

THE NET ZERO PLAN

EXECUTIVE SUMMARY

OUR COMMITMENTS

This document sets out the Port of London Authority's strategy for delivering climate action across our operations and value chain.

Since 2014, the PLA has been actively engaged in reducing emissions. This has resulted in an 83% decrease in our Scope 1&2 carbon emissions by 2023. The Net Zero PLA plan sets out to build upon this early success, increase the pace of our decarbonisation journey, and demonstrate leadership within our sector.



OPERATIONAL EMISSIONS (SCOPE 1&2) ARE COUNTERBALANCED BY CARBON REMOVALS IN OUR ESTATE BY 2027



NET ZERO IN OUR FULL VALUE CHAIN (SCOPE 1,2&3) BY 2040.

OUR APPROACH



Reduce emissions first, and use offsetting as a last resort, in line with the Science Based Targets Initiative principles.



Set targets in line with the approach of the SBTi, and that are 1.5 degrees Paris-aligned – and support with concrete actions.



Maximise the value of our physical assets for sustainability, including consideration of how we support the wider transition of the Thames and the UK

OUR KEY ACTIONS



Continue to reduce our fuel associated emissions through transitioning to alternative fuels and green technology.



Reduce emissions in our supply chain through working closely with suppliers on reducing their own emissions.





Improve our data quality and accuracy to ensure we are targeting the most impactful actions and meeting our overall objectives.



ROADMAP TO NET ZERO (5-YEAR ACTIONS)




OPERATIONAL EMISSIONS (SCOPE 1&2) ARE COUNTERBALANCED BY CARBON REMOVALS

**93% REDUCTION SCOPE 1&2
25% REDUCTION SCOPE 3**

OPERATIONAL EMISSIONS (SCOPE 1&2)

100% transition to HVO in diesel vessel fleet 
Production of electrification strategy for petrol vessel fleet 

100% renewable energy purchased for all sites 
Study on carbon removals in our estate 

80% vehicle fleet transition to electric / hybrid 
Building efficiencies programme roll out complete 
Trial of electric vessel 

2025

2026



2027

2028




2029

2030

VALUE CHAIN EMISSIONS (SCOPE 3)

Tenant emissions mapped and strategy produced 
Supplier engagement strategy produced 

Top 15 suppliers engaged 
Business travel policies updated 
Minimum weighting for sustainability within contract award process 

Top 50 suppliers engaged and at least 50% setting science-aligned targets 
Whole life carbon assessments on major projects 
Top 10 tenants engaged and at least 50% setting science-aligned targets 

INTRODUCTION

As custodian of the tidal Thames, The Port of London Authority (PLA) remains committed to a healthy future for the river and its port activities.

To support this aim, we are committed to achieving net zero emissions in our operations, and across our value chain by 2040. The PLA has been on an ambitious decarbonisation journey for the last ten years. This plan aims to build on these previous successes, as well as set a new trajectory to meet our goals.

We first calculated the carbon footprint of our emissions in 2014, when carbon reporting was in its infancy. This allowed us to set out on an ambitious journey to significantly reduce our carbon emissions, focusing on Scope 1&2.

We did this in a variety of ways. We invested in producing solar energy on our operation sites. From January to June 2024, we generated 114MWh through solar photovoltaics – enough to power approximately 10% of our buildings' electricity requirements.

We also took concrete steps to reduce emissions in our Scope 1 – focusing on transitioning our vessel fleet from diesel to sustainably sourced HVO (Hydrotreated Vegetable Oil). By 2023 these actions resulted in an 83% decrease in the PLA's Scope 1&2 emissions from 2014.

After ten years of successful carbon reductions, it was time to take stock of our progress and chart a new journey to reach our goals. We **only have 15 years left** to reach net zero, we know we need to renew and refocus our efforts.

Over the next five years, we will continue to reduce our fuel associated emissions, maximise our landholdings' carbon removal potential, and get even better at managing our data. We will also engage with our suppliers and tenants to ensure that they are working with us to reduce Scope 3 emissions.

We believe that it's crucial that we do this, as ports underpin the global economy and play an essential role in our everyday lives. More than 80% of global merchandise trade is transported via sea. The Port of London Authority is in a unique position, given our previous successes, to lead the way on decarbonisation for our sector.

HOW WE DEFINE 'NET ZERO'

Net-zero emissions are achieved when anthropogenic emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals over a specified period. Where multiple greenhouse gas emissions are involved, the quantification of net zero emissions depends on the climate metric chosen to compare emissions of different gases (such as global warming potential, global temperature change potential, and others, as well as the chosen time horizon).

HOW WE DEFINE 'SCOPES 1,2,3'

Scope 1 covers all direct emissions, mainly from burning fuel but also other industrial processes.

Scope 2 covers indirect emissions from the use of purchased electricity. This is reported in two ways:

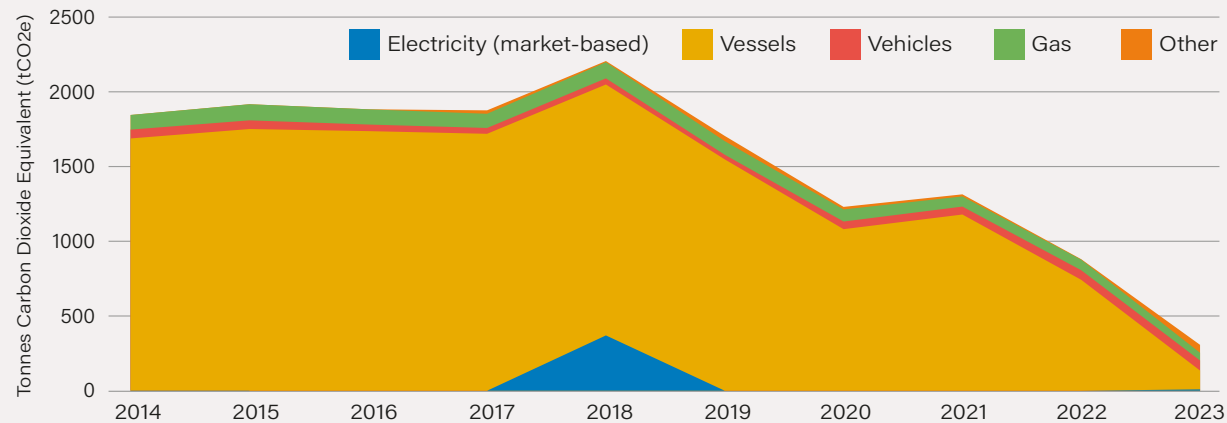
- Location-based refers to the actual emissions of electricity production on the grid.
- Market-based accounts for any contractual entitlements to report lower emissions, such as renewable energy certificates.

Scope 3 contains all other indirect emissions, split into several categories across the value chain.

OUR STORY SO FAR (2014-2023)

In 2014, the PLA implemented its first emissions reduction plan, focusing on the most material Scope 1&2 emissions for our operations. This has resulted in an 83% decrease in the PLA's Scope 1&2 emissions in these key emission categories as shown in the graph below. These reductions have been driven by the transition of our vessel fleet to sustainable HVO, implementing energy efficiency measures, purchasing renewable electricity and investing in renewable energy production on our sites. However, we also know that this picture of our emissions was incomplete, based on the best available information at the time of developing our plan. In 2023, we went through a full audit of our carbon footprint to bring it up to date and ensure we are capturing all our emissions going forward.

PLA SCOPE 1+2 GREENHOUSE GAS EMISSIONS (MARKET-BASED)



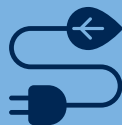
KEY ACTIONS TAKEN SINCE 2014



SWITCHING ALL PLA DIESEL VESSELS FROM FOSSIL-DERIVED FUEL TO BIOFUEL (SUSTAINABLY SOURCED)



EXPANDING THE PRODUCTION OF RENEWABLE ENERGY COUPLED WITH PURCHASING 100% RENEWABLE ENERGY FOR OUR BUILDINGS



IMPLEMENTING ENERGY EFFICIENCY MEASURES ACROSS OUR BUILDINGS INCLUDING SWITCHING TO LEDS AT OUR OPERATIONAL SITES



BEGINNING TO REPLACE OUR VEHICLE FLEET WITH ELECTRIC AND HYBRID ALTERNATIVES

MEASURING EMISSIONS

Our carbon footprint is reported in tonnes of carbon dioxide equivalent (tCO₂e). This is the amount of equivalent carbon emissions generated by the main greenhouse gases (carbon dioxide, methane, nitrous oxide etc.) each of which has a 'Global Warming Potential' factor that is included in the overall conversion factor.

Emissions are calculated by multiplying conversion factors by activity data, such as fuel or energy consumption, resource use or mileage.

Emissions (tCO₂e) = activity data × emission factor

The PLA uses the calendar year (1st January to 31st December) as the reporting period for our GHG inventory.

HOW WE SOURCE OUR HVO

We are committed to purchasing sustainable HVO from reputable suppliers. All HVO supplied to PLA is ISCC verified waste derived product, free from palm oil. The Proof of Sustainability confirms the origin of raw materials, certifying that none of their products contribute to global deforestation.

OUR APPROACH (2023-ONWARDS)

In 2023, we went through a full review of our methodology to bring us in line with Science Based Target initiative (SBTi) best practice guidance. This was prompted by a number of key changes to our operations including the purchase of a company by the PLA Group, the need to include full Scope 3 emissions, and an aging baseline for our carbon reporting. The key findings from this review were used to strengthen our reporting and create the actions within this action plan. They included the key changes highlighted below:

- Updated our baseline year from 2014 to 2023 in line with best practice.
- Updated our Scope 1&2 emissions to include F-gases and all remote site energy use.
- Updated our Scope 3 emissions to include purchased goods and services, capital projects, employee commuting, business travel via public transport and leased assets. Emissions from our industrial tenanted properties will be included in our 2026 update.

- Included both a market-based and location-based calculation for our Scope 2 emissions which captures our choices to purchase renewable energy, as well as the energy mix of our local supply.
- Included our fully owned subsidiary, Estuary Services Limited, as part of our Group level emissions data. ESL was purchased in 2021 and we began reporting on emissions from 2022.

This has resulted in a material change to our carbon emissions. Our new baseline which includes all emission Scopes across our full group is 9687 tCO₂e – an 800% increase compared to what we reported in 2022 (primarily driven by Scope 3 emissions). This increase represents a truer calculation of our total emissions impact through our full value chain.

SCOPE 1&2 EMISSIONS DEFINITIONS

- **Gas** – this covers the gas from the grid used for space and water heating.
- **Liquid Fuels** – this covers the fuel used in vessels, vehicles, plant, and generators that we own and operate.
- **Refrigerants** – this covers the fugitive emissions of refrigerant gases from installation and operation of our air conditioning systems.

SCOPE 3 EMISSIONS DEFINITIONS

- **Purchased Goods and Services** – this covers the production of goods and services we purchase that are not accounted for in other specific categories.
- **Capital Goods** – this covers the production of capital goods we purchase in a year.
- **Fuel and Energy Indirect** – this covers the production of fuels and energy we purchase (known as Well-to-Tank), as well as inefficiencies in energy distribution via the National Grid.
- **Upstream and Downstream Transportation and Distribution** – this covers transportation of products we purchase between our Tier 1 suppliers to our own sites by third parties.
- **Waste** – this covers the transportation, disposal, and treatment of the waste we generate from our operations by our licensed waste contractors.
- **Business Travel** – this covers transportation of staff for business-related activities in vehicles not owned or operated by the PLA.
- **Employee Commuting and Homeworking** – this covers transportation of staff between their homes and their worksites in vehicles not owned or operated by the PLA. It also optionally includes the energy use of working from home.
- **Upstream Leased Assets** – this covers the operation of assets leased to the PLA, which are not included in scope 1 and scope 2.
- **Downstream Leased Assets** – this covers the operation of assets leased out by the PLA, which are not included in scope 1 and scope 2.

OUR NEW BASELINE

We have updated our baseline and have readjusted our targets to be more ambitious. This recognises the substantial progress we have already made but also the urgency we feel to act as quickly as possible. The most material of change in our baseline Scope 1&2 is vessel emissions from our subsidiary company, and in Scope 3 is emissions from purchased goods and services.



SCOPE 1&2 EMISSIONS (BASELINE YEAR 2023, tCO₂e)

| | |
|--------------|-------|
| Electricity | 32 |
| Refrigerants | 45 |
| Liquid Fuels | 2,388 |
| Gas | 69 |

SCOPE 3 EMISSIONS (BASELINE YEAR 2023, tCO₂e)

| | |
|----------------------------|-------|
| Downstream Leased Assets | 36 |
| Upstream Leased Assets | 27 |
| Commuting & Homeworking | 959 |
| Business Travel | 692 |
| Waste | 3 |
| Upstream T&D | 138 |
| Fuel and Energy Indirect | 798 |
| Capital goods | 466 |
| Purchased goods & services | 4,034 |

2,534 tCO₂e

TOTAL SCOPE 1&2

7,153 tCO₂e

TOTAL SCOPE 3

OUR TARGETS

Along with updating our approach, we have updated our targets in line with SBTi guidance. Despite measuring more of our emissions, we are still on target to reach net zero by 2040. We have identified two milestone commitments, mapped our science-based trajectory, and set our interim targets to keep us on track.

Our interim trajectory and interim targets are designed to push as fast as we can on Scope 1&2 emissions as early as possible. Our reduction actions for Scope 1&2 will leave us with a small but difficult to abate remainder (7%) of emissions by 2030. These emissions are from sources that have no clear technological solutions in the near term. However, we will continue to invest in trialling technology to reduce these emissions. We will also counterbalance these emissions through the management of our land holdings to promote carbon removal. While this cannot offset our operational emissions, we will achieve carbon neutrality of our Scope 1&2 emissions in 2027 – which is a major milestone on our path to true net zero.

Scope 3 emissions are more difficult to reduce as we have less direct ability to act. We have set our trajectory in line with the science-based target initiative approach to achieving 1.5 degrees. As our major source of Scope 3 emissions is purchased goods and services, we will focus early on engaging with our suppliers on their own decarbonisation journeys.

OUR COMMITMENTS

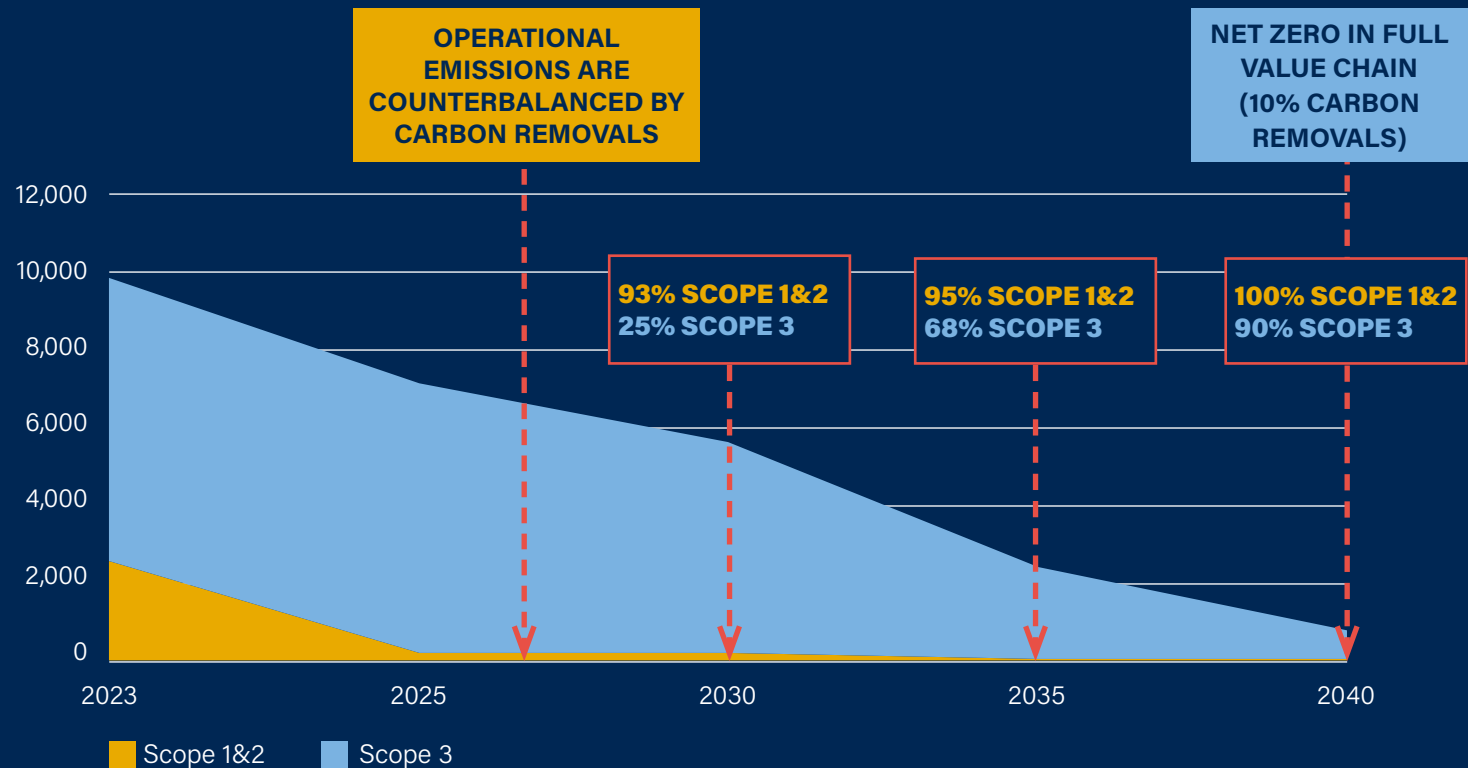


OPERATIONAL EMISSIONS (SCOPE 1&2) ARE COUNTERBALANCED BY CARBON REMOVALS IN OUR ESTATE BY 2027



NET ZERO IN OUR FULL VALUE CHAIN (SCOPE 1,2&3) BY 2040.

OUR TRAJECTORY & INTERIM TARGETS



ACTIONS TO NET ZERO

OPERATIONAL CARBON (SCOPE 1&2)

REDUCTIONS FROM PLANNED ACTIONS

| | |
|-----------------------------|-----|
| Vessel efficiencies | <1% |
| Building efficiencies | 1% |
| EV fleet transition | 2% |
| 100% renewable electricity | <1% |
| Vessel green fuels and tech | 89% |

Most of our emissions in Scope 1&2 are from fuel used in our vessel fleet. After a successful transition to HVO in the PLA's fleet, we have drastically reduced emissions from this source (by 83% compared to 2014). To meet our targets, we will continue the transition to HVO for the remainder of our group fleet, continue our vessel efficiencies programme, complete the roll out of the building efficiencies programme, continue our EV fleet transition, and procure 100% renewable energy for the rest of our estate.

CASE STUDY - PORT CONTROL CENTRE RETROFIT

In 2023 we started a project to upgrade our Port Control Centre. Starting from first principles we used sustainability as part of our design criteria – opting for a retrofit rather than rebuild to reduce emissions. The project will reduce our energy consumption for this building by 80% through integrating a wide variety of sustainability practices such as:

- Improved insulation with a high-performance insulated cladding,
- New windows with optimized glazing to limit unwanted excess summer solar gain but maintain a level of useful winter solar gain,
- High-efficiency LED lights with efficient lighting controls,
- Provision of efficient air source heat pumps for heating and cooling,
- Heat recovery on mechanical ventilation and air handling plant,
- Photovoltaic panels

KEY ACTIONS TO MEET TARGET

VESSEL GREEN FUELS AND TECH:



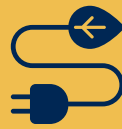
We will transition our new fleet of vessels from our subsidiary ESL to HVO. This will complete our full vessel transition plan and reduce our Scope 1&2 emissions by 89%. We will also produce a strategy on adopting electric battery technology in our fleet, to sit alongside a review of our fleet replacement strategy.



EV FLEET TRANSITION:

We will continue to implement our EV fleet transition for our land-based operations. We commit to 80% of vehicles being fully electric & hybrid by 2030.

100% RENEWABLE ELECTRICITY:



We will move ESL onto a 100% renewable electricity tariff. This will mean that all our electricity is 100% renewable and certified by REGOs. We will also continue to invest in solar power at our operational sites.

BUILDING EFFICIENCY PROGRAMME:



We will continue to deliver building efficiency measures across our estate including rolling out installation of LEDs, air source heat pumps, heat recovery, improved insulation and window replacements.

VESSEL EFFICIENCY PROGRAMME:



Alongside using greener fuels, we also need to optimise and reduce fuel consumption on our vessels. We will continue to roll out our Reygar system which tracks fuel efficiency on our vessels to target areas of under- performance.

CALCULATING CARBON REMOVALS:



We own a substantial estate of agricultural, green space, intertidal and subtidal land. We will commission research to understand our carbon removals and improve our land management practices.

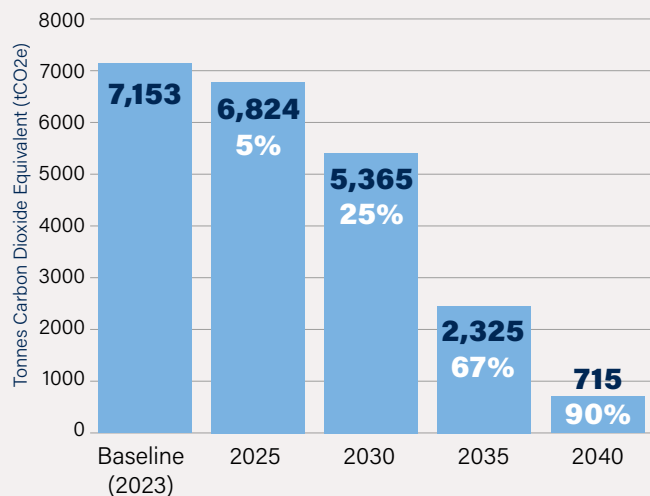
ACTIONS TO NET ZERO VALUE CHAIN CARBON (SCOPE 3)

We are committed to reducing our Scope 3 emissions by 25% by 2030 (in line with a 1.5 trajectory). Our largest source of Scope 3 emissions is in our supply chain. Meeting our near-term target will require us to work with our supply chain on emissions reductions.

We have started trialling whole life carbon (WLC) assessments in our capital projects. For example, our Marine Centre Transformation Programme WLC assessment resulted in a refurbishment of the building instead of full rebuild.

We also recognise that we are not reporting the emissions from our downstream leased assets to a high enough level of accuracy. We will focus on engaging with tenants to understand and reduce their emissions.

TARGET 5-YEARLY REDUCTIONS IN VALUE CHAIN EMISSIONS



KEY ACTIONS TO MEET TARGET



SUPPLIER ENGAGEMENT PROGRAMME:

We aim to significantly reduce the largest source of Scope 3 emissions through a multifaceted programme focused on supplier engagement and sustainable procurement practices. This will be done through annual engagement with top key suppliers on Net Zero targets and product level emissions, experimental zero carbon supply chain contracts, and collaboration with eco-friendly courier services and exploring innovative last-mile delivery options.



RENEWABLE ENERGY FOR HOMEWORKING:

We will promote the uptake of renewable energy tariffs to reduce emissions from homeworking.



TRIAL WHOLE LIFE CARBON ASSESSMENTS IN CAPITAL PROJECTS:

We will collaborate with our suppliers on key projects to produce whole life carbon assessments.



ELECTRIFICATION OF THIRD-PARTY TRANSPORTATION:

We will engage with the contracted pilot taxi companies to collaborate and investigate opportunities for emission reduction.



TENANT ENGAGEMENT PROGRAMME:

We will map our tenant energy use more accurately and engage with our tenants to identify opportunities for emission reduction. Where possible, we will investigate using our assets to develop renewable energy for use by our tenants.



SUSTAINABLE TRAVEL POLICIES AND PRACTICES:

We will promote sustainable travel choices and embed carbon calculations into systems that will empower employees to make direct reductions from their actions.

SUPPLIER ENGAGEMENT TARGETS

62% of our Scope 3 emissions come from our purchased goods and services, and capital projects. As a result, alongside absolute carbon reductions, we have also developed supplier engagement targets. This demonstrates our commitment to work with our supply chain to reduce emissions.

By 2030 we will engage with 50 Tier 1 suppliers representing 80% of our supply chain emissions.

IMPROVING DATA

We know that our performance is only as good as the data that underpins it.

That is why we are committed to improving our emissions data across all our scopes. As part of our review, we assessed all our data sources against criteria of accuracy and quality. For example, all our data sources for our Scope 1&2 emissions have been rated as high or medium accuracy and quality – giving us a high level of confidence in our Scope 1&2 footprint.

We have a lower level of confidence over our Scope 3 data. This is consistent with the wider industry trends as Scope 3 is third party data or estimates based on proxies. Our key areas of focus for data improvements are:

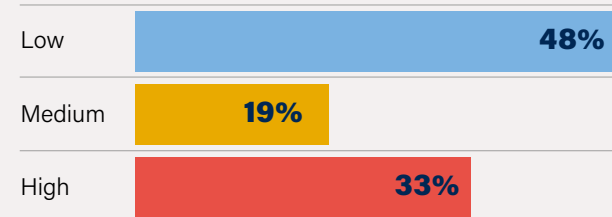
100% DATA TO BE OF A HIGH OR MEDIUM QUALITY BY 2027

100% SUPPLIERS TO BE SCREENED ON CARBON DISCLOSURES, OR ESTIMATED USING INDUSTRY-LEVEL AVERAGES BY 2027

100% OF TENANT EMISSIONS REPORTED BY 2026



% EMISSIONS DATA BY ACCURACY/ QUALITY SCORE



WALSINGHAM HOUSE

35 Seething Lane
London, EC3N 4AH

LONDON RIVER HOUSE

Royal Pier Road
Gravesend, Kent, DA12 2BG

T: +44 (01474) 562200

F: +44 (01474) 562281

info@pla.co.uk

www.pla.co.uk

 @LondonPortAuth

 @Port of London Authority