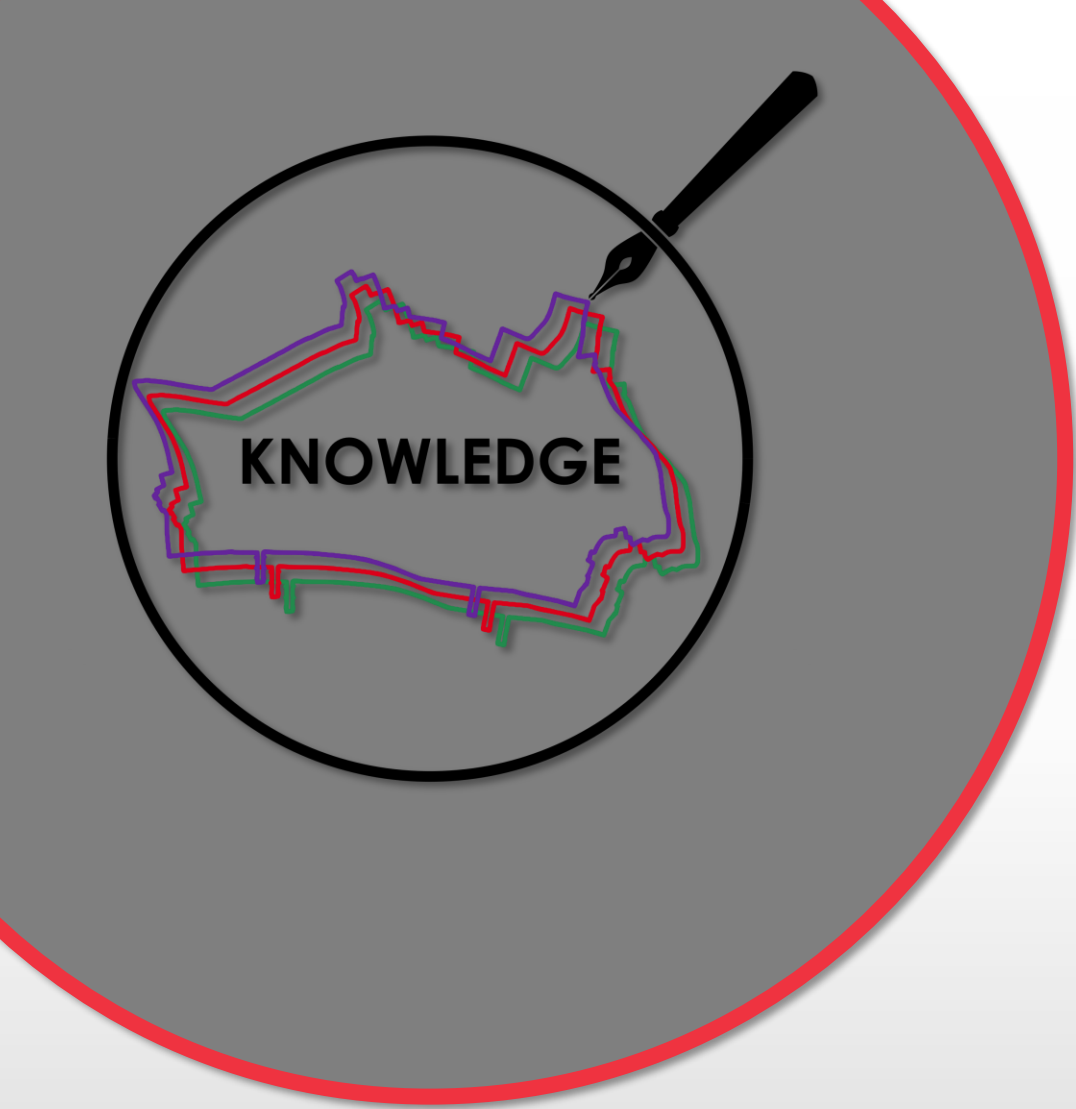
Siân Foster | Director of Corporate Affairs, Port of London Authority

Port of London Authority

Free online lecture

11:00, Friday, 13 September 2024



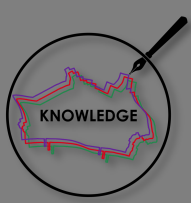


A Word From Our Convenor

Professor Tim Connell

Emeritus Professor
City, University of London



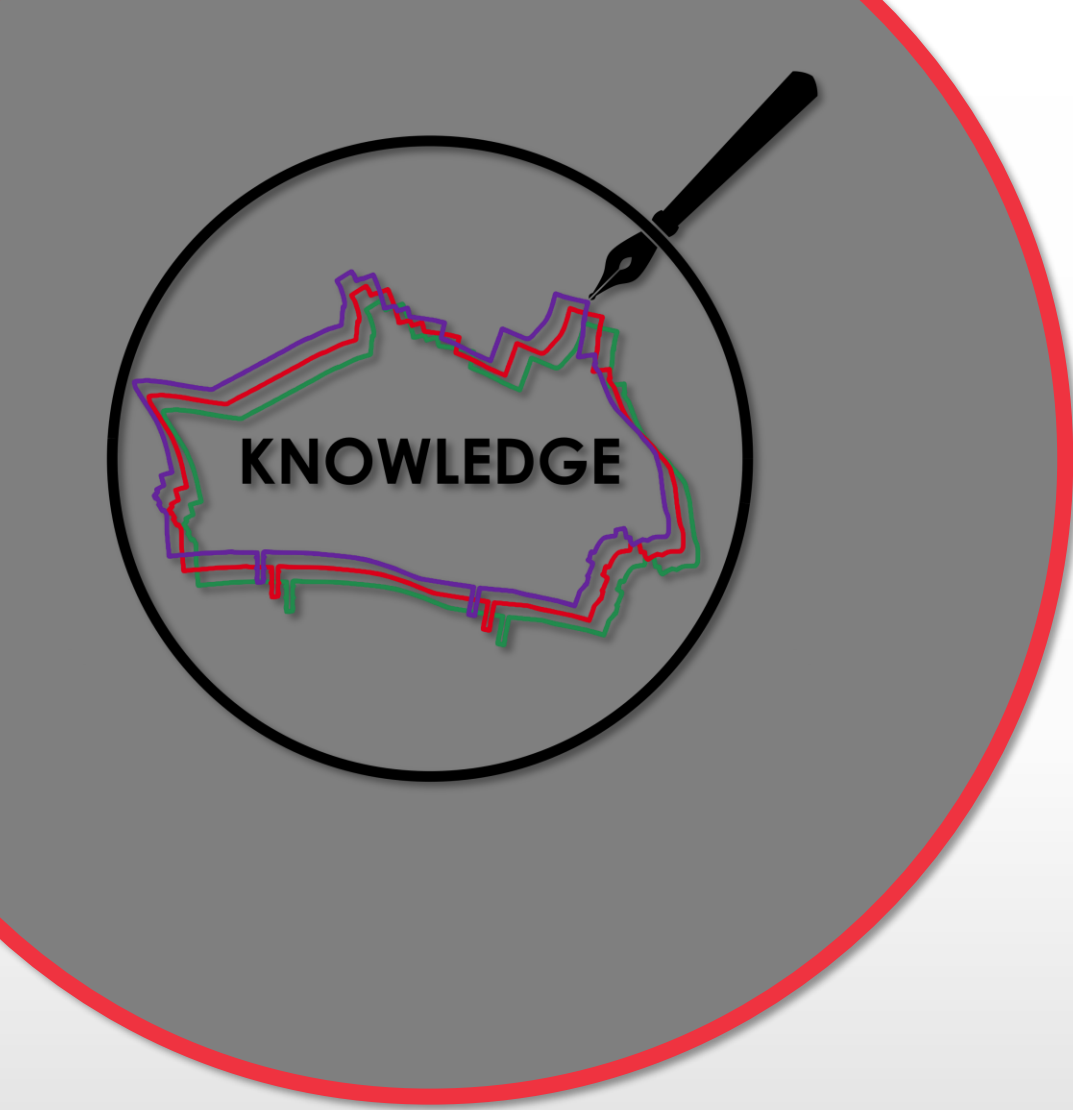


Today's Agenda



- 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





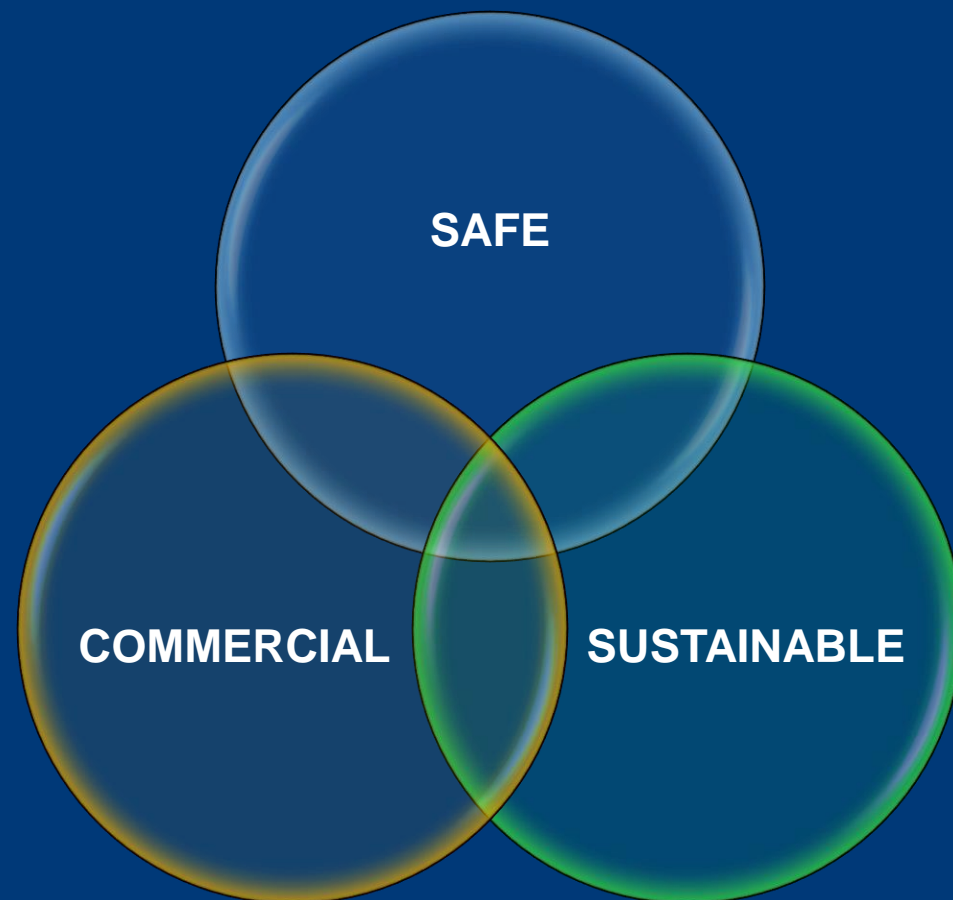
PORT OF
LONDON
AUTHORITY

WE PROTECT
AND IMPROVE
THE TIDAL
THAMES FOR
ALL

#1

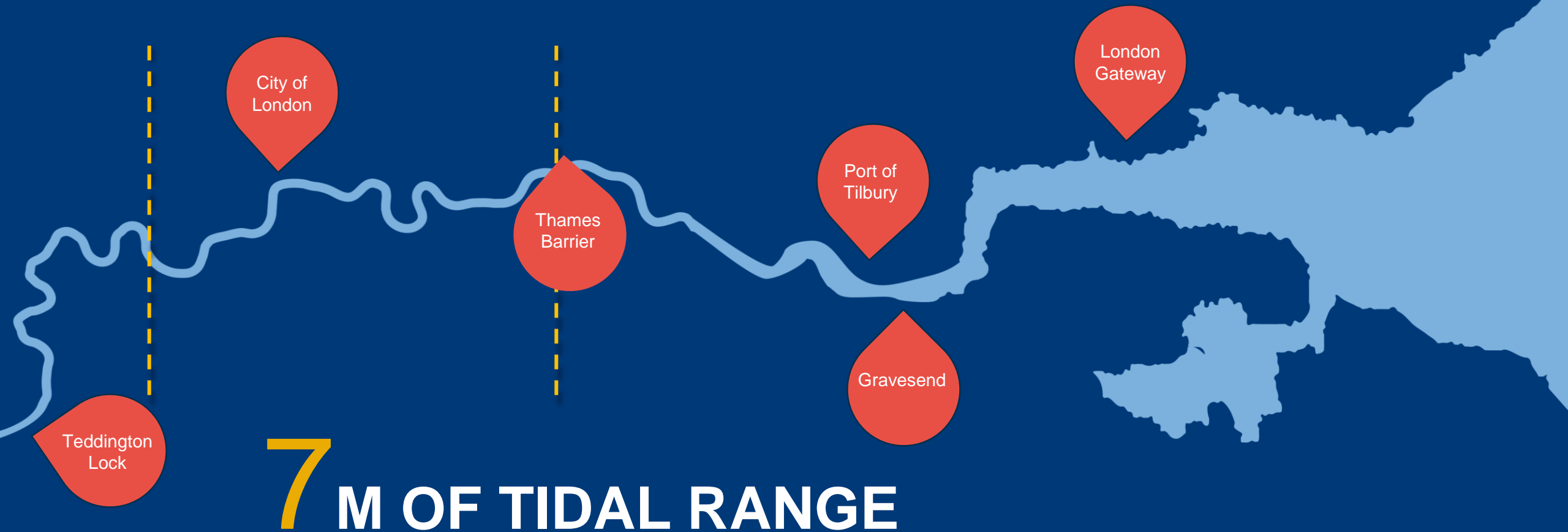
THE PLA: WE PROTECT AND IMPROVE THE TIDAL THAMES FOR ALL

- **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

PORT OF
LONDON
AUTHORITY



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

1992:

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

1964:

Peak trade
– 60m
tonnes

2024



51.6_m

**TONNES OF GOODS
HANDLED IN 2023**

THE PLA IN NUMBERS 2023

10_k

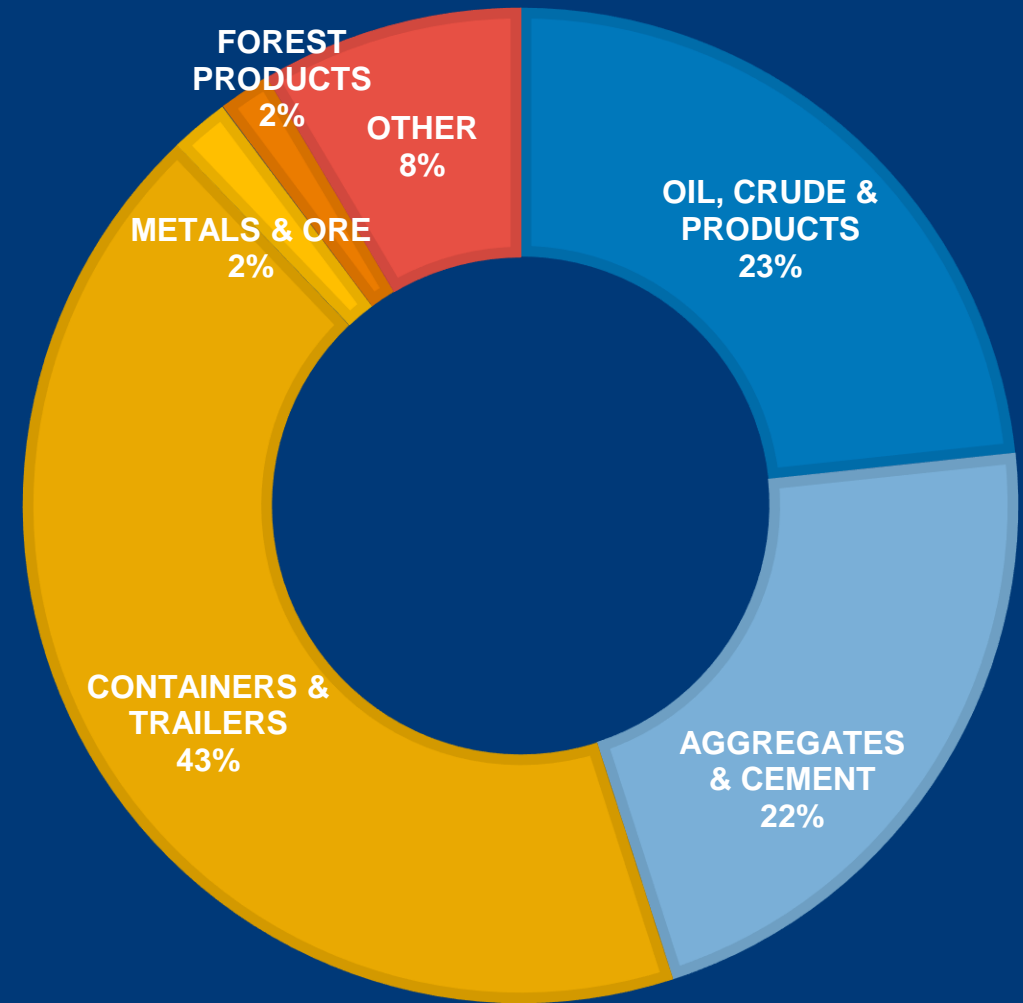
PILOTAGE ACTS

99.6%

SERVICE LEVEL

PORT OF
LONDON
AUTHORITY

TRADE BY TYPE



THE PLA IN NUMBERS 2023

9_m

PASSENGERS

3.1_m

TONNES INLAND
WATERWAYS FREIGHT

645

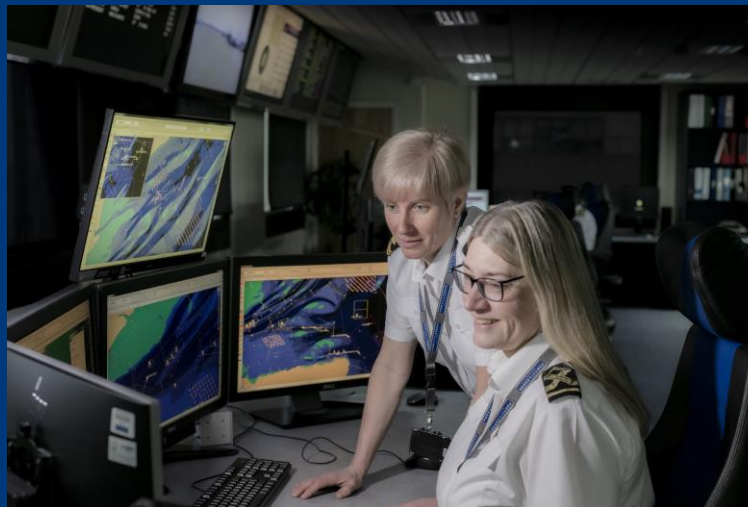
SPORTING
EVENTS

0

SERIOUS
NAVIGATIONAL
INCIDENTS

SAFETY OF NAVIGATION

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



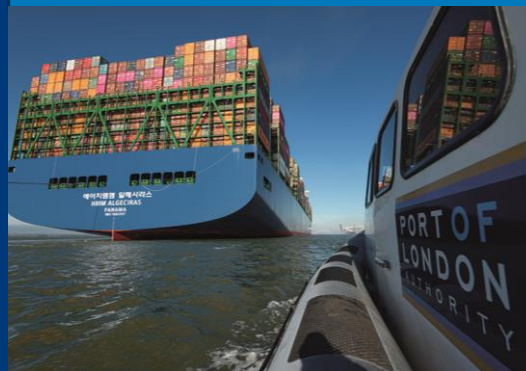
THAMES VISION 2050



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

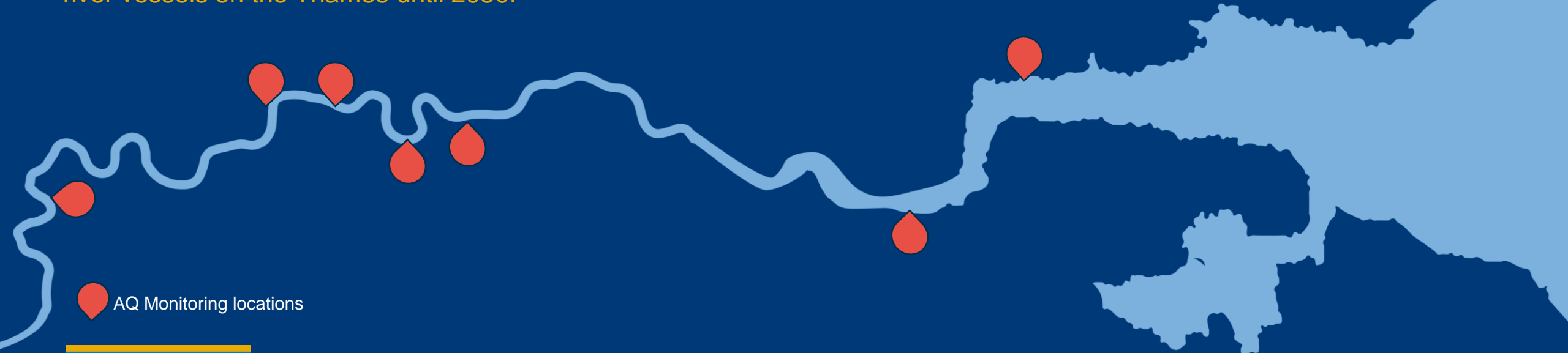
The Port of London was the first port to publish an **Air Quality Strategy (AQS)** in 2018. The Port's Air Quality Strategy (AQS) is an action plan for continued reduction in pollutants from river vessels on the Thames until 2050.

✓ 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

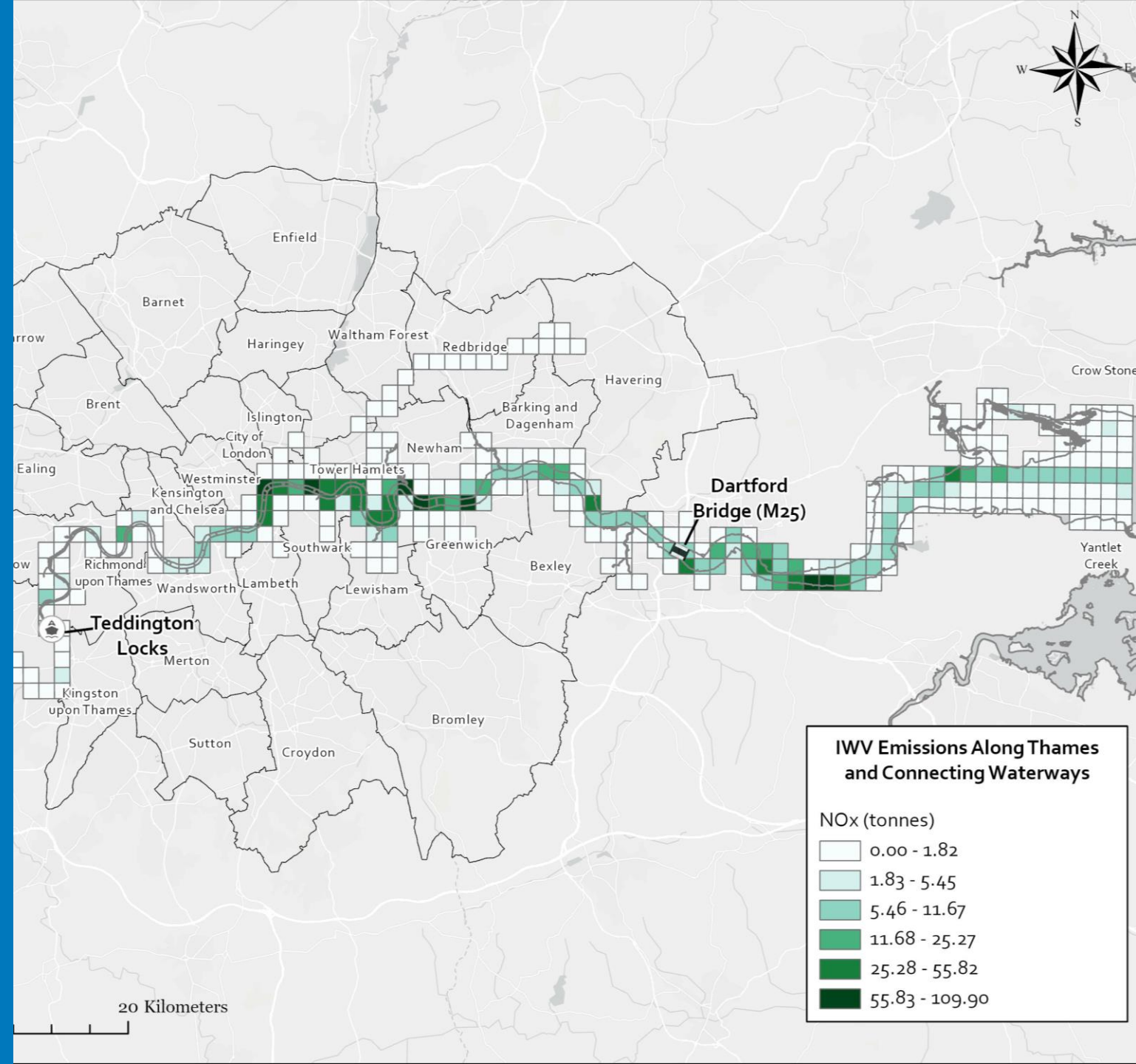
Emission inventory was undertaken most recently in 2021. This provided granularity of vessel activity on the river that is contributing to local pollution.



PORT OF
LONDON
AUTHORITY

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

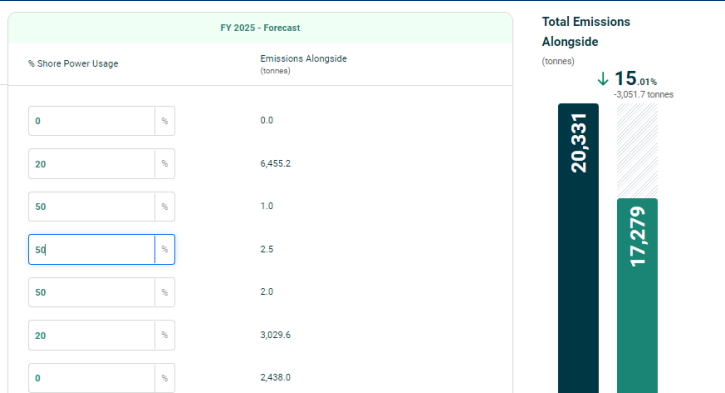
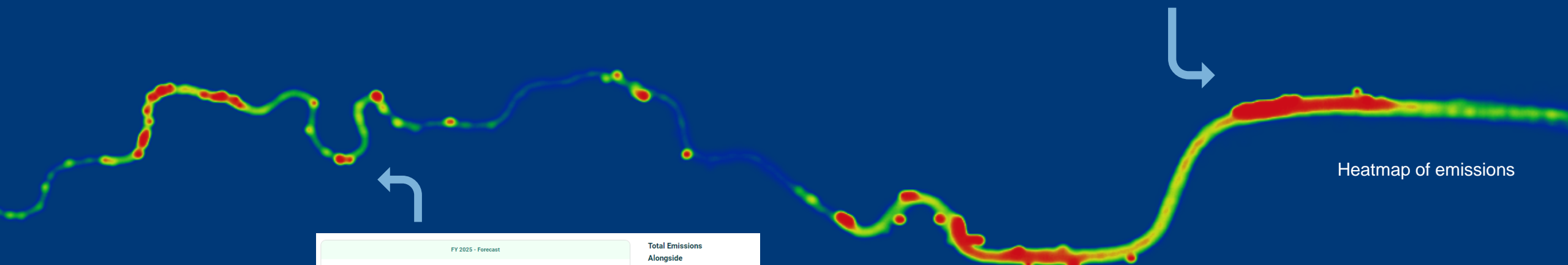
Actions will allow us to **improve the perception** of the Thames as a polluted river and have a positive reputational impact.



5. Embed air quality considerations into our own decision making

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

MARITIME EMISSIONS PORTAL





ALL THE WAY TO ZERO

MAERSK
MAERSK
MAERSK
MAERSK

MAERSK
MAERSK
MAERSK
MAERSK

MAERSK
MAERSK
MAERSK
MAERSK

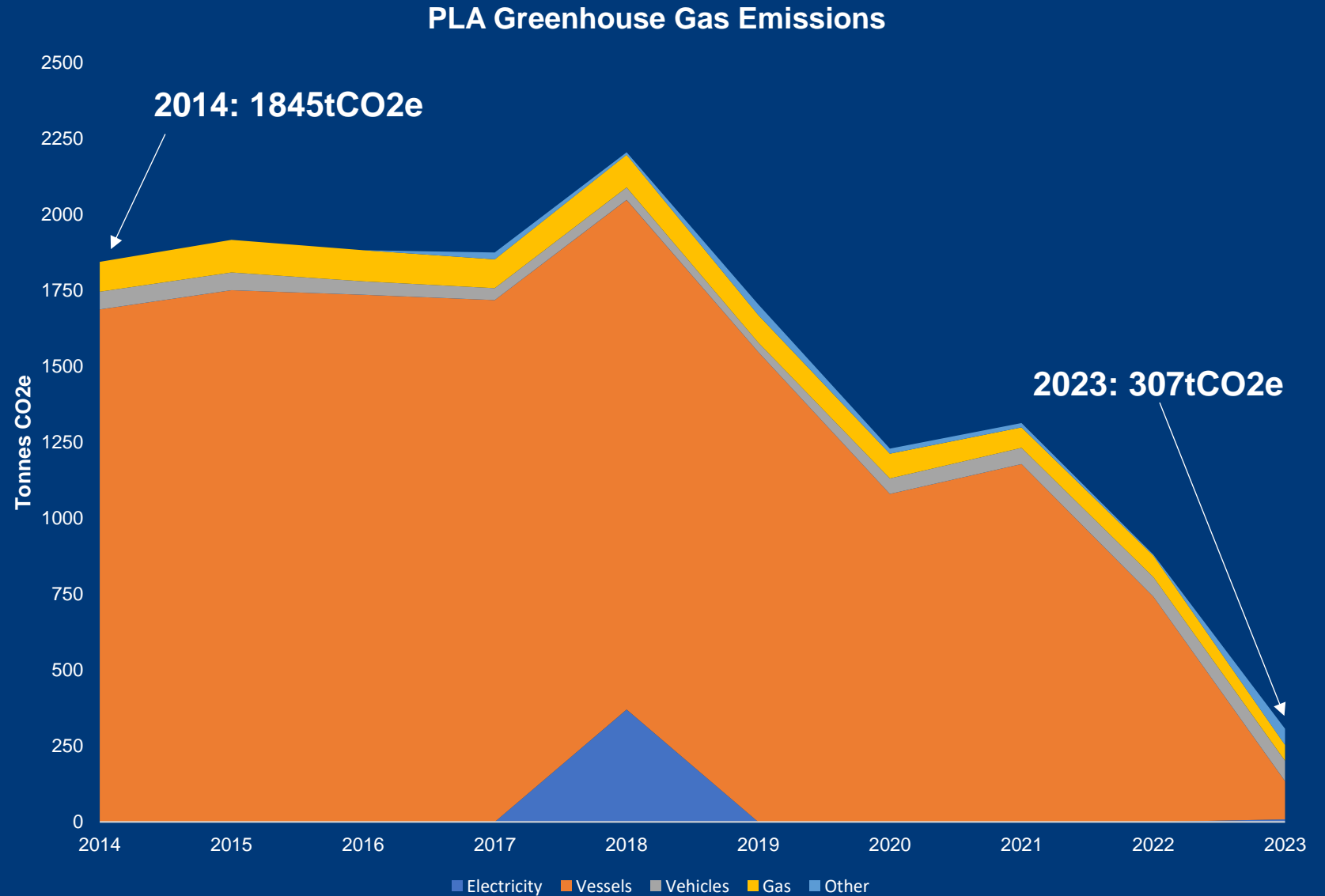
MAERSK
MAERSK
MAERSK
MAERSK

MAERSK
MAERSK
MAERSK

MAERSK
MAERSK
MAERSK

PLA CARBON FOOTPRINT 2014 – 2023

PORT OF
LONDON
AUTHORITY



ACTIONS TAKEN SO FAR

PORT OF
LONDON
AUTHORITY

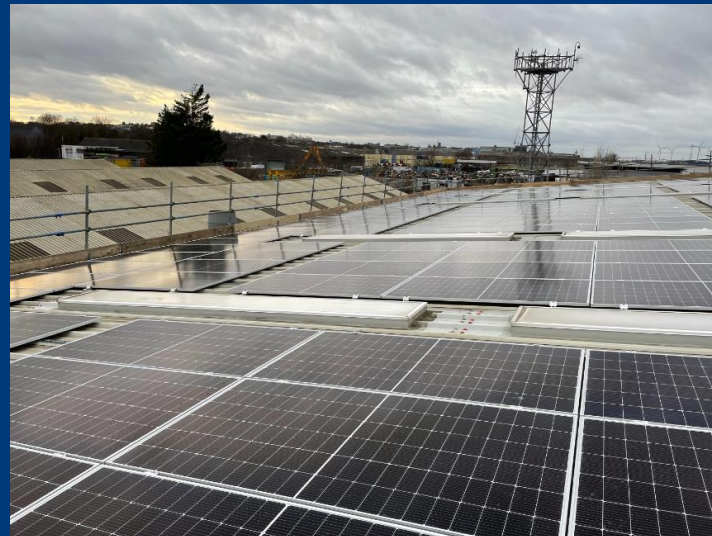
BIOFUEL TRANSITION



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.



ELECTRIC THAMES



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



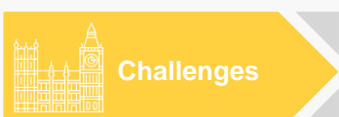
Infrastructure Corridor

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

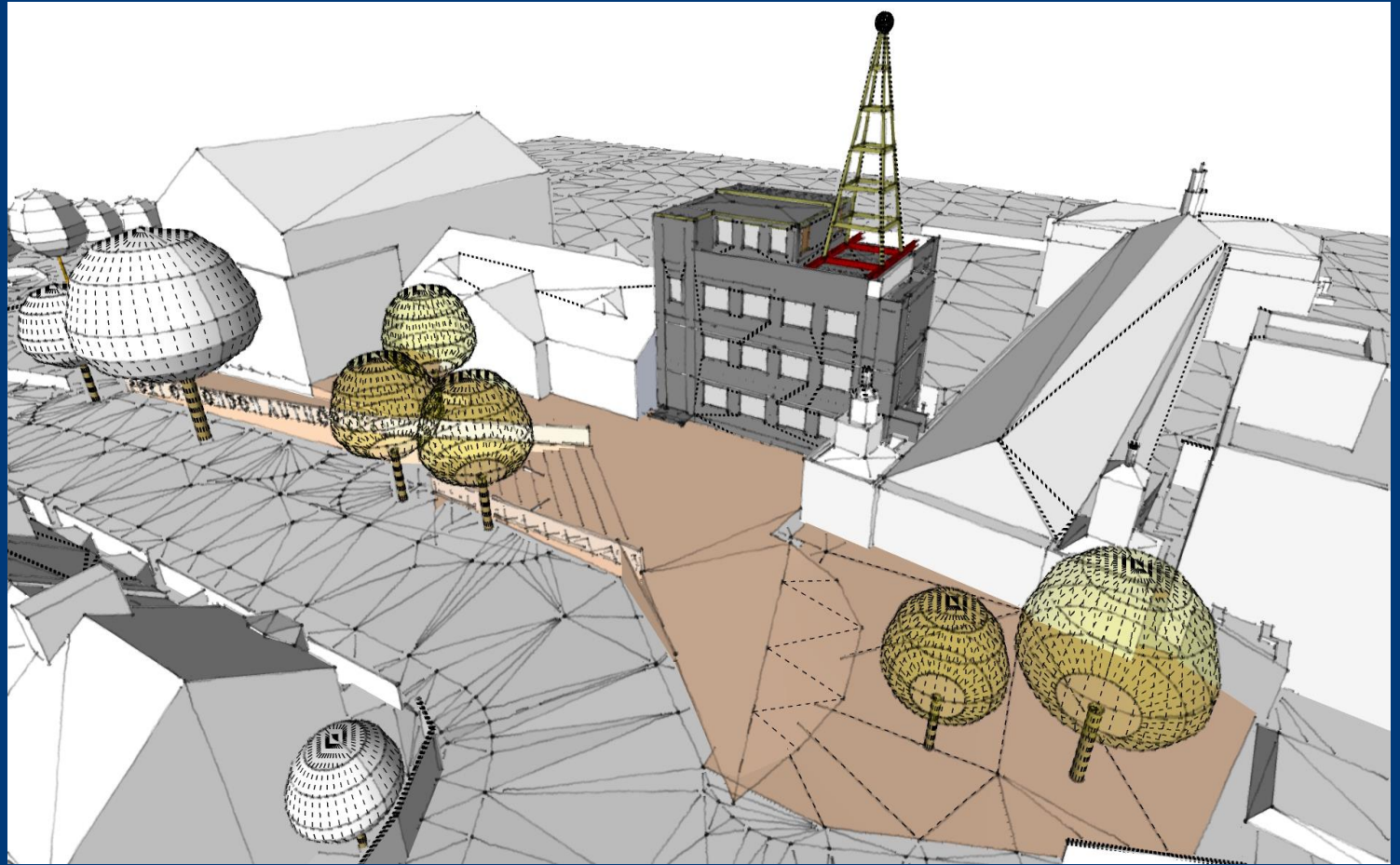
SMART AND RESILIENT



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

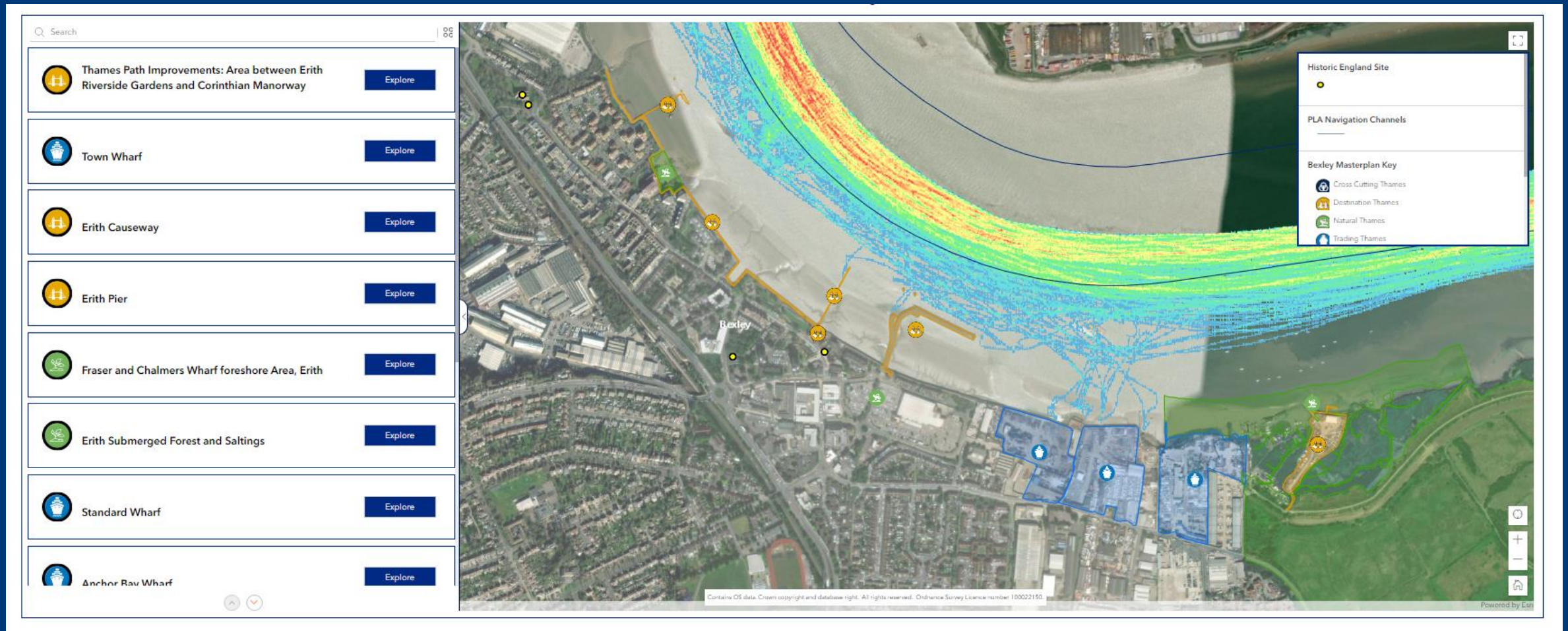


MASTERPLAN: BEXLEY RIVERSIDE

- 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

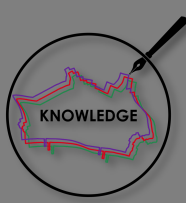


WHAT'S NEXT?



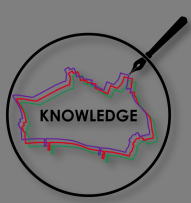
Q & A





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?

Visit: www.knowledgemiles.net

