

Point Lisas Industrial Port Development Corporation Limited (PLIPDECO)

6TH HEMISPHERIC CONFERENCE ON
SUSTAINABLE PORT MANAGEMENT AND
ENVIRONMENTAL PROTECTION

*The Energy Transition:
Caribbean Ports as Enablers*

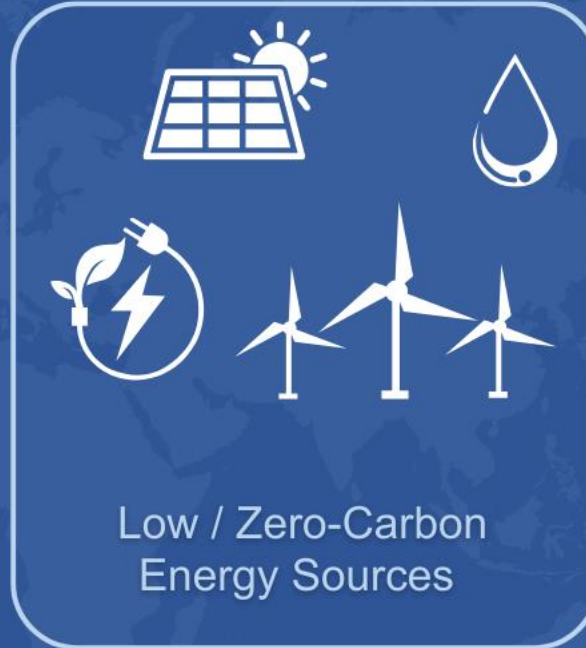
September 23rd 2025

Presented By: Dr. Curtis Dennie, President - PLIPDECO



Global Context

The Energy Transition



IMO 2023 GHG Strategy



Paris Agreement



ESG Investor Expectations

“Ports are the frontline of global energy and trade - we must evolve with shipping.”





Point Lisas Harbour

Point Lisas Industrial Estate



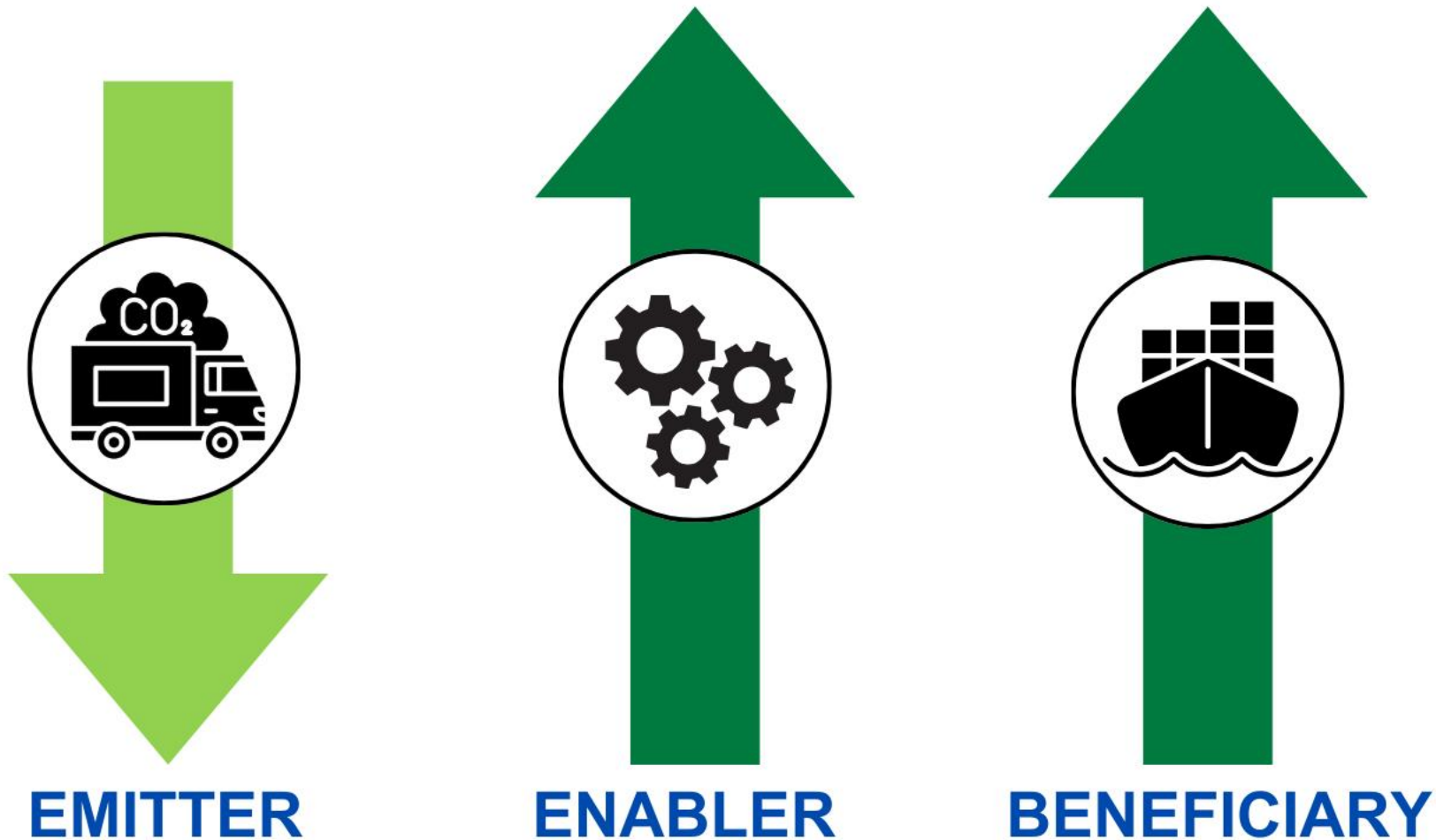
“Port + Estate = PLIPDECO as an enabler of regional growth and energy transition”

Industrial Estate

- 869 hectares with over 88 tenants
- Plants include chemical and steel production facilities:
 - Methanol companies - combined production capacity of 6.5m tonnes per annum
 - 5 Ammonia companies - combined capacity of 5.8m tonnes per annum
 - 1 Urea plant - capacity of 710,000 tonnes per annum
 - 1 Steel Company producing 1.6m tonnes per annum
 - Natural gas processing ~730 billion cubic feet of gas per annum
 - Industrial gases manufacturing
 - Power generation plant - installed capacity of 852MW



PLIPDECO's Position in the Energy Transition



PLIPDECO's Position

Discharge and Storage of Solar Panels



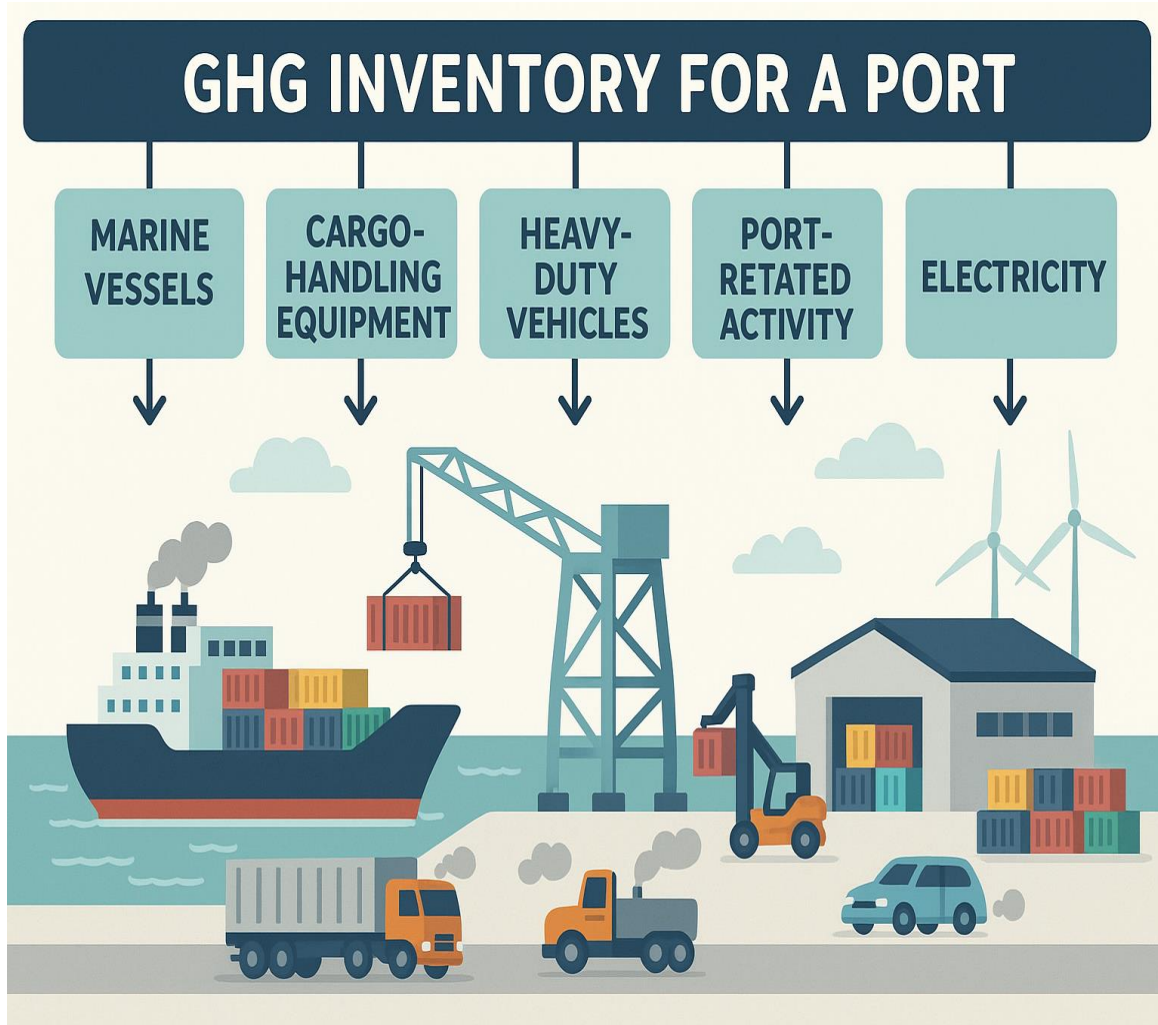
Methanol Bunkering PROMAN



PLIPDECO's Energy Transition Ladder



Foundation

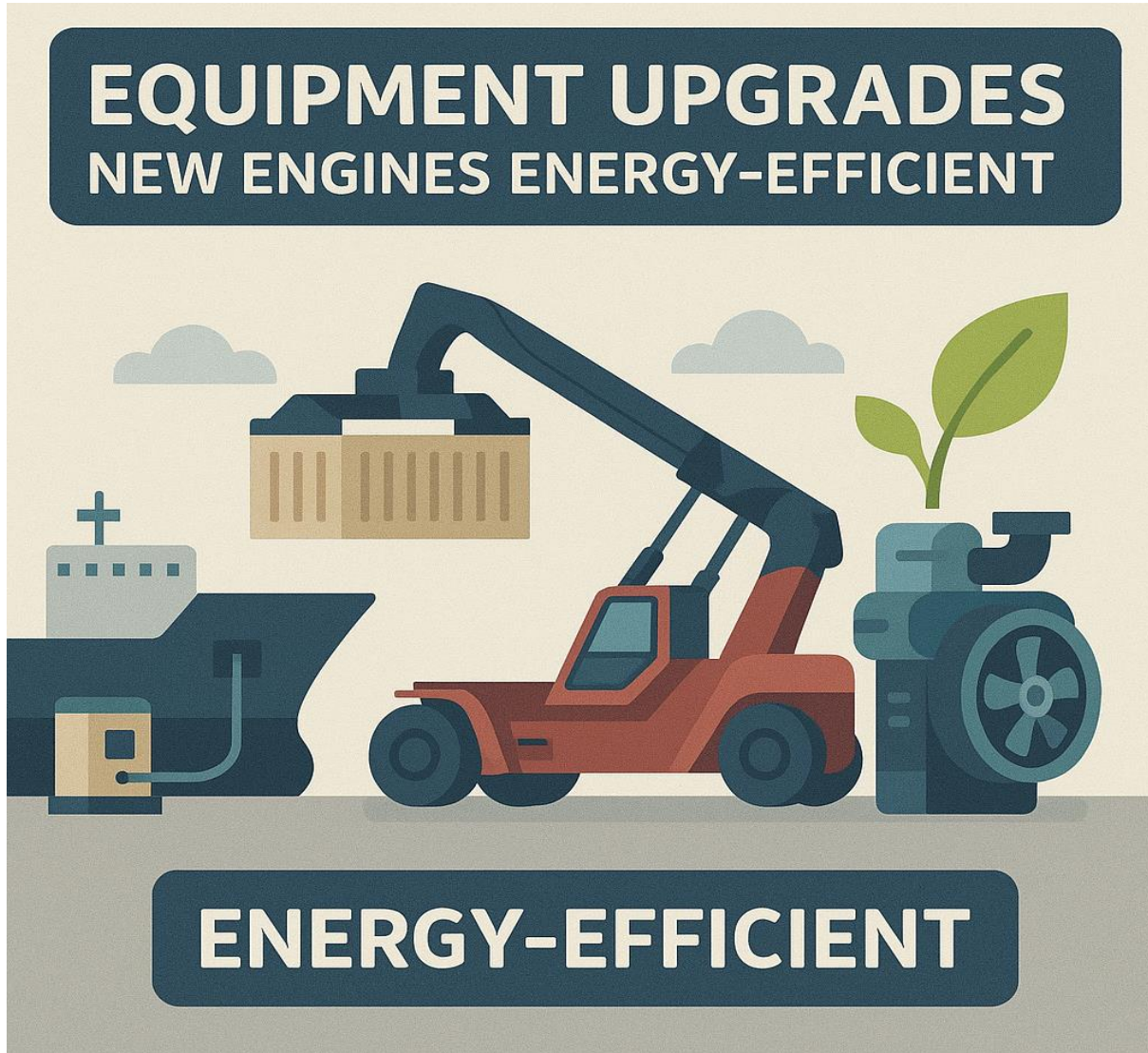


- First major Port GHG inventory in the Caribbean, completed with UTT collaboration (2 years).
- Covered Scopes 1, 2, and some Scope 3.
- Provides baseline for reduction targets & ESG reporting.
- Identifies major emission sources (cargo handling, electricity, vessel calls) to guide investment decisions.

Summary of Data- Total GHG Emissions

| Source of Emissions | Summary of Emissions (2019) | | Summary of Emissions (2020) | |
|--------------------------|--|-------------------------|--|-------------------------|
| | Emissions (CO ₂ e) / tonnes | Percentage of Total (%) | Emissions (CO ₂ e) / tonnes | Percentage of Total (%) |
| Electrical Energy | 3201.61 | 31.30 | 3000.90 | 31.26 |
| Cargo Handling Equipment | 2982.23 | 29.15 | 2818.20 | 29.35 |
| Light Duty Vehicles | 221.53 | 2.17 | 210.85 | 2.20 |
| Heavy-Duty Vehicles | 663.29 | 6.48 | 628.97 | 6.55 |
| Ocean-going Vessels | 3138.12 | 30.68 | 2916.82 | 30.38 |
| Harbour Crafts | 23.09 | 0.23 | 24.85 | 0.26 |
| Total | 10229.86 | | 9600.60 | |

Efficiency



- Replacement of high-consumption systems (lighting, reefer yard upgrades)
- Transition to energy-efficient cargo handling equipment (e.g., modern RTGs, forklifts, trucks)
- Preventive maintenance to optimise fuel and energy performance
- Quick-win decarbonisation: Lower costs, reduced emissions, improved reliability

Transformation



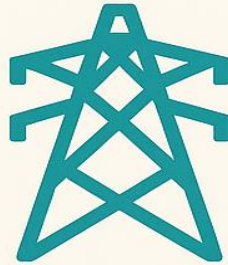
- Partnership with Kenesjay Green Ltd. (KGL)
- Feasibility study & technical assessment for OPS infrastructure
- Goal: Allow vessels to plug into shore power instead of running auxiliary engines
- Reduces NO_x, SO_x, CO₂ emissions at berth
- Aligns with IMO 2023 GHG Strategy & EU “Fit for 55” standards
- Establishes the groundwork for a pilot OPS installation, positioning PLIPDECO

Key Challenges

CHALLENGES IN THE CARIBBEAN



**HIGH COST OF
INFRASTRUCTURE**



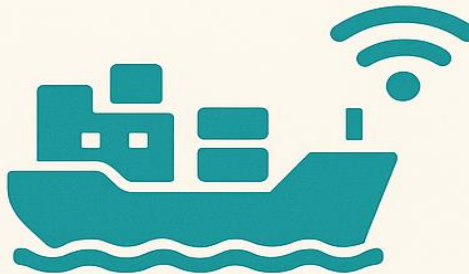
**GRID CAPACITY
& RELIABILITY**



**REGULATORY AND
LEGISLATIVE IMPACTS**



**FINANCING &
ACCESS TO CAPITAL**



**TECHNOLOGY
READINESS OF
VISITING VESSELS**



**CLIMATE
VULNERABILITY**



**CAPACITY
& SKILLS GAP**

Leverage



**LEVERAGE
INDUSTRIAL
ESTATE**



**FIRST-MOVER
ADVANTAGE**



**FINANCING &
PARTNERSHIPS**



**RENEWABLES
& NATIONAL
ALIGNMENT**

Thank you

Dr. Curtis Dennie President

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