



CONSULTATION ON DRAFT AIR QUALITY

STRATEGY FOR THE THAMES



INTRODUCTION



We have been working for the last year and a half with stakeholders to investigate the scale of risk and opportunities for air quality in the port. In July this year we published a short document, Towards an Air Quality Strategy for the Thames, which set out three strands of research we had commissioned, with the Greater London Authority and Transport for London, to inform this work.

Once we received the research results, we ran a series of workshops to discuss with stakeholders how they can engage with a strategy to deliver improved air quality. Following those discussions, and after further research, we have now published the draft Air Quality Strategy for the Thames for consultation.

The strategy includes 19 proposals for action centred on the '5 E' framework, used in the European Seaports Organisation (ESPO) Green

Guide, which are **Exemplify, Enable, Encourage, Engage** and **Enforce**. Collectively they aim to drive down air emissions from the river, without impacting on the river's ability to support trade, its ability to take lorries off London's roads and transport people around the capital.

This document provides a short summary of the strategy, the proposed actions and the questions we are inviting stakeholders to answer in response to the consultation. The full strategy document can be found on the PLA website, at:

<http://www.pla.co.uk/environment/Air-Quality-and-Green-Tariff/Air-Quality>

The consultation runs from 5 December 2017 to 23 January 2018, we look forward to hearing from you.

AIR QUALITY STRATEGY AIM AND ACTION PLAN

STRATEGY AIM

The reduction in harmful emissions to air from marine sources within the tidal River Thames, whilst facilitating the Port and London's future growth.

ACTION PLAN

To deliver the strategy aims, we have developed 19 proposals, covering Standards; Operational Efficiency; Green Technology Development; Green Technology Implementation; Developing Supporting Infrastructure; and Monitoring.

STANDARDS

Proposal 1 – Appropriate standards for emissions

To *engage* in discussion and consider how to *encourage* the use of appropriate standards via incentives for vessel emissions to air with which to set improvements for inland vessels in the future.

Action: MCA & DfT, with PLA support

Discussions to start in 2018

OPERATIONAL EFFICIENCY

Proposal 2 – Review and improve the Green Tariff

Continue to review and improve the discounts and standards within the green tariff to *encourage* voluntary reduction of emissions beyond what is legally prescribed. Consider working with others on any scheme that could be applied for the inland vessels.

Action: PLA

Ongoing

Proposal 3 – Encourage freight service on the river

TfL, GLA and PLA to *engage* in order to ensure that Construction Logistics Guidance actively *encourages* the use and development of freight services on the river, reducing the need to move freight by road and contributing to TfL’s plans to reduce peak time freight movements on the road by 10%.

Action: TfL, GLA and PLA

2018

Proposal 4 – Publish best practice operator guidance for inland fleet operators

PLA to *engage* with operators to *encourage* best practice by developing operator guidance for inland fleet using lessons learnt from international shipping and existing practices.

Action: PLA, TfL and operators

2018

Proposal 5 – Guidance for developers

To develop guidance by *engaging* with the riparian boroughs and GLA, ECC & KCC for planners and developers to *encourage* the use of the river, while *enabling* best practice and improvements in air quality.

Action: TfL, PLA and riparian boroughs and County Councils

2018

GREEN TECHNOLOGY DEVELOPMENT

Proposal 6 – MBNA Thames Clippers & Wight Shipyard

In partnership to investigate further the potential of developing a diesel electric engine that would meet legal safety standards, to permit electric power up to 12 knots and diesel for the fast sections of the routes. *Engaging* with the relevant licencing authorities to create a vessel that could operate commercially in the future.

Action: MBNA Thames Clippers and Wight Shipyard Co

TBC

Proposal 7 – Identify and secure funding and support for R&D

To identify and facilitate the use of the available funds in order to *enable* the development of research and innovation in technology to further reduce emissions from vessels. (Also applies to installation of green technologies.)

Action: All Stakeholders

2018

Proposal 8 – Host an environmental technology EXPO

PLA to *engage* with partners in order to convene an exhibition with operators and manufacturers. The event will *enable* discussion and *encourage* practical ideas, relevant to for the inland fleet.

Action: PLA and partners

2019

GREEN TECHNOLOGY IMPLEMENTATION

Proposal 9 – PLA to learn from vessel technology

Using developments in vessel technology the PLA will work in partnership with other river operators on a project to analyse the costs and benefits of different technological solutions and their applicability to different vessels across the Thames. This could also include a trial on an appropriate vessel or consideration during vessel procurement. Other operators’ trials may also help inform choices made in the future, such as those listed in Proposals 10 & 11.

Action: PLA

TBC

Proposal 10 – Retro-fitting fleets

MBNA Thames Clippers is running a retro-fitting programme to add new powertrain mechanisms to three of their oldest vessels in order to reduce fuel consumption and emissions. Two vessels have been completed and this has resulted in a 50 per cent reduction in particulates, 40 per cent less Nitrogen Oxides (NO_x) and Hydrocarbon (HC) emissions, for every litre of fuel used.

Action: MBNA Thames Clippers

Ongoing

Proposal 11 – NO_x abatement project

MBNA Thames Clippers and TfL are currently collaborating on a DfT funded NO_x abatement project to review whether Thames Clippers high speed craft can be retro-fitted with a post combustion system.

Action: TfL and MBNA Thames Clippers

2017

Proposal 12 – PLA to encourage installation of green technology

Encourage the installation of green technology including shore power through the river works licensing regime.

Action: PLA

Ongoing

Proposal 13 – Shore-side power feasibility study for London site	
Undertake a detailed feasibility into the potential of installing shore-side power at a site in London. This should encompass the amount of electricity needed for the type of vessel, scope for the installation of the physical connection, and the capacity of the electricity supply grid to meet demand.	
Action: PLA with GLA support	2018 – 2019

DEVELOPING SUPPORTING INFRASTRUCTURE

Proposal 14 – Feasibility study for the use of LNG and CNG	
Carry out a feasibility study on the consequence of using Liquefied Natural Gas and Compressed Natural Gas (CNG) to improve air quality without compromising safety, increases in greenhouse gases and necessary requirements for infrastructure and investment.	
Action: PLA with UK LNG support	2018

MONITORING

Proposal 15 – Diffuse monitoring of river emissions	
Corporation of London and PLA to <i>engage</i> in order to undertake diffuse monitoring on transects from the river to nearest pathway or highway, to explore dispersion of emissions from different sources.	
Action: City of London and PLA	2019 – 2020

Proposal 16 – To carry out modelling of river emission dispersion	
Modelling of emission dispersion on the river is very complex; the PLA welcomes collaborative <i>engagement</i> with TfL to model how emissions would move on the river.	
Action: TfL and PLA	2018

Proposal 17 – Update Port Wide Inventory	
To update the Port Wide Inventory to take into account changes in emissions and trade on the river prior to the revision of the Air Quality Strategy for the Tidal Thames in 2021-2022.	
Action: PLA	2020

Proposal 18 – Exhaust monitoring	
To monitor the effectiveness in reduction of emissions of trials to help <i>encourage</i> the implementation of any suitable technology.	
Action: PLA	TBC

Proposal 19 – Ambient monitoring for marine emissions	
To install an ambient monitoring network along the river in appropriate positions to indicate changes in marine emissions.	
Action: PLA	2020

GATHERING FEEDBACK

The questions for gathering feedback are in outlined in the two sections below:

- Section 1 – General Questions (mandatory)
- Section 2 – Technical Questions (optional) covering contribution to air quality, the Strategy and implementing the Air Quality Strategy.

Section 1 is mandatory for providing feedback while Section 2 is optional.

HOW TO FEEDBACK TO US

You can:
email us: cn@pla.co.uk

Or write to us at:

Environment Department
Port of London Authority
London River House
Royal Pier Road
Gravesend
Kent
DA12 2BG

CONSULTATION PERIOD

The consultation period runs from 5 December 2017 to 23 January 2018. We will accept feedback received after the closing date, but cannot guarantee that it will be assessed in the preparation of the final Air Quality Strategy for the Thames.

SECTION 1 – GENERAL QUESTIONS (MANDATORY)

1. What is your name?

2. Who do you represent?

3. Where on the river is your interest?

4. In developing the work for the port it is important to recognise that waterborne transport makes significant contributions to London’s transport network by removing lorries for congested roads, similarly international shipping is also more efficient for the total cargo. So the aim has been set to recognise that the port can still change and grow.

STRATEGY AIM

The reduction in harmful emissions to air from marine sources within the tidal River Thames, whilst facilitating the Port and London’s future growth.

5. Do you agree with the Air Quality Strategy aim?

6. Do you support the PLA in the strategy? Would you like to be recognised as a supporter in the final publication? If yes please provide a logo.



SECTION 2 – TECHNICAL QUESTIONS (OPTIONAL)

CONTRIBUTION TO AIR QUALITY

7. Please identify the greatest challenge or concern with respect to the management of air quality in your area.

8. Does the draft Air Quality Strategy for the Port of London address all the key Air Quality plans relevant to your area of the Thames?

9. Are you currently developing any plans, policies or legal mechanisms in your area related to air quality and the management of emissions to the air?

10. Do you know of any plans or actions that would contribute to the improvement of the air quality from the Thames?



THE STRATEGY

11a. Should the Strategy have targets? Yes No Don't know

11b. What should the targets be? Scenario 1 2 3 . Or do you have another question?

	Scenario 1	Scenario 2	Scenario 3
Year	Collect evidence and wait for regulations	Based on analysis of action in the next five year on whole Thames from a 2016 baseline	Meet Mayors Strategy for the road (based on 2013 baseline only within London)
2021	NO _x 2019 Stage V		2020 PM _{2.5} 26% PM ₁₀ 40% NO _x 40%
2026	NO _x 2021 Tier III	20% reduction in PM & NO _x	2025 PM _{2.5} 34%; PM ₁₀ 53% NO _x 53%
2031		40% PM ₁₀ & NO _x 30% Carbon 30% PM _{2.5}	2030 PM _{2.5} 41% PM ₁₀ 61%; NO _x 61%
2051		50% NO _x PM ₁₀ 40% PM _{2.5}	2050 PM _{2.5} 61% PM ₁₀ 79 % NO _x 79% Zero Carbon
		Overarching – no increase in CO ₂ from strategy actions	

The baseline of 2016 has been chosen as it has the most robust date set for the inventory, for any other year, like 2013, there was a need to make assumptions and as such we would recommend any targets are based on 2016. Scenario 3 is unlikely to be possible if based over 2016 baseline, so would need adjustment.

IMPLEMENTING THE AIR QUALITY STRATEGY

The Strategy is the first of its kind, and scale for a UK port. The strategy may be driven by the PLA, but it cannot be delivered by the PLA alone, during the development of the strategy we have consulted a number of stakeholders, port and vessel operators and regulators or authorities. Achieving the goals will only be possible through working together and we would like to recognise that in the final document, which is expected to apply for five years.

12. Do you have a funding stream that could be used to drive the development of technology on the river?

13. Do you have a concept that could help reduce emissions from vessels on the river that you would like included in the Strategy?

14. Would you consider applying for funds to encourage the development and use of green technology as applied to river uses?

15. Would you be able and willing to contribute technically or financially to any future air quality monitoring for the river?

16. Would you like to deliver any other actions?

17. Would you like the PLA to keep you up to date with the strategy progress? Please leave an email address.

ABOUT THE PORT OF LONDON AUTHORITY

- At the Port of London Authority we work to ensure navigational safety along the tidal Thames, sharing our marine, environmental, planning and other expertise to promote use of the river and safeguard its unique marine environment.
- As Custodians of the tidal Thames our strategic goals are to Protect, Improve and Promote. Under Protect our aim is to create: more sustainable port and river operations and improving habitats.
- As the harbour and pilotage authority for the tidal Thames we operate two port control centres, run river patrols 24 hours a day, keeping people safe and have a team of pilots who guide ships into and out of the port.

ABOUT THE TIDAL THAMES

- 95 miles of river and estuary, from Teddington Lock to the North Sea.
- The UK's second biggest port, handling over 50 million tonnes of cargo each year.
- More than 46,000 people's jobs are linked to port operations, which contribute more than £4 billion to the economy annually.
- Britain's busiest inland waterway, carrying three million tonnes of goods and materials, keeping more than 150,000 lorry trips off roads.
- A growing commuter and tourist route used by over 10 million people a year.
- Home to almost 100 sporting events every year, including the annual University Boat Race.



CUSTODIANS OF THE TIDAL THAMES

PROTECT | IMPROVE | PROMOTE

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[@LondonPortAuth](https://twitter.com/LondonPortAuth)
www.youtube.com/portoflondon
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