



## BUSINESS OPPORTUNITIES WITHIN THE ENERGY TRANSITION

How do ports capture additional value from the investment in green infrastructure?

# PREAMBLE: REGULATIONS RISE, MARGINS SHRINK

## DP World Driven by “Our World Our Future”



560+  
BUSINESS UNITS



75+  
COUNTRIES



115K+  
EMPLOYEES

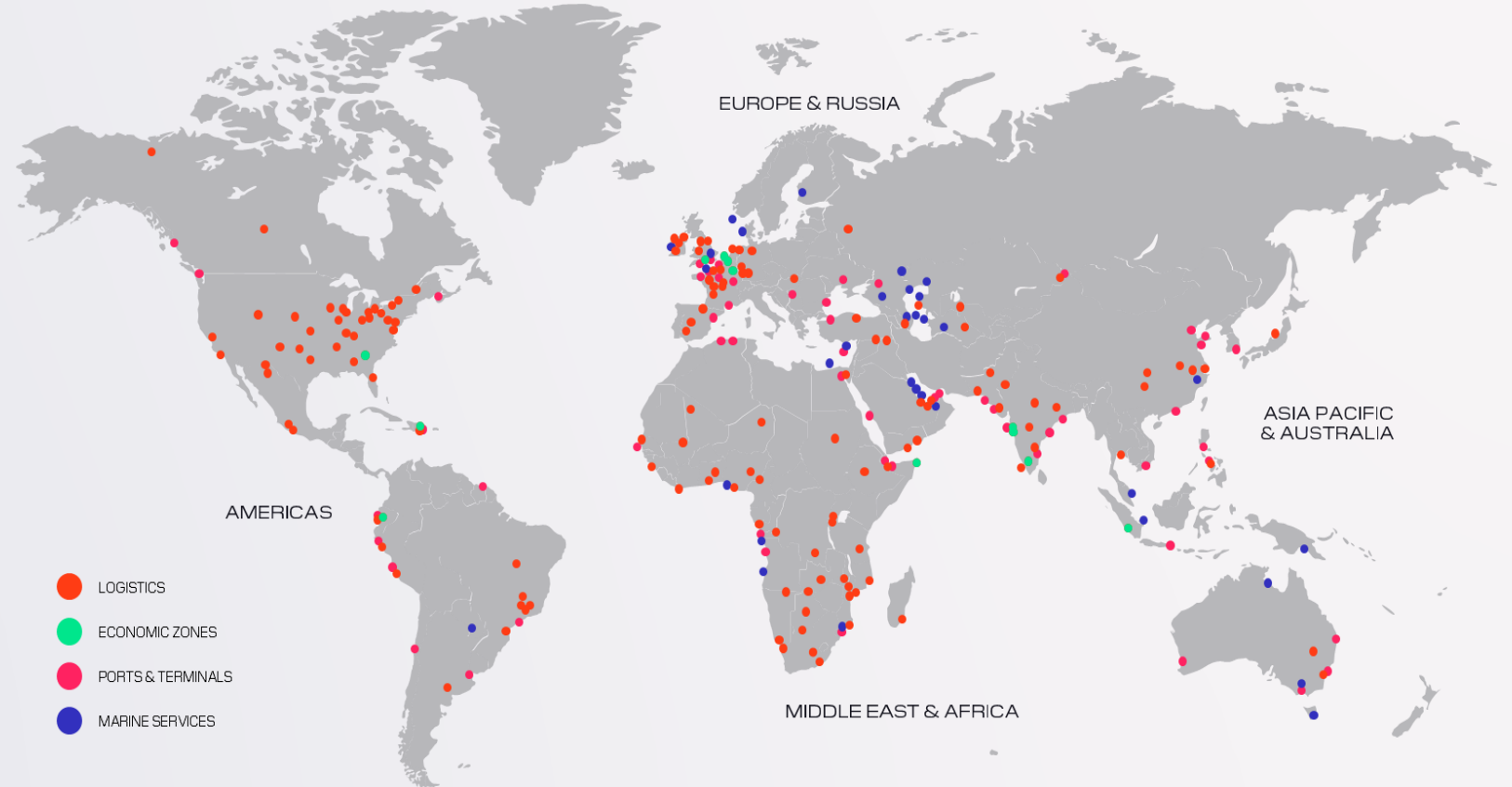


102M TEU  
GLOBAL CAPACITY



\$42BN  
CAPITAL EMPLOYED

- At DP World, we handle 10% of world trade and are committed to net-zero by 2050 via SBTi Verification.
- As an end-to-end logistics provider, we need net-zero solutions for our Ports, Logistics, Maritime, and Economic Zone businesses.
- Regulation is upon us to decarbonize
  - IMO targets intensifying
  - EU ETS cost pressures
  - Ports risk losing traffic to less-regulated alternatives
- **How do we change this into a commercial advantage?**



# THE PORT OF THE FUTURE LEVERAGES EXISTING INFRASTRUCTURE FOR VALUE CREATION

## Ports-as-an-energy platform

- The role of the “Port of the future” needs to be **reframed from transit hubs to energy platforms**
- Ports are large energy consumers and distributors with the potential to **provide grid services, enabling green trade**
- Ports can act as **central nodes for the energy transition** while increasing commercial activity that drives incremental value
- Ports sit at the intersection of trade and energy, making them ideal launchpads for scalable solutions
  - Freezones co-located with commercial and industrial
  - Bunkering / petro-chemical hubs

### Energy Arbitrage

- Monetize peak load shifting by storing energy when prices are low and dispatching during high-demand periods
- Offer demand response services to the grid or local utilities for financial compensation
- Leverage battery for time-of-use tariff OPEX reduction
- Enable third-party EV truck fleet charging with dynamic pricing to generate new revenue streams



### Shore Power

- Generate recurring revenue by selling electricity to vessels at berth under cost+ supply agreements
- Integrate MRV systems to quantify CO<sub>2</sub> savings and sell credits or enable insetting
- Reduce port noise and local air pollution, increasing port attractiveness to urban authorities and regulators



### Bunkering

- Develop multi-fuel bunkering hubs to serve future-ready vessels using methanol and ammonia
- Co-locate alt. fuels production and on-site blending with ports and freezones to minimize logistics costs and capture value upstream
- Partner with fuel producers and shipping lines for long-term bunkering offtake agreements



Infrastructure Focused Value Creation

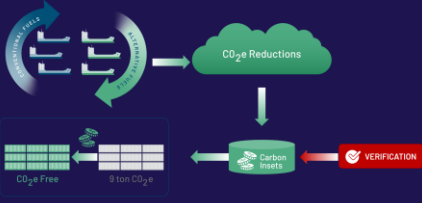
# PROGRAM BASED VALUE CREATION CAN ALREADY BE UTILIZED BY THE PORT COMMUNITY

## “Asset light” business opportunities

- Scaling the business opportunities from the energy transition requires moving from siloed projects to **integrated value-creation programs**
- Carbon insetting, green/blue finance, and tailored strategic programs enable monetization opportunities
- Ports that institutionalize these programs can build competitive advantages (**top and bottom line**) and **access capital** at the same time

### Carbon Insetting

- Offer carbon insetting digital platforms where carriers or BCOs pay for verified emissions reductions (Scope 3) at your port
- Leverage DP World–Unifeeder’s book and claim model: Unifeeder enables customers to offset scope 3 supply chain emissions via vessels using B100 biofuels (and e-methanol in 2026)
- Monetize carbon reductions from RTG electrification, electric terminal tractors, and shore power



The diagram illustrates the carbon insetting process. It shows a cycle where 'CO<sub>2</sub>e Free' and '3 ton CO<sub>2</sub>e' are input into a system. This leads to 'CO<sub>2</sub>e Reductions', which are then converted into 'Carbon Insets'. These insets are verified and can be used to offset emissions elsewhere.

### Green & Blue Bonds

- Raise capital at favorable rates (5-20 bps) to fund port decarbonization initiatives, especially in mature markets
- Use blue bonds to align with ocean-positive outcomes, enhancing brand value and unlocking new investor classes
- De-risk funding through blended finance models with public sector co-investment



A group photo of port officials and industry leaders standing on a stage during a formal event, likely related to the issuance of green or blue bonds.

### Tailored Strategy

- Align with regional and national climate goals to access grants, subsidies, or preferential trade agreements
- Lead industry through initiatives like the DP World–PIL green shipping lane, offering end-to-end low-carbon solutions
- Position your port as a ZEPA member to attract carriers (or to help in driving down costs of battery container handling equipment)



A grid of logos representing various port and industry partners, including AARHUS HAVN, PATRICK, SANY, KEMPOWER, CATL, Long Beach Container Terminal, APM TERMINALS, DP WORLD, WESTWELL, Port of Rotterdam, iaph, BYD, ROCSYS, Shell, SSAMarine, ZPMC, STÄUBLI, IAV, TICA, INDUCTEV, EUROGATE, portwise, TERBERG, Smart Freight Centre, Port of Antwerp Bruges, C&C, CHARIN, STEDIN, and K&L GATES.



# PARTING THOUGHTS

## Moving from pilots to platforms

- As ports, we should not just go through the energy transition, but we should **transform into energy platforms** that can monetize the transition for shareholders
- Prioritize **energy strategy for value creation**, not just compliance for the sake of regulation
- Partner across public-private sectors to scale impact

# THANK YOU



**Andy Tam**  
Global Vice President  
Energy Management  
DP World