

MARITIME EMISSIONS PLATFORM

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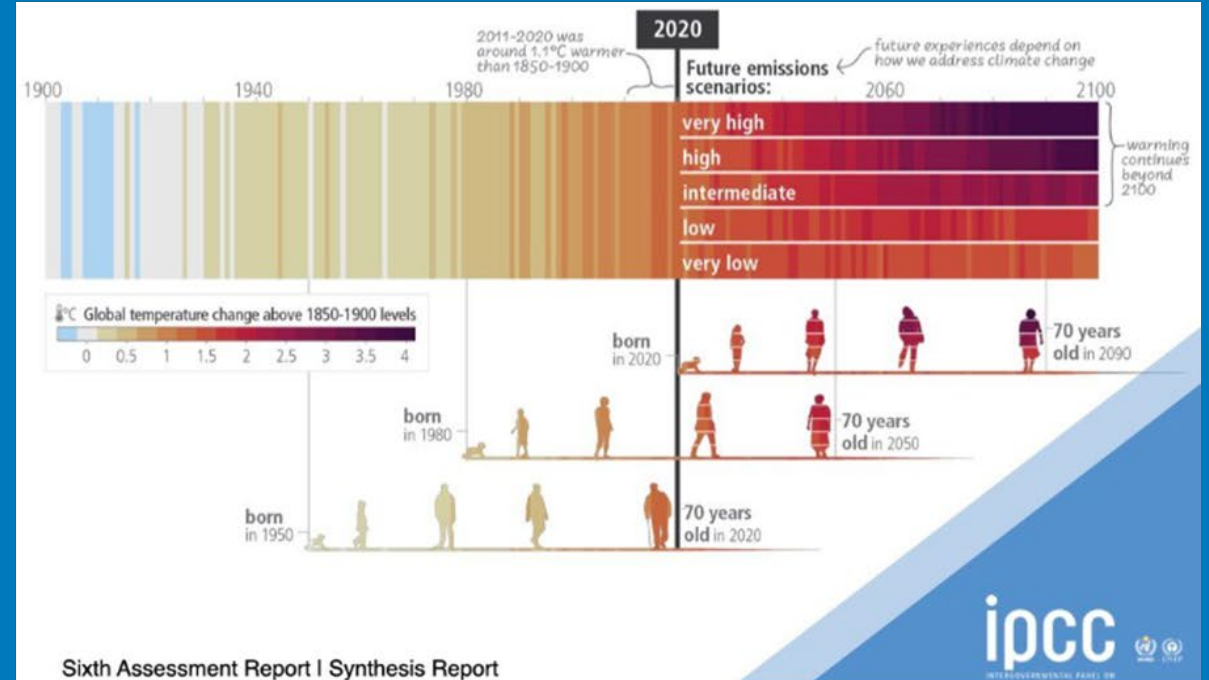
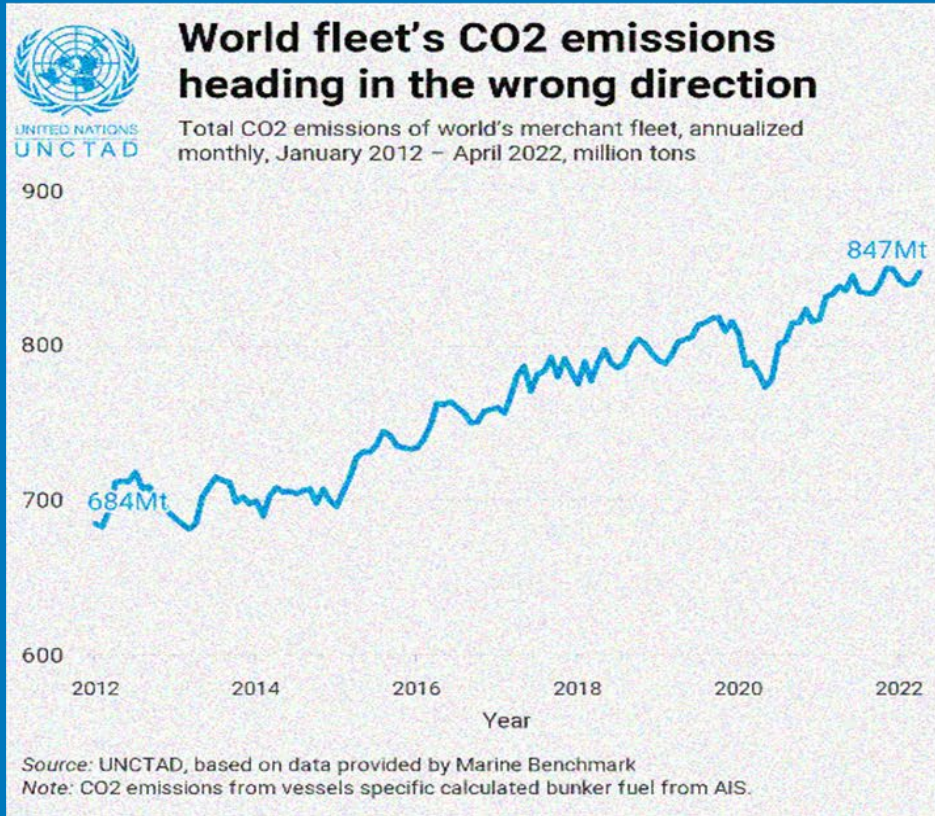
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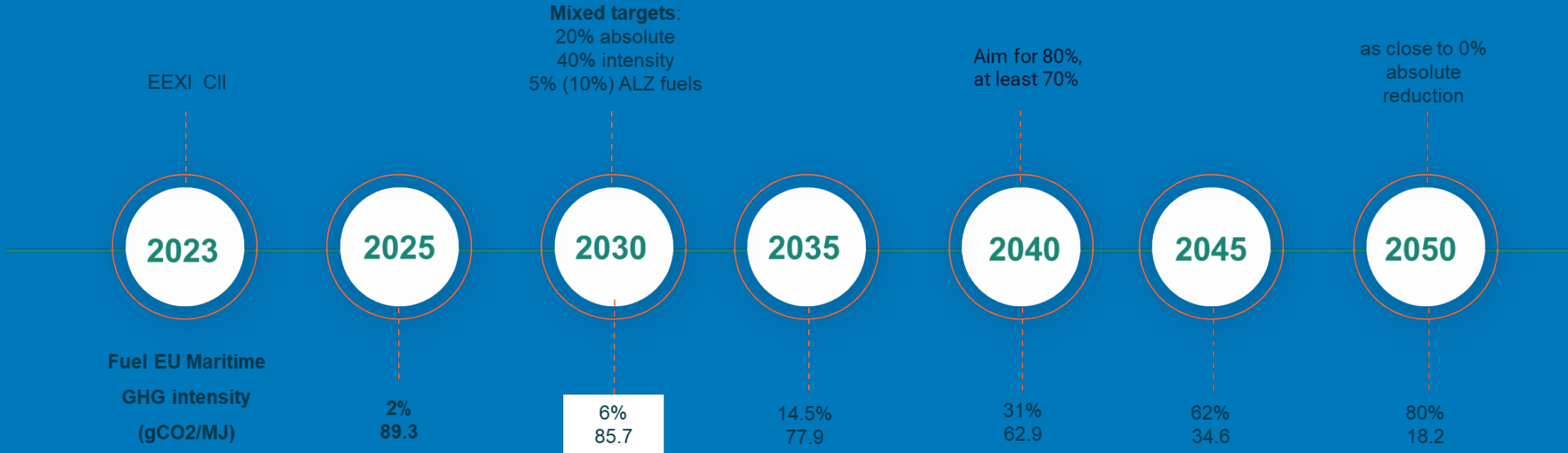
P O R T O F
L O N D O N
A U T H O R I T Y

THE CLIMATE CHANGE CHALLENGE



MIXED TARGETS

IMO



EU



DRIVERS FOR PORTS



- Desire for more transparency in port operations
- Increased attention on Net Zero 2050 and short-medium-long term goals
- Limited access to accurate ship specific GHG and air pollution data
- Opportunities to decarbonise and improve air quality through better monitoring and management
- Clydebank Declaration & Green Corridors
- Availability of Scalable Zero Emission Fuels (SZEF)

PORT AND TERMINALS CONTEXT

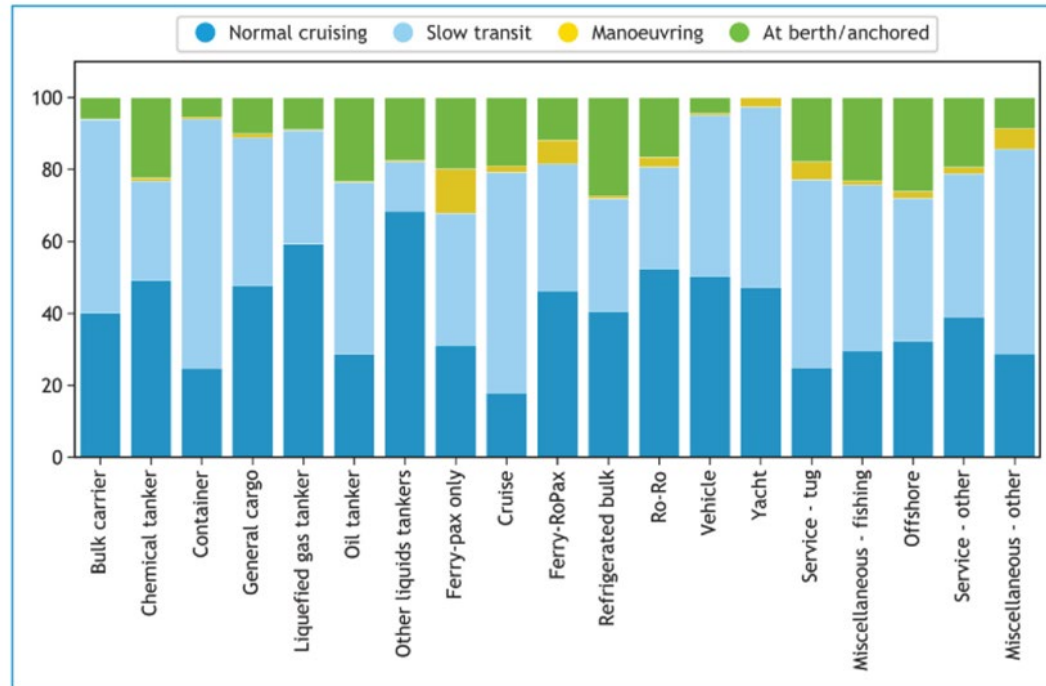


Figure 6 – Proportion of international GHG emissions (in CO₂e) by operational phase in 2018, according to the voyage-based allocation of emissions. Operational phases are assigned based on the vessel's speed over ground, distance from coast/port and main engine load (see Table 16)



Regulatory environment



Trusted data and transparency

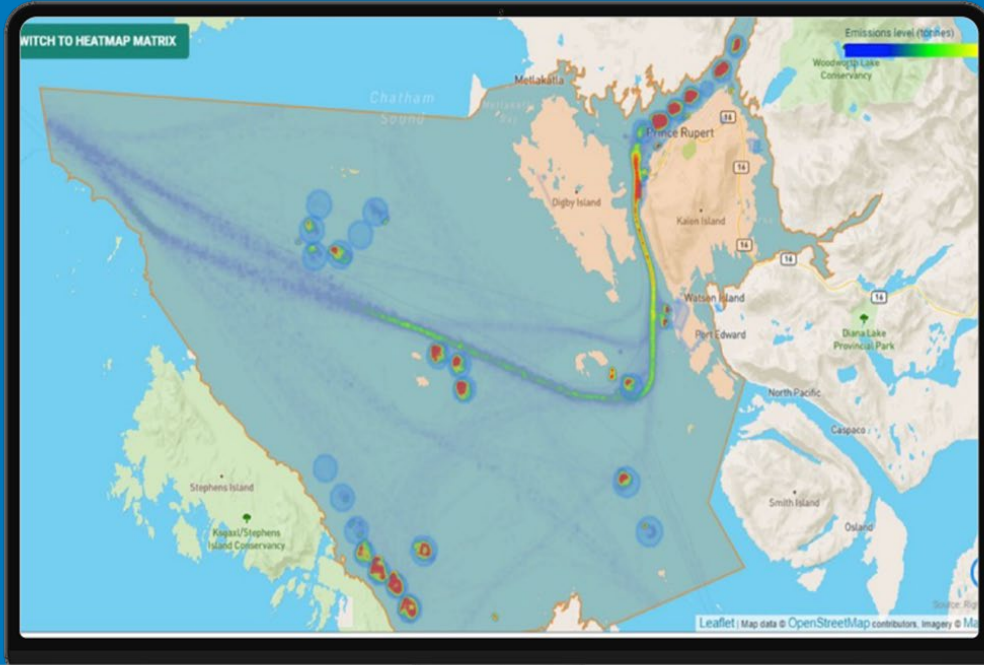


Stakeholder pressure



Green corridor & Net-zero

THE MARITIME EMISSIONS PORTAL



- Monitor and measure
- Benchmark and target
- Visual Insights
- Data dashboard

- As Defined by Climate Change Info Kit (UNEP UNFCCC)

A modern digital emissions tool

Energy based modelling approach

1,000's of data points

Independent 3rd party review

- Port Geo-fence
- Port Location
- AIS Data
- 200,000 vessels

- Annual review
- Data source / assumptions
- Input consistency
- Analytical methods

HOW IT WORKS

1

Draw a boundary around areas of vessel activity within a port, terminal or berth.

2

We track the vessels which are entering into these port boundaries using AIS data.

3

Using our unique database of vessel details, we generate a detailed emissions inventory across eight main pollutants.

4

Customers use the MEP dashboards to analyse reporting data by vessel type, operation mode, terminals in the ports or by emission type.



#1

PORT IN THE UK
BY TONNAGE

54.9_m

TONNES OF GOODS
HANDLED

8.3_m

PASSENGER
JOURNEYS

569

SPORTING
EVENTS



London
Office



Port of
Tilbury

Gravesend
Office

London
Gateway

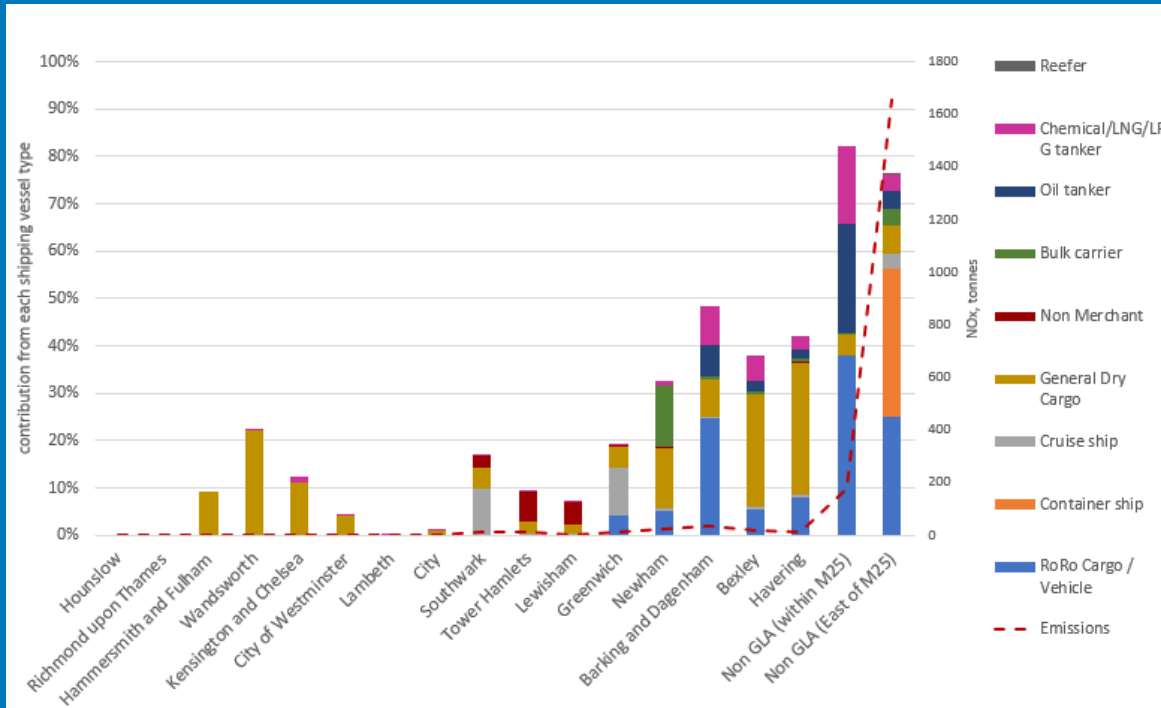


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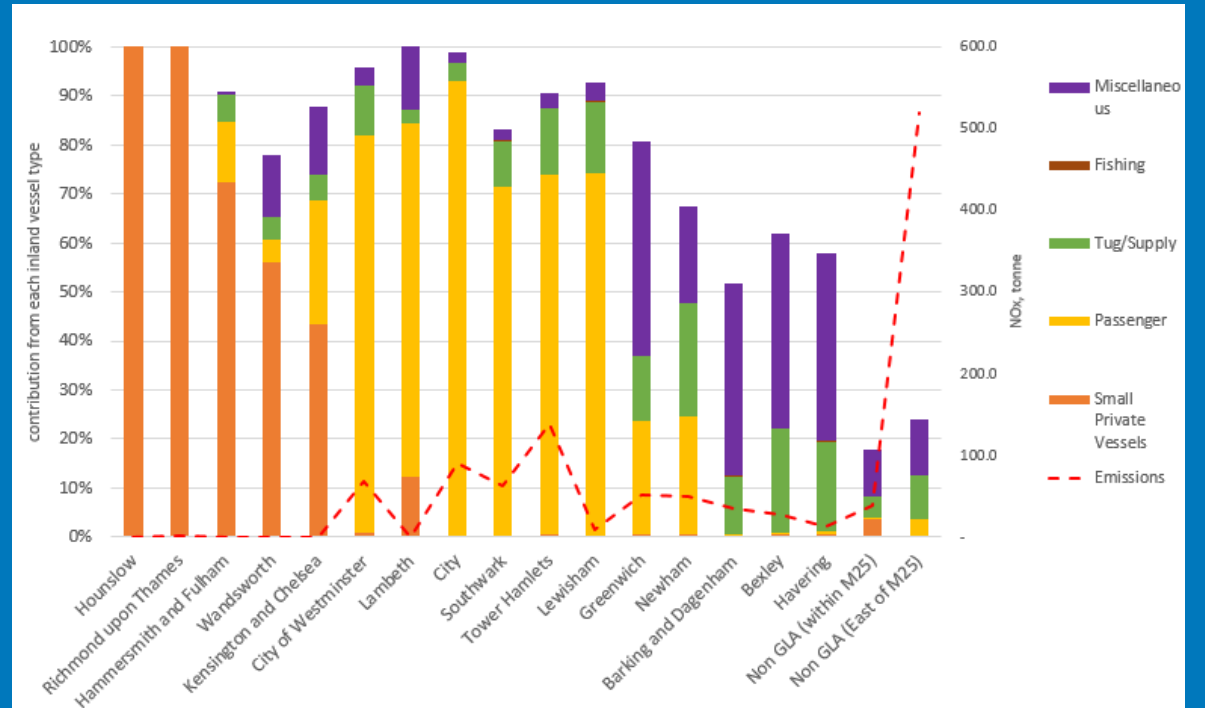
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EMISSIONS INVENTORY FINDINGS 2016

Ocean-going vessels



Inland vessels

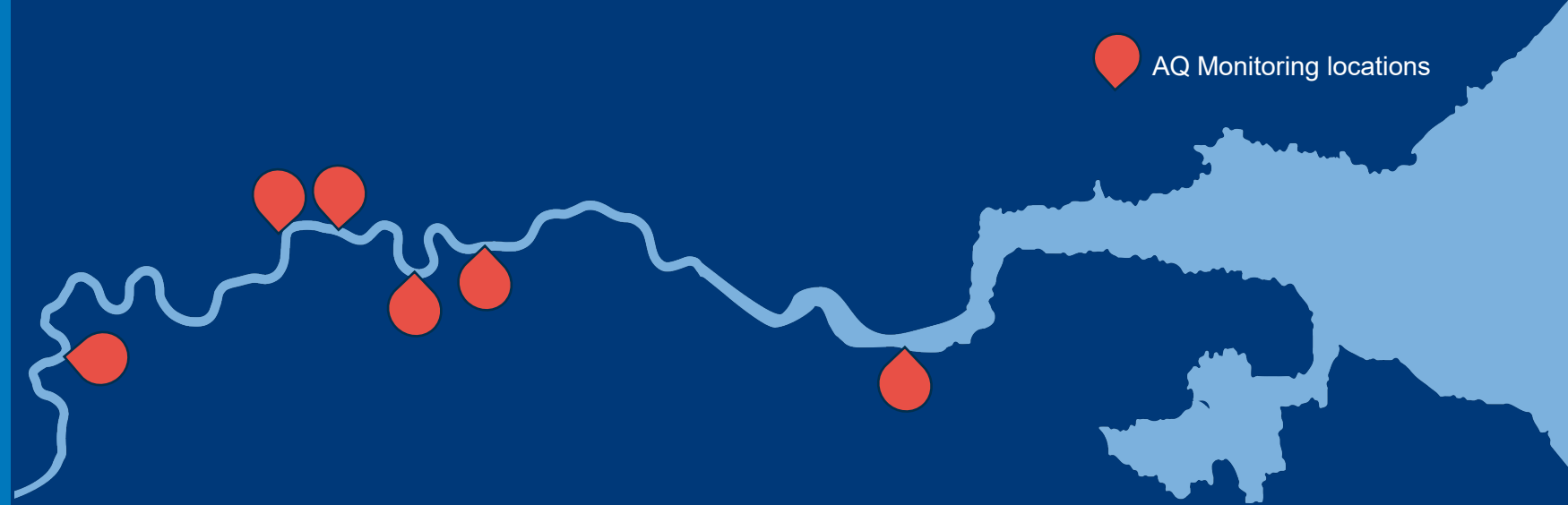


AIR QUALITY STRATEGY

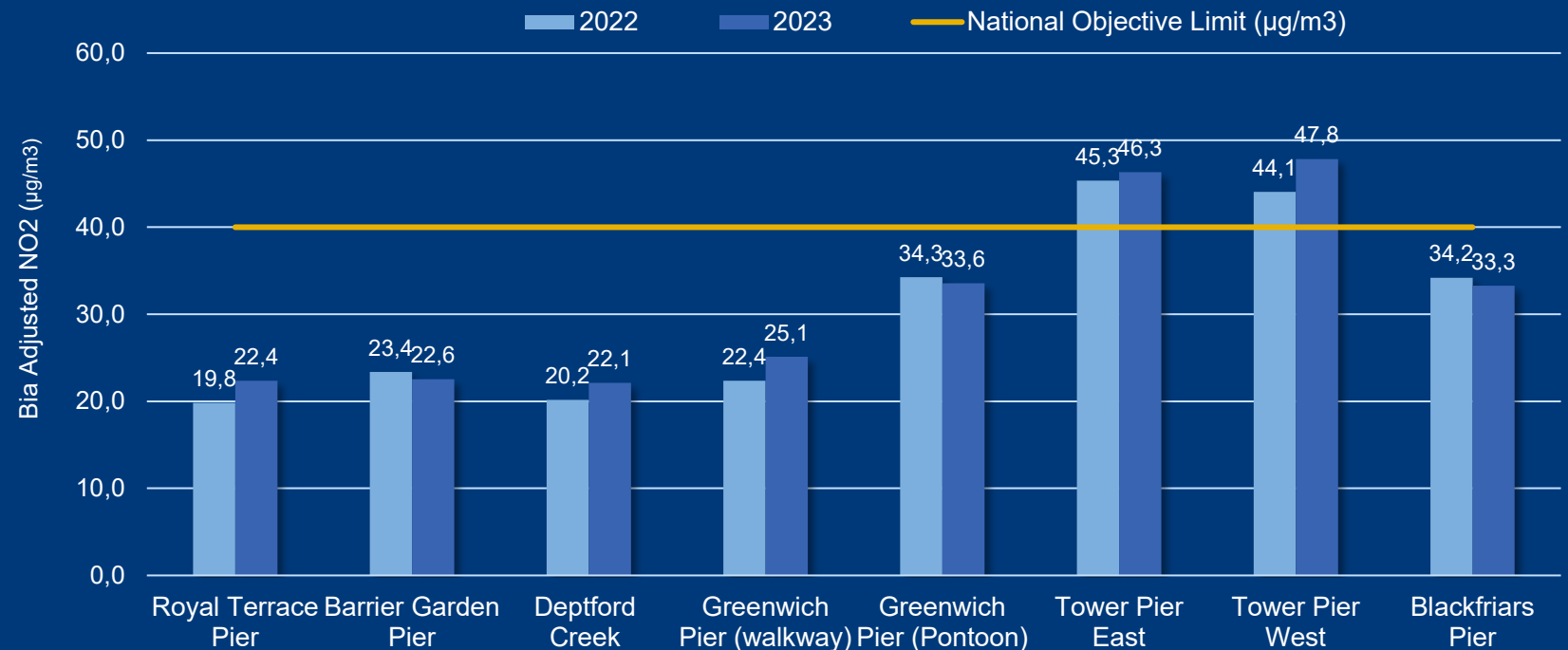
Air quality monitoring using diffusion tubes and real-time monitors have been in place for long-term monitoring since 2022.

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Bias Adjusted NO₂ Annual Mean Concentrations ($\mu\text{g}/\text{m}^3$) for 2022 and 2023



MEP DASHBOARD

The tabs display different data insights filterable by emission type, POI, vessel type, and operation mode.

Operation modes include:

- Alongside
- Transit
- Manoeuvre
- Anchor

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Year

FY 2023

Month(s)

Jan 2023 - Dec 2023

HOME

DASHBOARD

INSIGHTS

VESSELS

YOY COMPARISON

EMISSION TARGETS

SCENARIO PLANNING

GENERATE REPORT

Dashboard Controls

Emission Type All	Point of Interest All	Vessel Type Bulk Carrier, Che...	Operation Mode All
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APPLY FILTERS

RESET TO DEFAULT

Vessel Statistics

VIEW VESSELS →



Vessel Calls

4,308/9,298



Distinct Vessel Count

1,161/2,027



Source: RightShip

Total GHG Emissions

362,869 tCO₂e_100yr

Scope 3
362,869 tCO₂e_100yr



Carbon Dioxide →
353,374 tonnes



Nitrous Oxide →
20 tonnes



Methane →
152 tonnes

Total Criteria Pollutants

6,576 tonnes

Scope 3
6,576 tonnes



Sulfur Oxides →
214 tonnes



Particulate Matter < 2.5 µm →
91 tonnes



Volatile Organic Compounds →
331 tonnes



Nitrogen Oxides →
5,841 tonnes



Particulate Matter < 10.0 µm →
99 tonnes

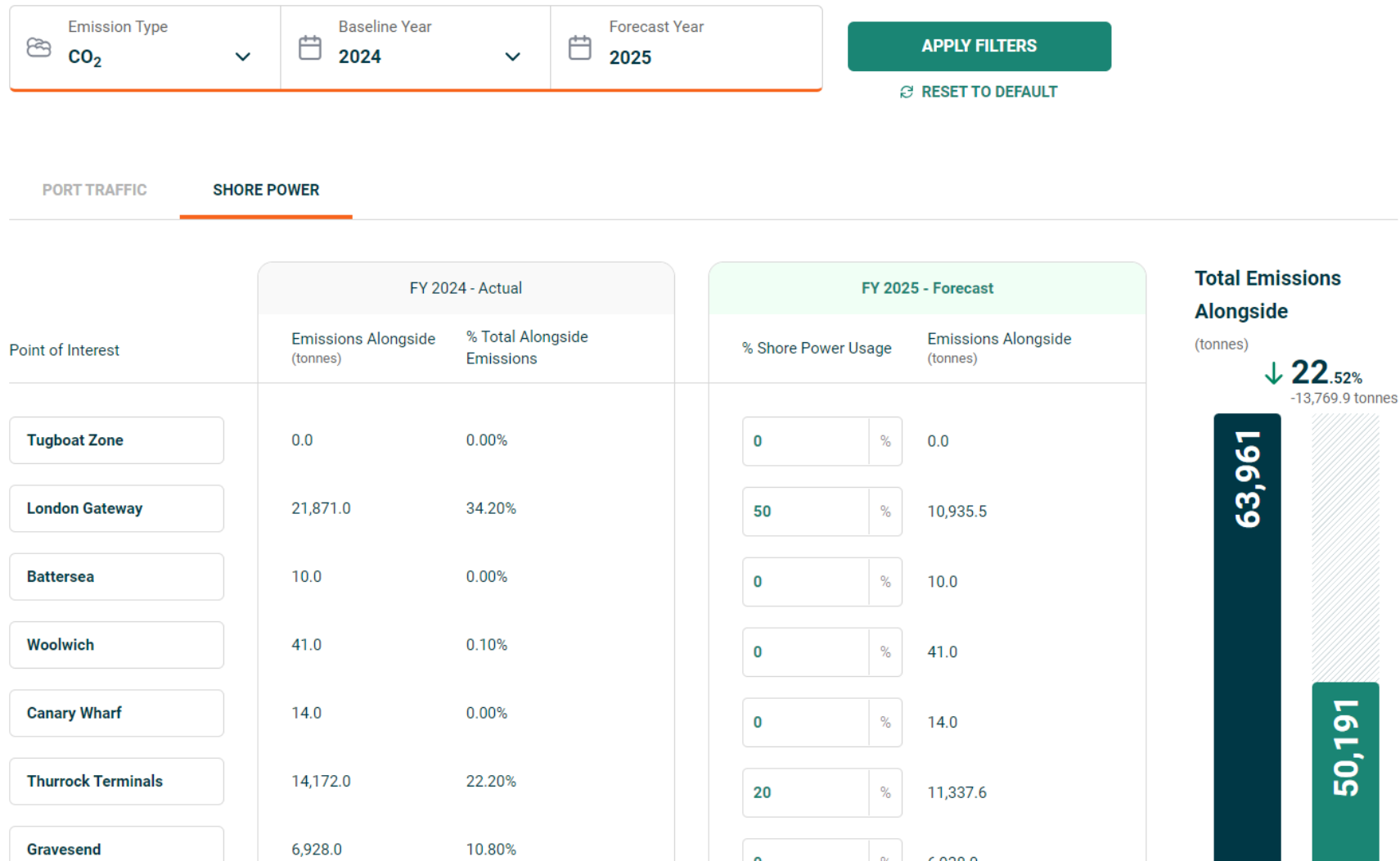
HOW WE ARE USING THE MEP

Using the data to make evidence-based decisions for decarbonisation and air quality actions.

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1. SCENARIO PLANNING


PORT TRAFFIC
SHORE POWER

Total Emissions Alongside
(tonnes)

↓ 22.52%

-13,769.9 tonnes

63,961

50,191

HOW WE ARE USING THE MEP

Using the target setting system to identify worst emitters

2. TRACKING AGAINST TARGETS

Targets can be set for up to 16 different emission types both GHG and Air Quality.

The PLA will be using 2023 as a baseline year.

CO₂

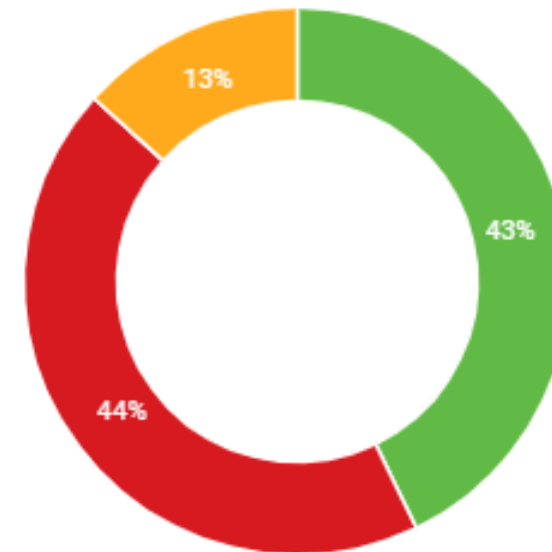
Carbon Dioxide

- Set no targets
- Set absolute target
- Set relative target

Base year

Target for FY 2024

Improvement over FY 2023



● Within target

774 vessels

● Exceed target over 15%

792 vessels

● Exceed target by up to 15%

241 vessels

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HOW WE ARE USING THE MEP

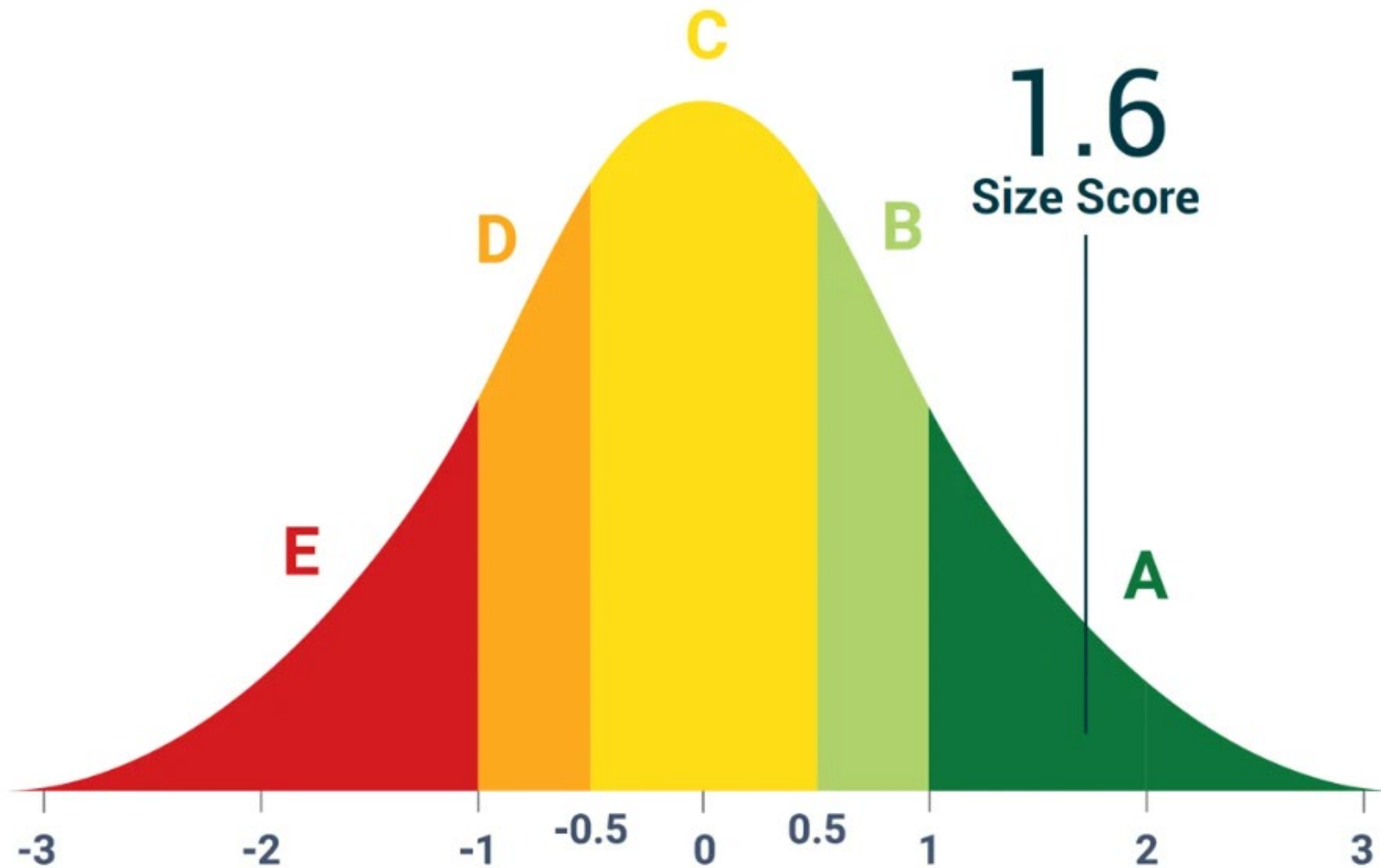
Using the GHG rating system to incentivise worst polluters to improve

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2. CONSERVANCY AND INCENTIVISATION

GHG Rating - normal peer distribution



THANKS FOR LISTENING QUESTIONS?

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