

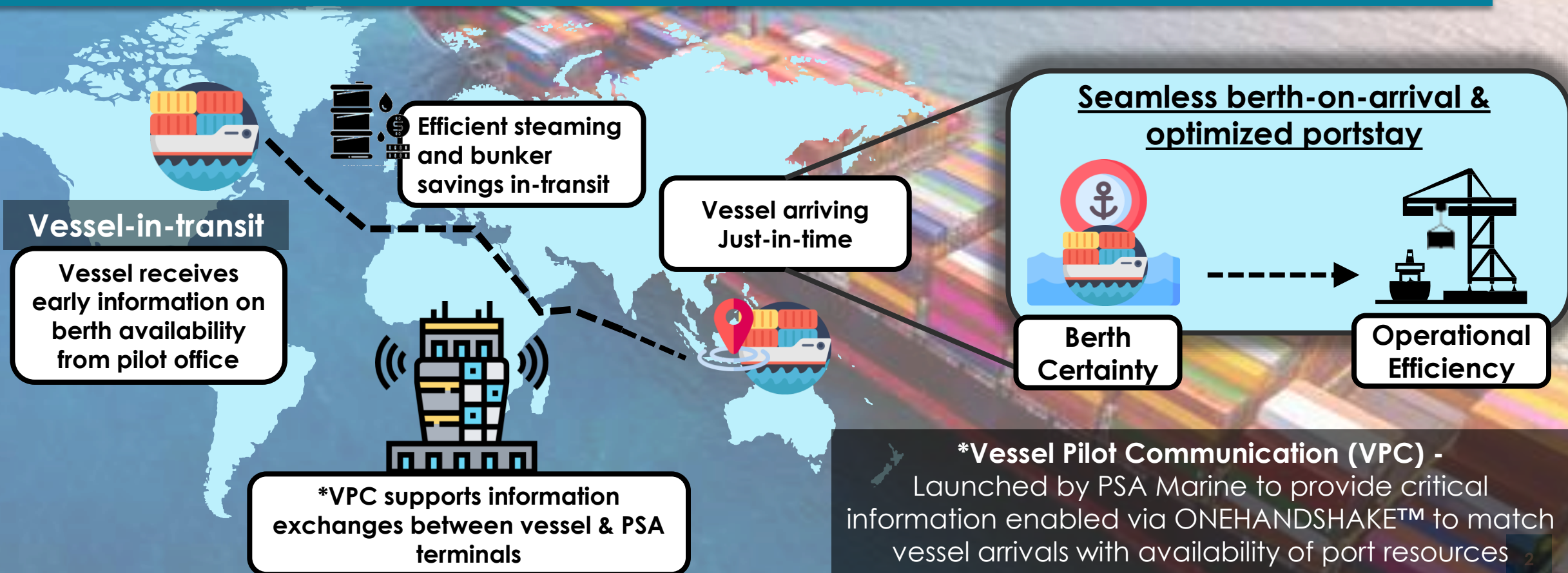


 **OptEVoyage**

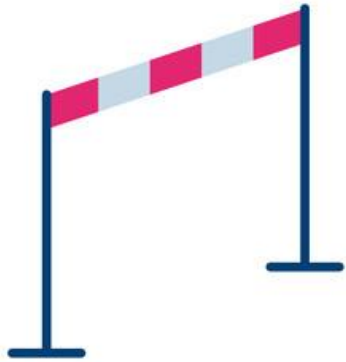
Digital solution to enable & enhance Just-In-Time Arrivals for direct berthing

# OptE-Voyages

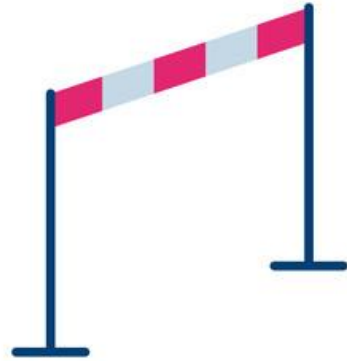
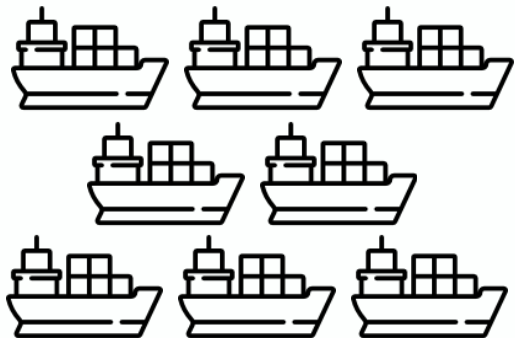
OptE-Voyage facilitates transparent real-time activity synchronization and 24/7 ship-to-port data exchange to enable **Just-In-Time vessel arrivals**. Through stakeholder collaboration, it supports the dynamic optimisation of terminal resource planning and efficient vessel bunker consumption, thereby improving the carbon abatement, efficiency and resilience of our supply chain.



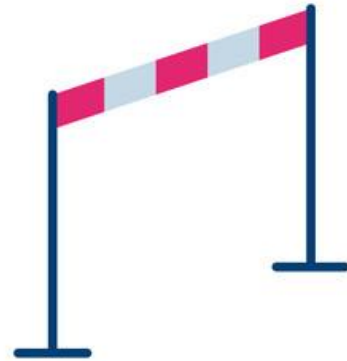
# Overcoming Challenges



Vessel congesting  
Singapore's  
anchorage



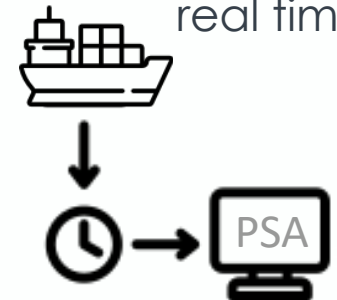
Vessel burning  
excessive bunker and  
emitting carbon



Delayed updating of berth  
time required (BTR) by  
local office/ agencies  
E.g. Time zone differences



Information between  
Terminal and Liners not  
real time



# Innovative Solution



API linkage with liners for real time updates



PSA Portnet

Direct linkage with Portnet to update BTR

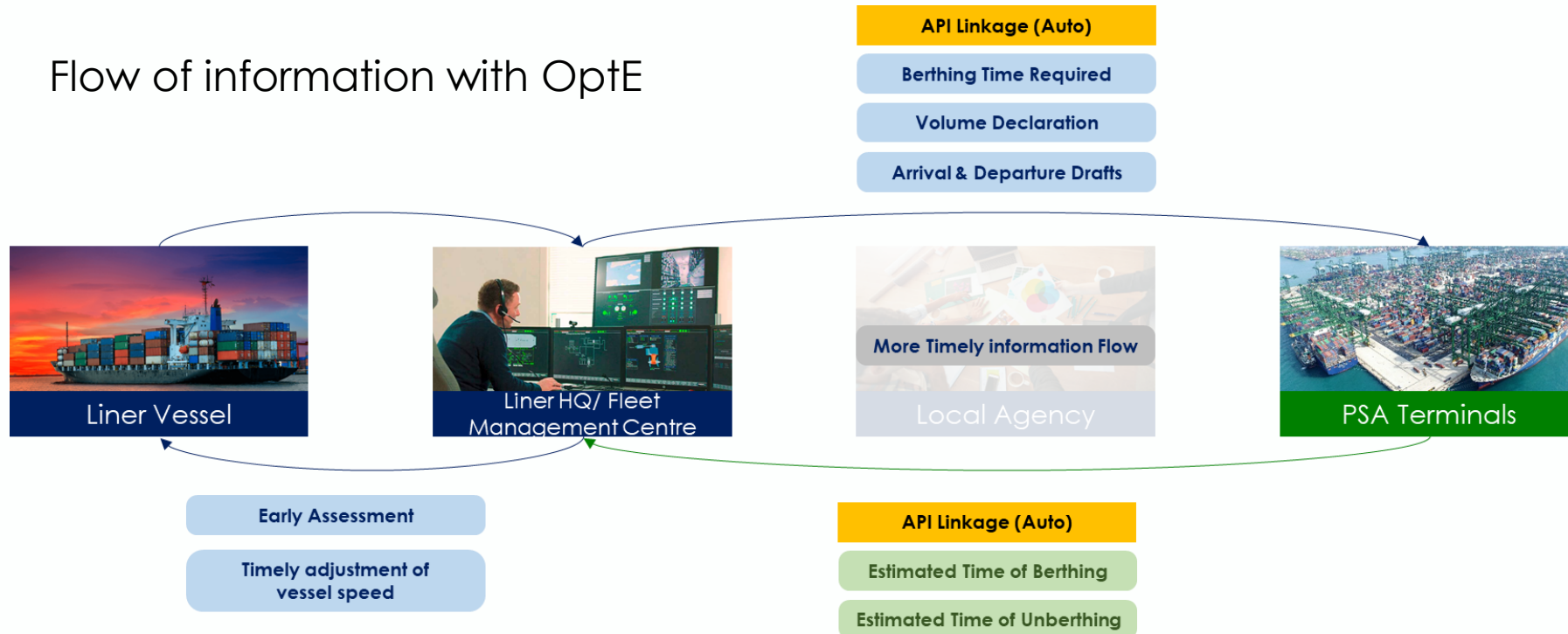


Just-In-Time arrivals for ships with **Agreed Berth Time**



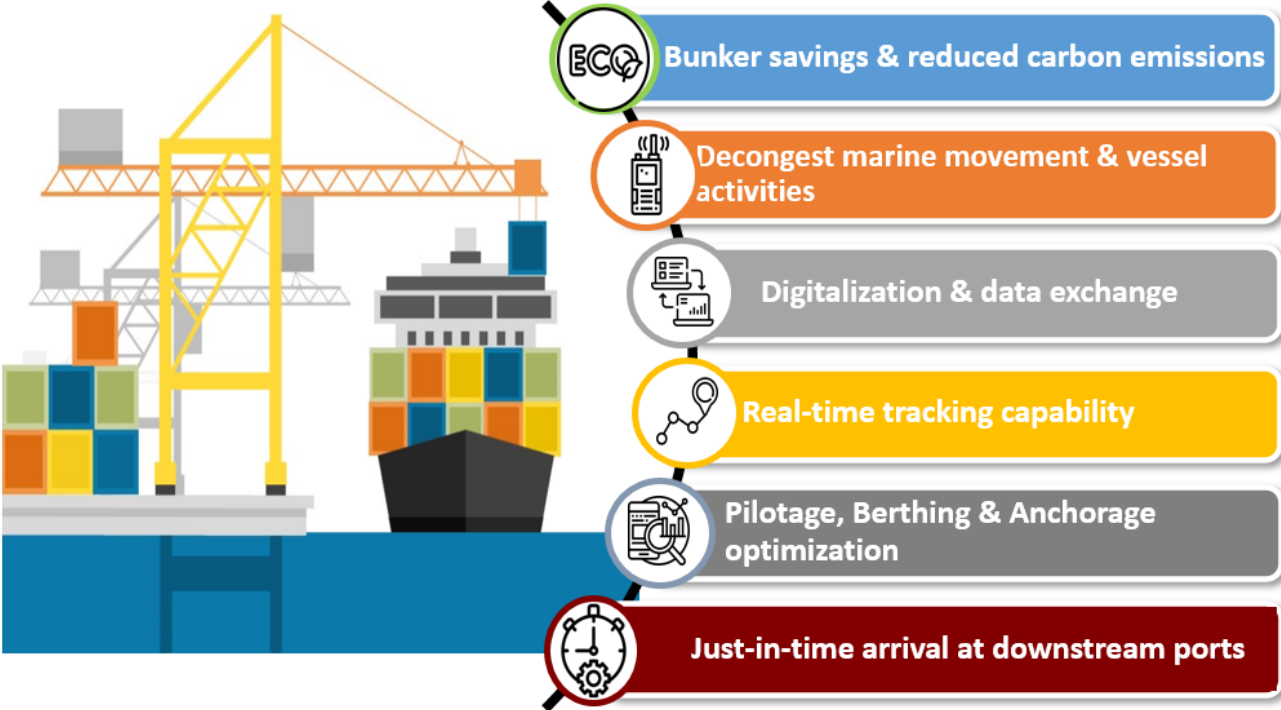
Quantifying bunker and CO<sub>2</sub> savings

## Flow of information with OptE



# Key Benefits

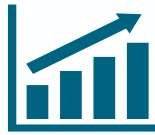
Providing greater visibility, predictability and productivity



Regional Container Lines



Enhances customer satisfaction and trust with certainty for vessel schedule (arrival & departure)



Increases asset utilization (berth & quay crane) and volume handled by joint venture terminal

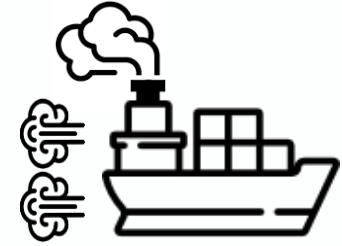
# Highlights of OptE-Voyages in 2023



99 services onboarded



Inferred bunker savings of  
52,551 mt  
(cost savings of ~US\$32M)



Inferred CO<sub>2</sub> Emission savings of  
163,832 mt  
(Equivalent to annual emissions of ~35,622 cars)

THANK YOU