BLUE VISBY SOLUTION

ADB Presentation, 20 November 2025
Decarbonisation in Ports

The Blue Visby Solution
Slowing down to speed up maritime decarbonisation

The Blue Visby Consortium

- In collaboration with the Consortium of 44+ participants, including 6 Ports,
- raised awareness,
- prepared studies,
- refined the concept,
- conducted real-time virtual pilots,
- launched operational prototypes in Q2 2024,
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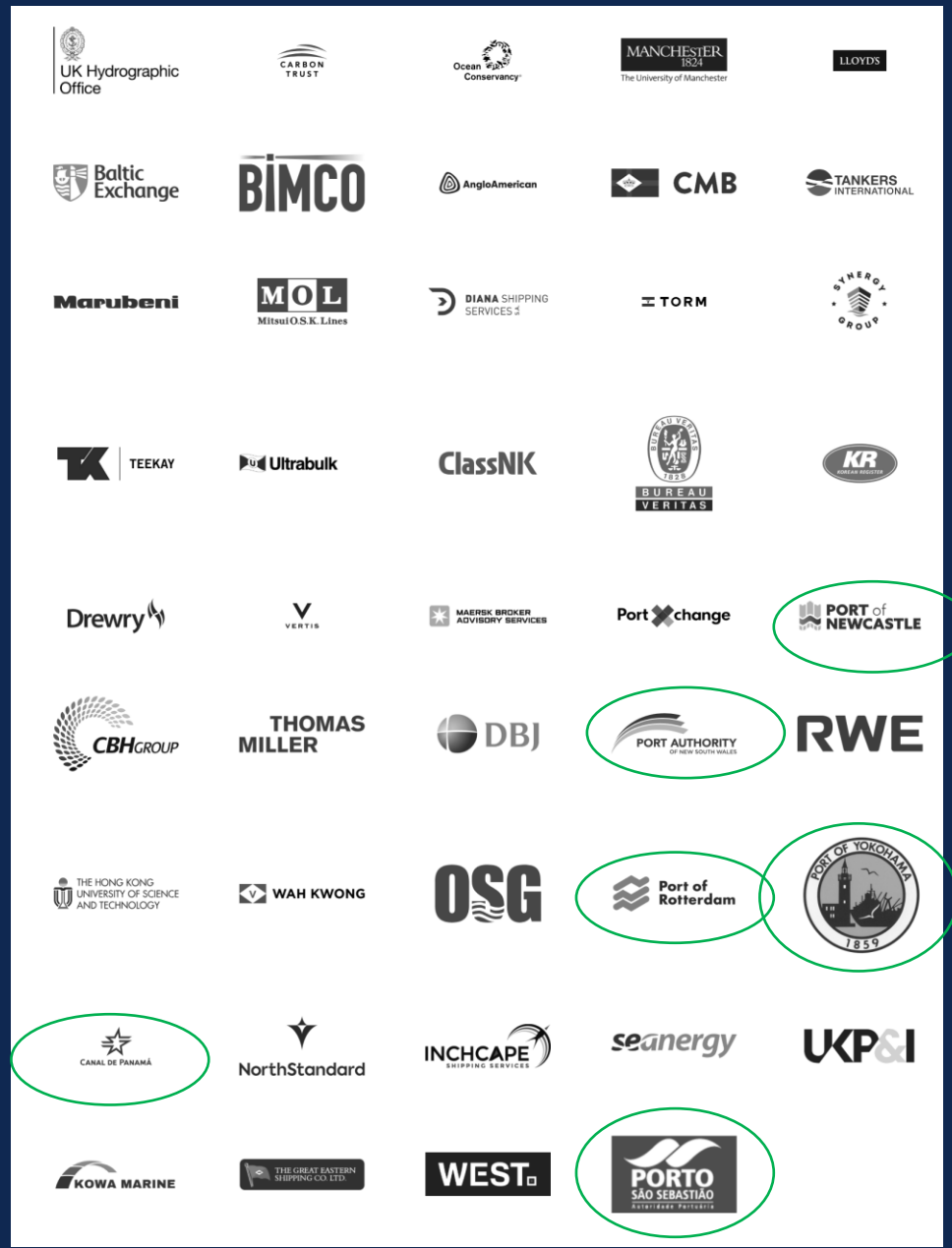
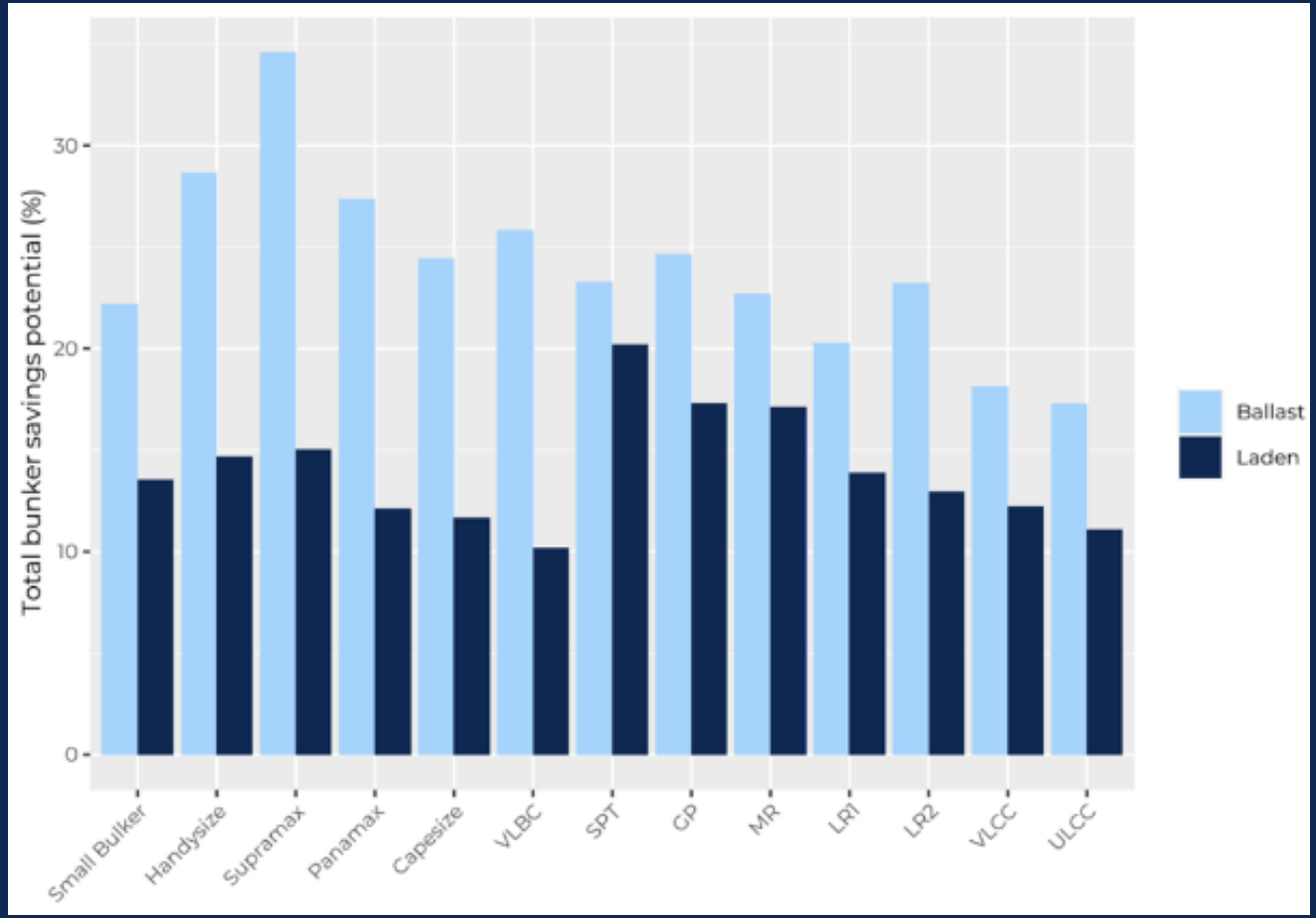


BLUE VISBY SOLUTION

Eradicating
Sail Fast, Then Wait.

The single largest systemic carbon inefficiency, responsible for 20% of shipping's carbon footprint.

A great source of air pollution affecting the health of populations.



BLUE VISBY
SOLUTION

Identified by the World Bank as a practical application applicable to all ports

Box 4.2 **Case studies of PCO initiatives**

Port of Tanger Med

Box 4.3 **Digital Container Shipping Association (DCSA)**

Box 4.4 **Port Call Optimization Network (PCO Network)**

Box 4.5 **Blue Visby Solution (BVS)**

The Blue Visby Solution (BVS) is a multilateral optimization platform that notifies ships of the optimal date and time for arriving at their destination to mitigate the effects of the "Sail Fast, Then Wait" strategy, with a focus on the dry bulk and tanker sectors. The solution also includes a contractual mechanism for sharing the costs and benefits of coordinated arrivals into port (for example, fuel savings and opportunity cost of demurrage revenue).

The concept differs from the perspective of port/berth management, as in JIT Arrival, because it does not seek to optimize berthing (which is the responsibility of ports and terminals) and operates at a time and place prior to the engagement of current JIT systems. BVS is compatible with weather routing or voyage optimization systems that shipowners or operators may use, inventory management systems in port, and JIT Arrival systems.

The BVS has been supported by the Blue Visby Consortium, which has over 44 members and is coordinated by the software company NAPA Oy and the law firm Stephenson Harwood LLP. The Consortium comprises industry members from ship owning, commodities trading, port management, and operations, including the Port Authority of New South Wales (Australia), the Port of Newcastle (Australia), Port of Yokohama, Port of Rotterdam, Port Sao Sebastiao (Brazil), as well as the Panama Canal Authority. The project has progressed from academic studies and proofs of concept to digital twin pilots and prototype trials, which led to deployment in December 2024 at several ports in Australia.

Source: BIMCO (2024), Previljak (2024).

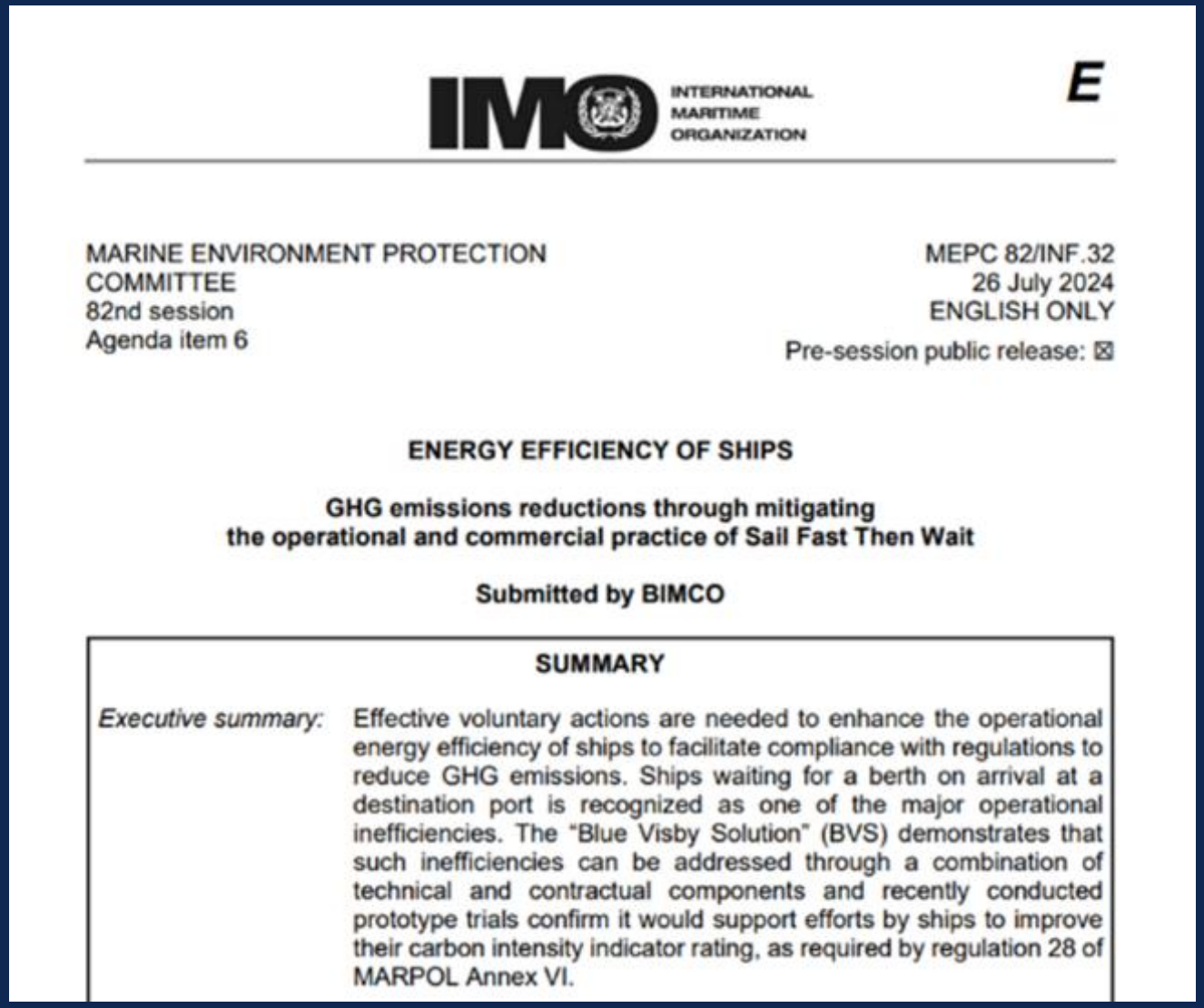
Port of Singapore

Port of Hamburg

BLUE VISBY SOLUTION

“The shipping industry should do two things: adopt electronic bills of lading and adopt the Blue Visby Solution”

Nikolaus H. Schues,
BIMCO President,
interview with Lloyds List,
September 2023



IMO INTERNATIONAL MARITIME ORGANIZATION

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MARINE ENVIRONMENT PROTECTION COMMITTEE
82nd session
Agenda item 6

MEPC 82/INF.32
26 July 2024
ENGLISH ONLY
Pre-session public release: ☒

ENERGY EFFICIENCY OF SHIPS

GHG emissions reductions through mitigating the operational and commercial practice of Sail Fast Then Wait

Submitted by BIMCO

SUMMARY

Executive summary: Effective voluntary actions are needed to enhance the operational energy efficiency of ships to facilitate compliance with regulations to reduce GHG emissions. Ships waiting for a berth on arrival at a destination port is recognized as one of the major operational inefficiencies. The “Blue Visby Solution” (BVS) demonstrates that such inefficiencies can be addressed through a combination of technical and contractual components and recently conducted prototype trials confirm it would support efforts by ships to improve their carbon intensity indicator rating, as required by regulation 28 of MARPOL Annex VI.

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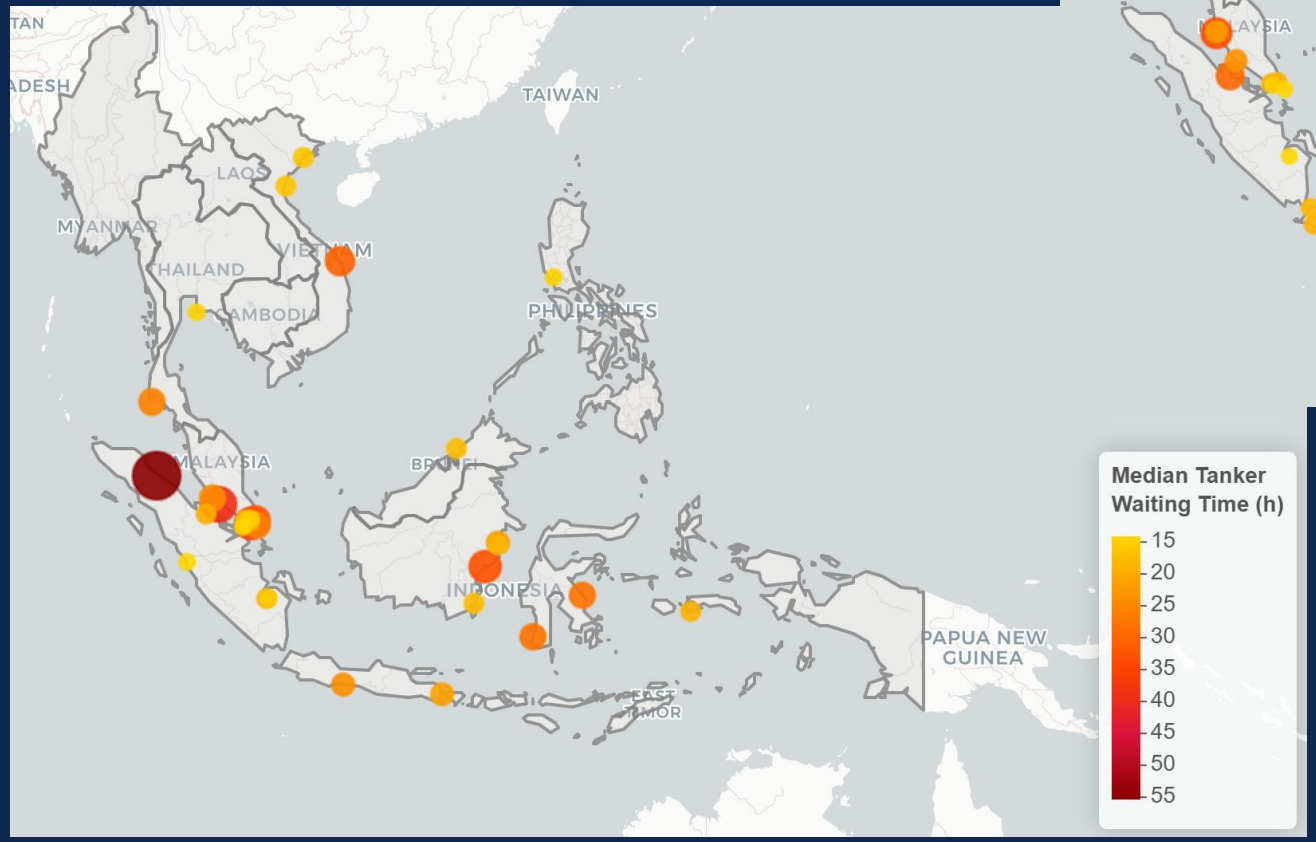
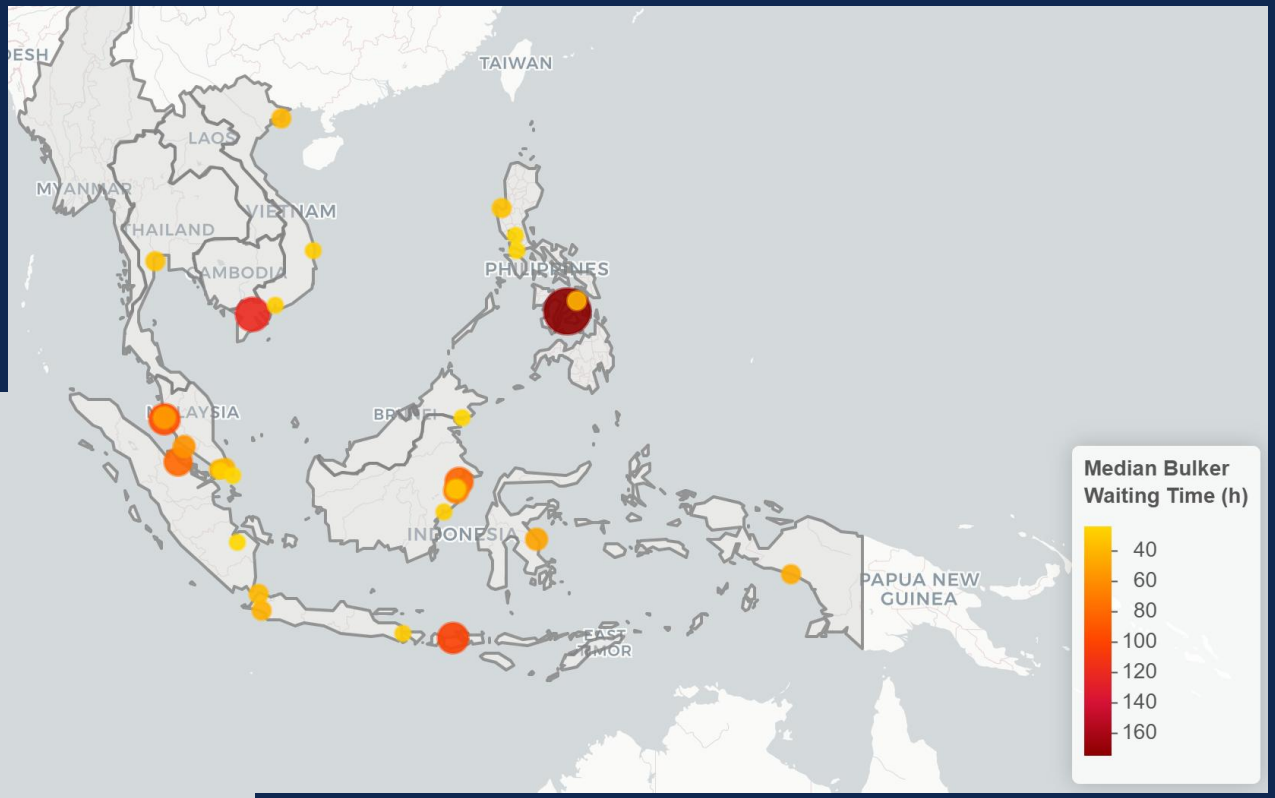
SFTW in S.E. Asia





BLUE VISBY SOLUTION

How can we eradicate SFTW while respecting local needs & without interfering with the port ecosystem?

BLUE VISBY
SOLUTION

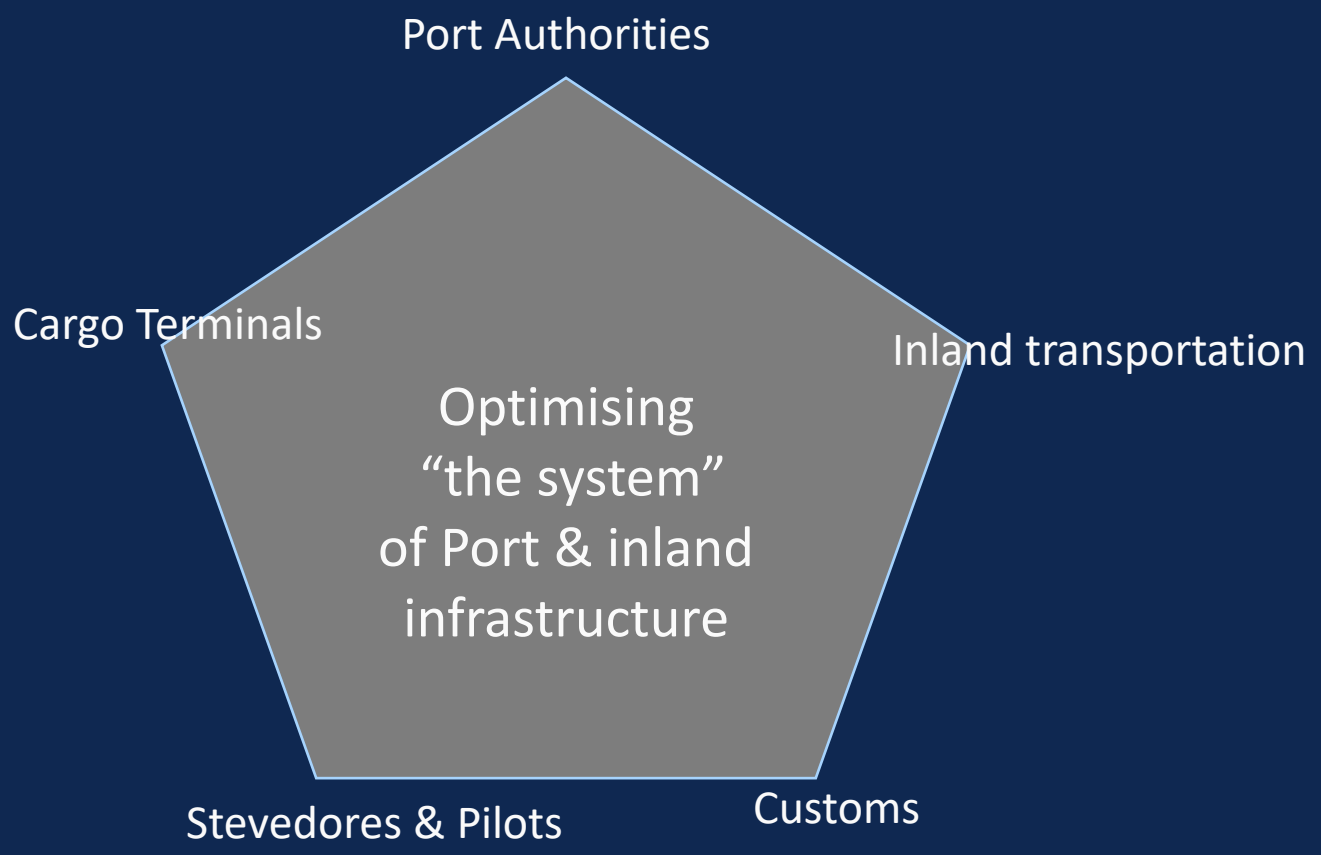
How can we eradicate SFTW while respecting local needs & without interfering with the port ecosystem?

- Ports & terminals have different preferences and priorities about organising their operations
- Resilience is paramount
- Upstream / inland considerations are not in the hands of ports or terminals
- Market segments that are not as vertically integrated as the container trade are especially difficult to optimise.

Trying to implement a Just-in-Time system is complex, expensive, time-consuming & risks disrupting local preferences and priorities and jeopardising resilience.

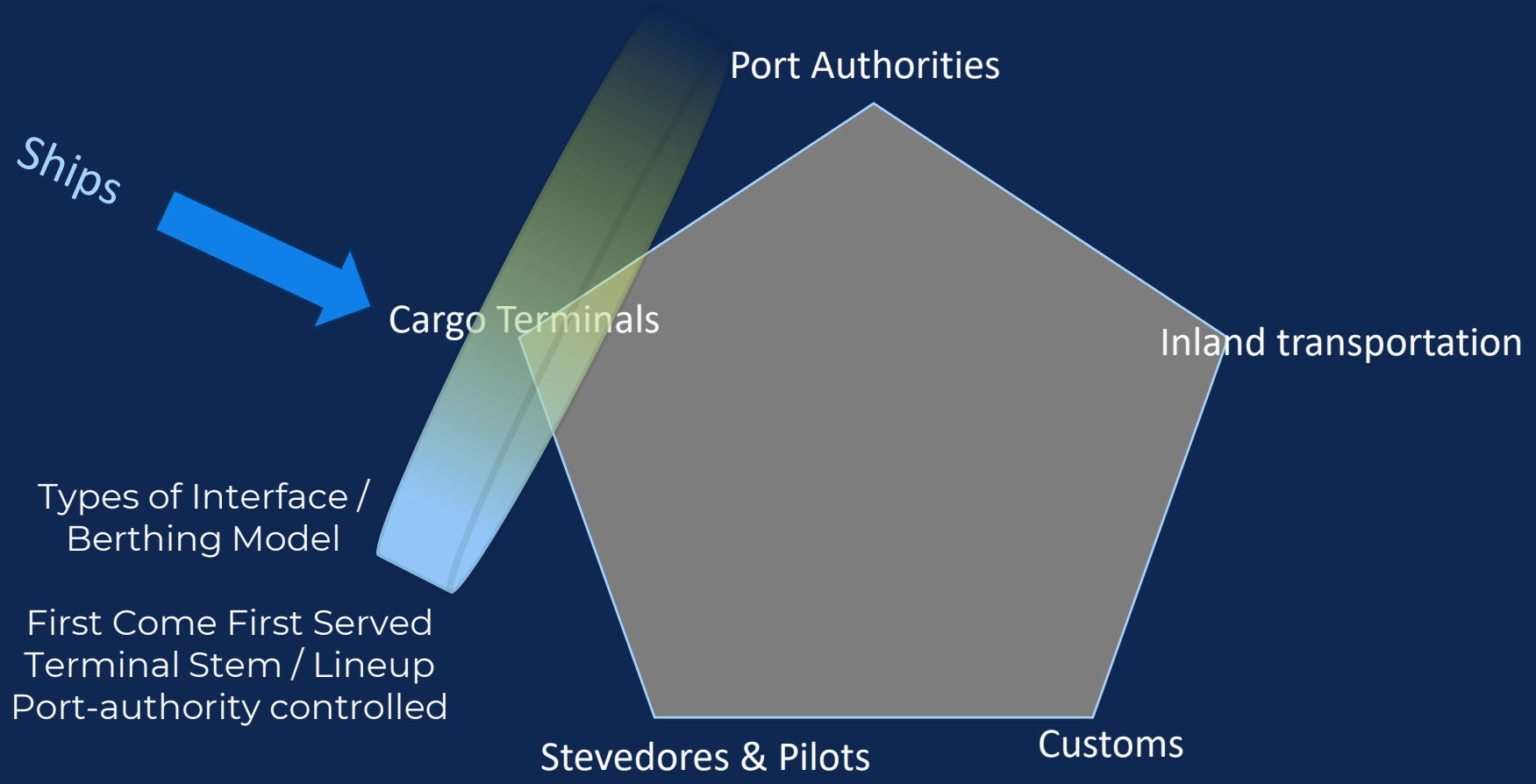
BLUE VISBY SOLUTION

The Port Ecosystem impacting on berthing timing and sequencing



BLUE VISBY
SOLUTION

The choice of interface between land and ocean reflects local needs & the importance of resilience



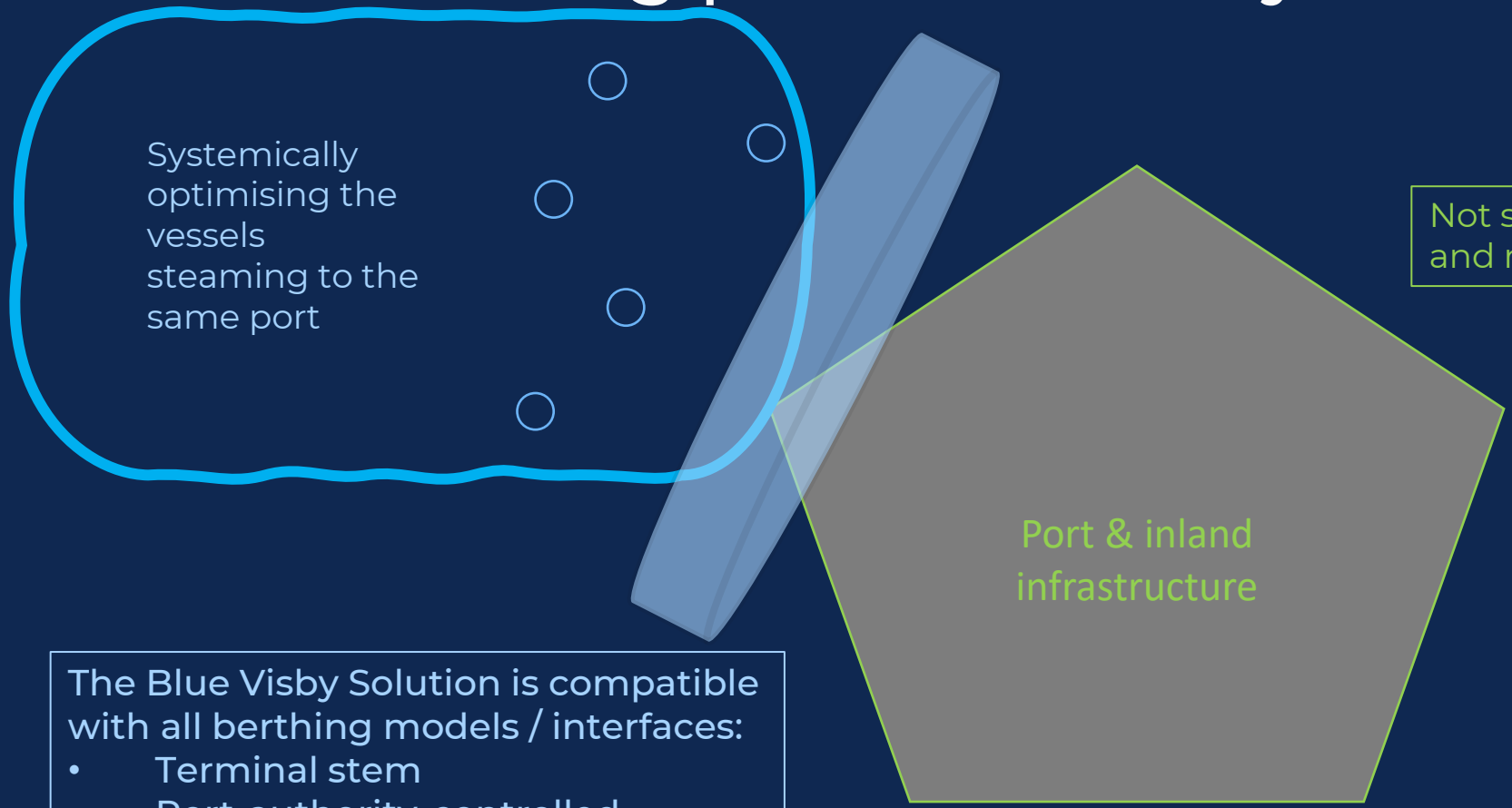
- First Come First Served
- Terminal Stem / Lineup
- Port-authority controlled

BLUE VISBY SOLUTION

The Blue Visby Solution
optimises systemically the ocean passage,
not berthing,
and so does not interfere
with local systems & local priorities

BLUE VISBY
SOLUTION

The Blue Visby Solution does not disrupt the port ecosystem and does not interfere with the berthing priorities and systems in place.



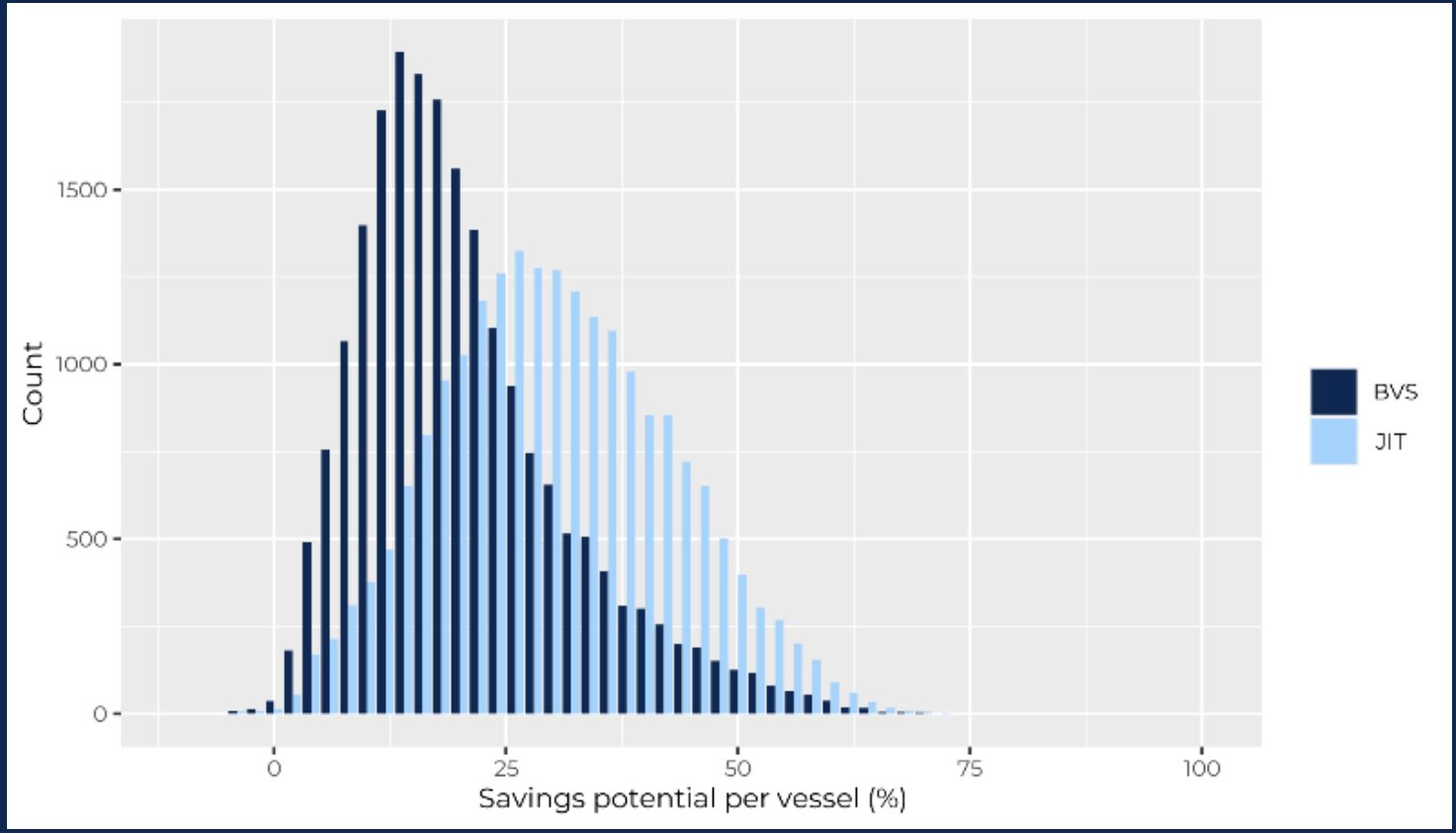
Not seeking to optimise the land elements and not seeking to optimise berthing

The Blue Visby Solution is compatible with all berthing models / interfaces:

- Terminal stem
- Port-authority-controlled
- First Come First Served

BLUE VISBY SOLUTION

The Blue Visby Solution optimises only the ocean passage to the anchorage, not the entire voyage to berth, treating berthing as a last-mile concern, which is left in the hands of the ports and terminals.



BLUE VISBY
SOLUTION

Summary of deployment since December 2024

26.0 MT

Fuel Saved

Average per Voyage

$14,312

Fuel Cost Savings

Average per Voyage

16%

Fuel and CO_2 Savings

Average per Voyage

82.6 MT

CO_2 Avoided

Average per Voyage

1.4 days

Anchorage Time Reduced

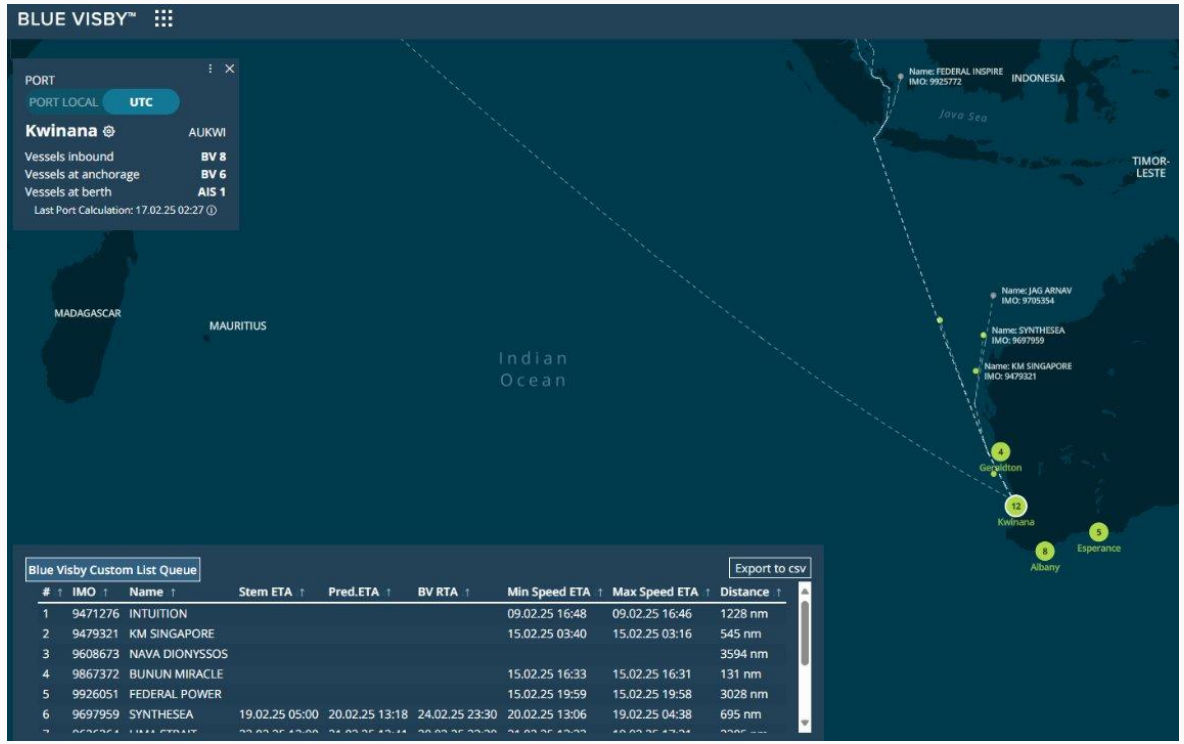
Average per Voyage

$172,775

Blue GA

Total Shared between Owners and Charterers

20+ voyages at Kwinana, Geraldton, Albany & Esperance.



BLUE VISBY SOLUTION

Blue Visby Solution – The Benefits

For shipowners, charterers, cargo shippers and receivers

- 15-20% CII / Scope 3 improvement without capex – in addition to any other improvements through voyage planning and retrofits.
- EEOI improvement
- Share of Blue GA, improving P&L

For the environment

- 15-20% GHG reductions
- 15% carbon budget reduction (Manchester University)
- 40% reduction in whale strike risk and 45% reduction in noise pollution (Ocean Conservancy)
- Global air pollution reduction and mortality improvements (Hong Kong University of Science & Technology)

For ports & terminals

- Safety improvement through reduction in anchorage congestion
- Local air pollution reduction
- Improvement in Scope 3 GHG emissions
- Dynamic visibility of vessel arrival from the start helps ports plan
- Competitive advantage due to (a) improved P&L of shipowners and charterers. and (b) lower carbon intensity on the ocean passage

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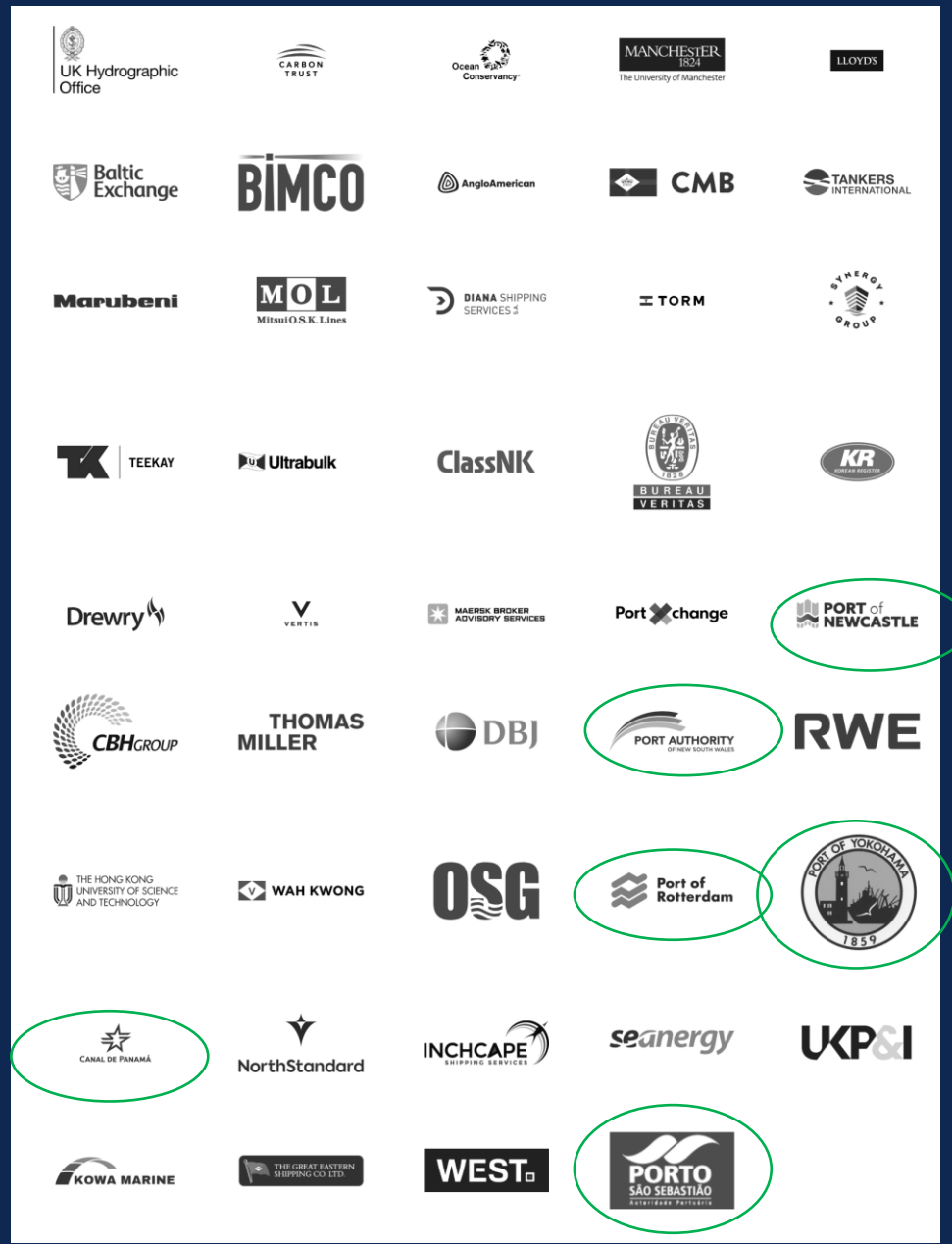
Consortium co-ordinators:



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