



net **zero**
EMISSIONS
The future is NOW



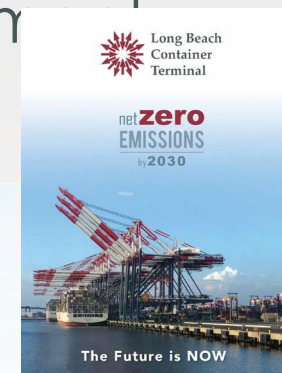
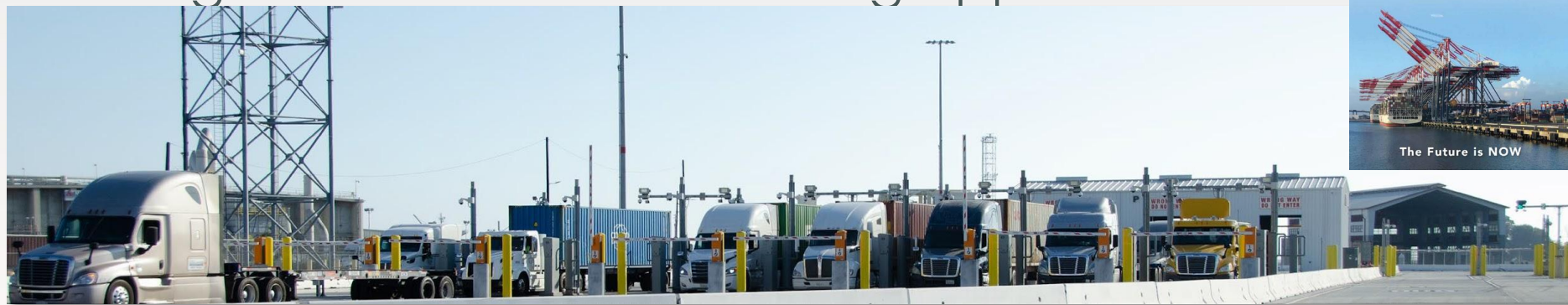
Long Beach
Container
Terminal

A photograph of a port terminal. In the foreground, a red tugboat with a white cabin is moving across the dark blue water, leaving a white wake. In the background, there are several large, yellow gantry cranes on a pier. The sky is a clear, pale blue. The text "ONE OF THE LARGEST, GREENEST CONTAINER TERMINALS" is overlaid in the center of the image.

ONE OF THE LARGEST, GREENEST
CONTAINER TERMINALS

Why Change

- ❁ Alleviate chronic congestion, transfer truck traffic to rail
- ❁ Meet trucking industry's need for faster gate/yard processes
- ❁ Larger ships need system to better manage the peaks
- ❁ Environmental Stewardship: demonstrate commitment
- ❁ Existing federal and state funding opportunities

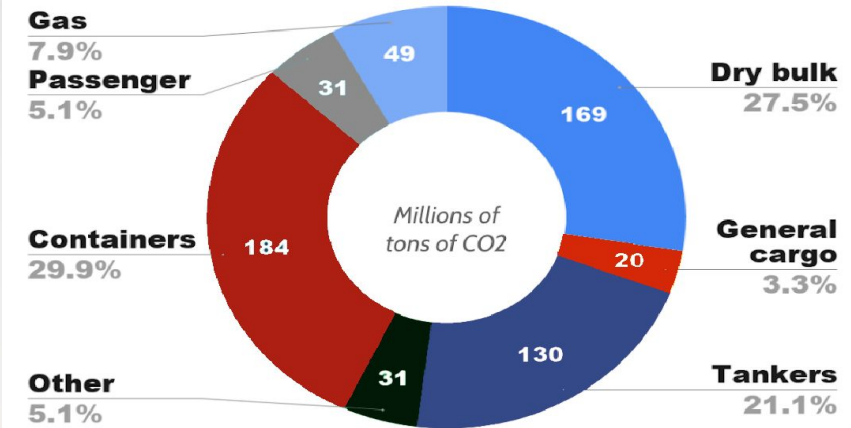


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Why Change Now

- ☀️ Climate change is here NOW
- ☀️ Movement of goods represents 20% (GHG)s globally and recent diversions from West Coast to East Coast significantly increased Vessel GHGs by 18%
- ☀️ Ports are located in severe air quality non-attainment and economically disadvantaged areas with public health impacts
- ☀️ Stakeholders are more engaged and active than ever before

World fleet CO2 emissions



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Being a Partner of Choice on our Profitable Pathways to Net

Zero Readiness

Eliminate GHG & Criteria Pollutants* from LBCT's operations

Resilience

Help reduce/offset emissions from the electricity grid (SCE*)

Regeneration

Help reduce/eliminate systemwide supply chain emissions

* Conducted detailed GHG & AQ Analyses dating back to 2015

GHG: Mobile sources of pollution or Greenhouse Gases

Criteria Pollutants: Stationary sources of pollution: nitrous oxide, sulfur oxide, and particulate matter 2.5/10

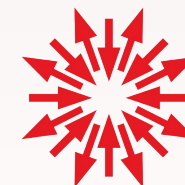
* **SCE:** Southern California Edison



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Readiness: Ocean

- ❁ High berth productivity
- ❁ 100% shore power
- ❁ No LBCT-bound vessels anchored during 2021/2022 pandemic
- ❁ Took on additional 37 ships
- ❁ Green Corridor & Green Methanol – 20 ships by 2030

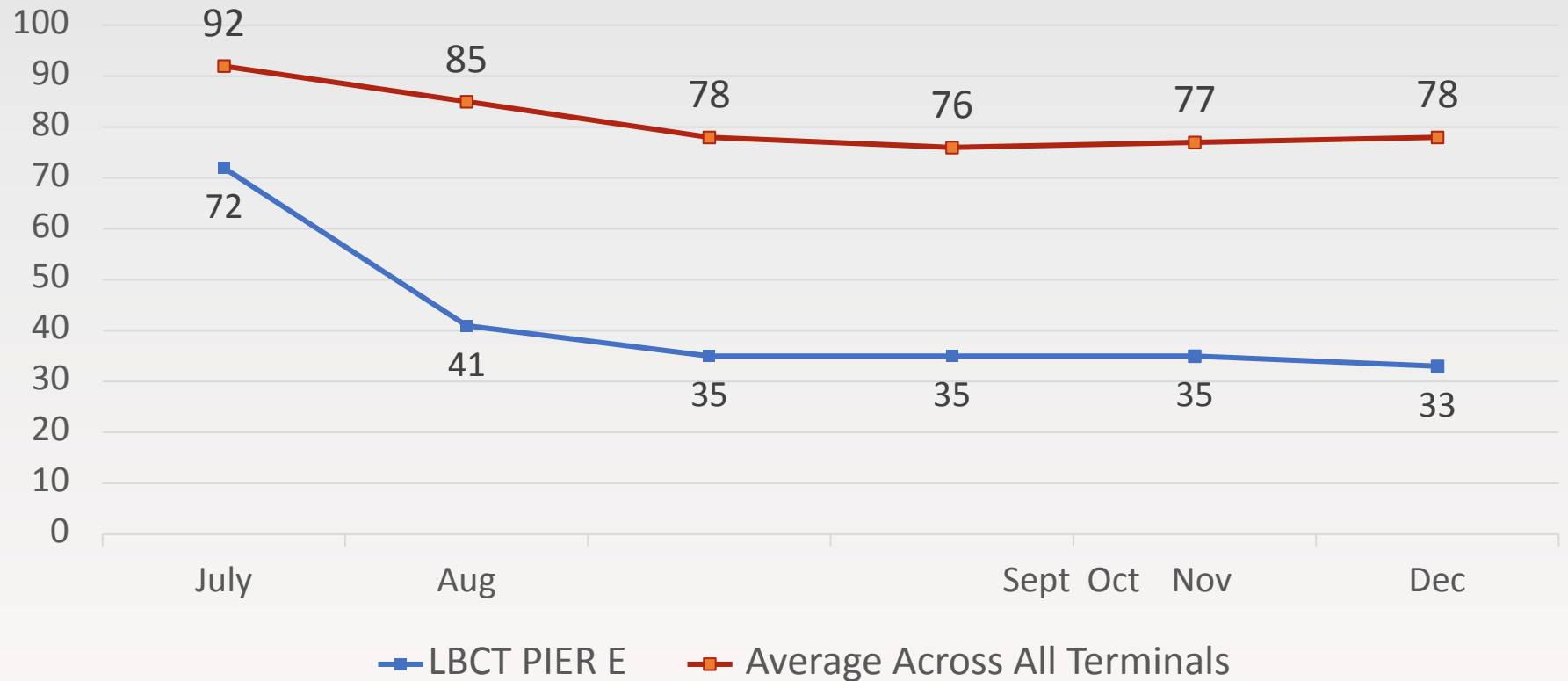


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Readiness: Trucking

2022 LBCT Turn Time Average July through December



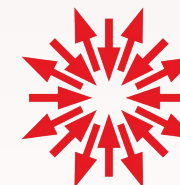
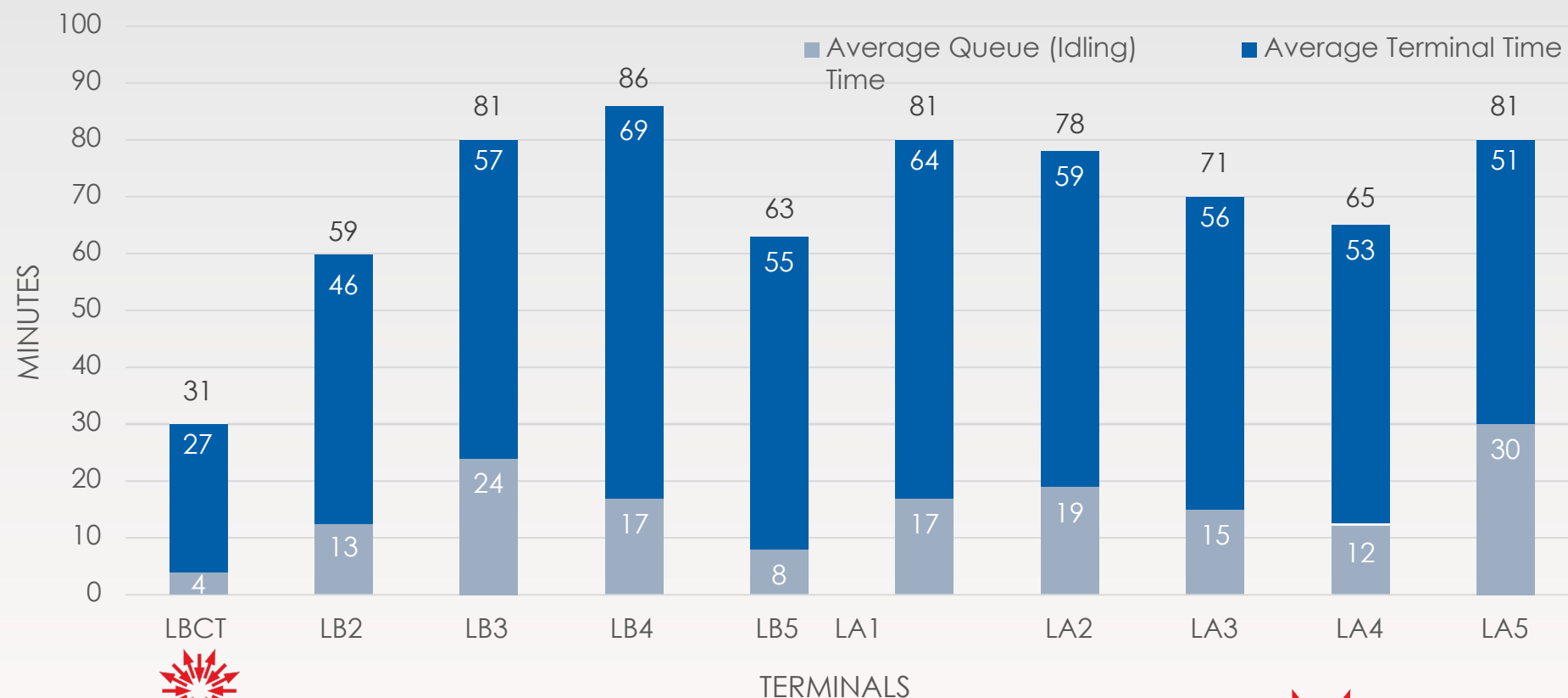
Data
Source:



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Trucks Idle and Queue Less at LBCT

Less Idling = Less Emissions*

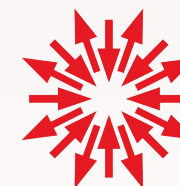


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*Source: Harbor Trucking Association (HTA) Truck Turn Times Report, Dec 2022

Readiness: Rail

- ❁ Largest on dock rail facility in North America
- ❁ Average dwell time: 3.5 days vs. 4 to 7 at competing terminals
- ❁ Fewer trucks on our roads means less idling and less emissions
- ❁ Beginning dialogue on electrification of rail



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Understanding Carbon Disclosure Project (CDP) Scopes 1, 2 and 3

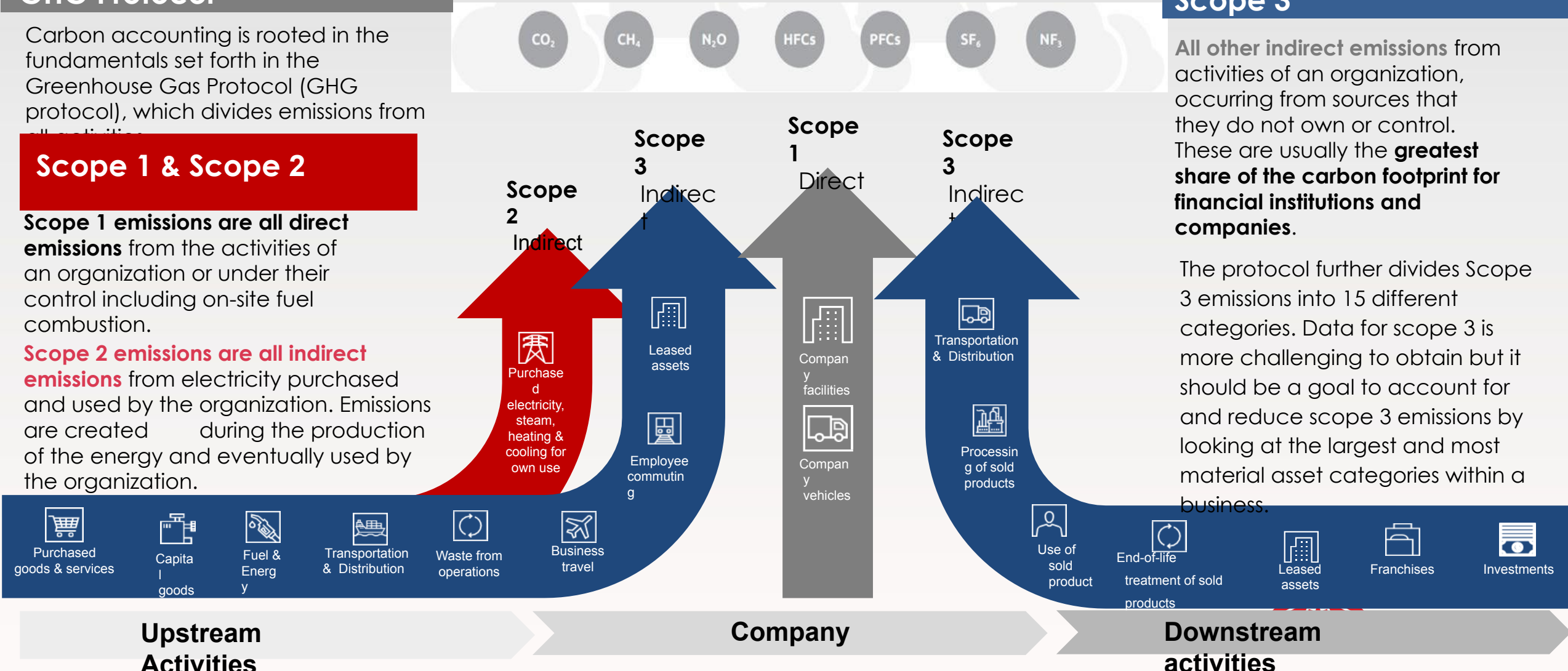
GHG Protocol

Carbon accounting is rooted in the fundamentals set forth in the Greenhouse Gas Protocol (GHG protocol), which divides emissions from all activities.

Scope 1 & Scope 2

Scope 1 emissions are all direct emissions from the activities of an organization or under their control including on-site fuel combustion.

Scope 2 emissions are all indirect emissions from electricity purchased and used by the organization. Emissions are created during the production of the energy and eventually used by the organization.



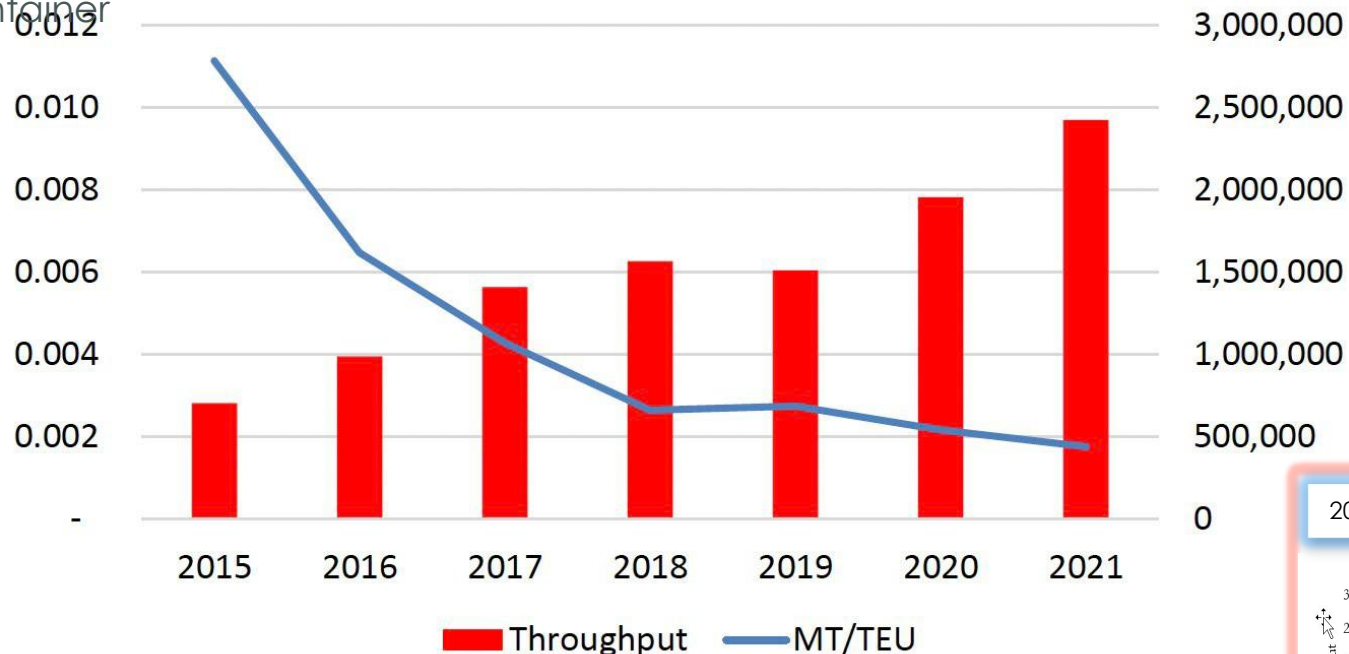
Readiness: Scope 1

LBCT has reduced Greenhouse Gases by more than

80%

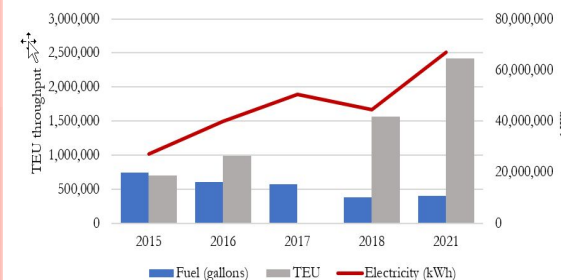
Emissions
per
Container

Scope 1 CO2e Emissions per TEU Metric



LBCT has grown from handling **700K** TEU in 2015 to handling average of **2.5 million** TEU in 2021.

2015 – 2021 Fuel, Electricity & TEU Throughput



of 20-foot Containers = (TEU throughput)



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Emissions Facts & Figures

+244%

TEU Thru-put
Capacity
Increase

-90%

NOx Emissions
Nitrous Oxide

-42%

SOx Emissions
Sulphur Oxide

-52%

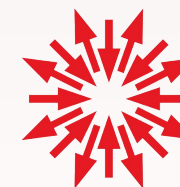
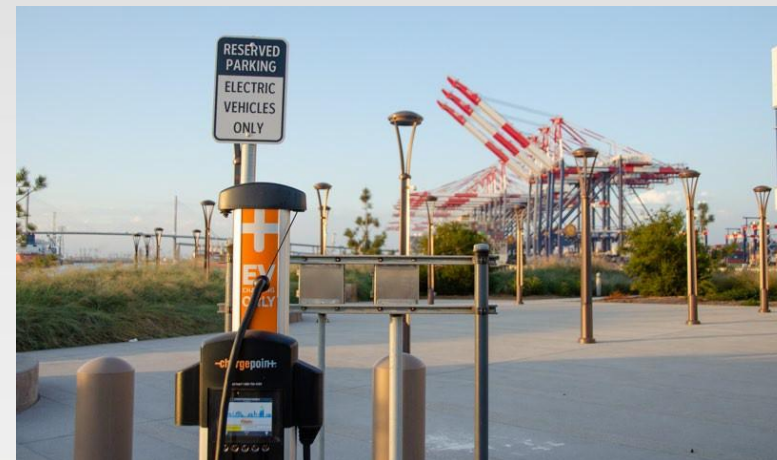
Diesel Fuel
Consumption

270

Remaining
Vehicles
to Replace

1/2

Assets are CHE
~1/2
Gasoline
Vehicles



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Resilience: Measuring What Matters

LBCT's baseline emissions calculations and how Scope 1 and 2 emissions are being addressed were independently verified by Cameron-Cole, an environmental services firm.



Verification Statement Long Beach Container Terminal, LLC. CY2021 Greenhouse Gas Inventory

Background

Cameron-Cole, LLC (Cameron-Cole) was retained by Long Beach Container Terminal, LLC (LBCT LLC) to perform an independent verification of their calendar year (CY) 2021 Greenhouse Gas (GHG) Emissions. The GHG Inventory was developed according to the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004 revised edition). Our opinion on the results of the inventory, with respect to the verification objectives and criteria, is provided in this statement.

Responsibility of LBCT LLC & Independence of Verification Provider

LBCT LLC has sole responsibility for the content of its GHG Inventory. Cameron-Cole accepts no responsibility for any changes that may have occurred to the GHG emissions results since they were submitted to us for review. Based on internationally accepted norms for impartiality, we believe our review represents an independent assessment of LBCT LLC's CY2021 GHG Emissions Inventory. Finally, the opinion expressed in this verification statement should not be relied upon as the basis for any financial or investment decisions.

Level of Assurance

The level of assurance is used to determine the depth of detail that a Verification Body designs into the Verification Plan to determine if there are material errors, omissions or misstatements in a company's GHG assertions. Two levels of assurance are generally recognized – reasonable and limited. Reasonable Assurance generates the highest level of confidence that an emissions report is materially correct (with the exception of Absolute Assurance which is generally impractical for companies to achieve). Limited Assurance provides less confidence, and involves less detailed examination of GHG data and supporting documentation. Limited Assurance statements assert that there is no evidence that an emissions report is not materially correct. Cameron-Cole's verification of LBCT LLC's GHG Emissions Inventory for CY2021 was constructed to provide a Limited Level of Assurance.

Objectives

The primary objectives of this verification assignment were as follows:

- Determine whether the GHG emissions assertions meets/exceeds the 95% threshold for accuracy.
- Determine whether LBCT LLC's GHG inventory meets the generally accepted GHG accounting principles of accuracy, completeness, transparency, relevance and consistency
- Evaluate the conformance of LBCT LLC's accounting and calculation methodologies, processes and systems to the WRI/WBCSD GHG Protocol.

Verification Criteria

1 | Page

Market-Based Scenario 2 ¹
4,253
(50,679)
(46,426)
(46,426)

correct, limited

2 | Page

3 | Page

¹ An alternative Market-Based scenario was reported by LBCT LLC that includes the application of sub-zero carbon intensities. Cameron-Cole was unable to verify this scenario against the current protocol and is including it as supplementary.

✳️ Eliminate Scope 1 emissions – true 2030 net zero
Equal focus on criteria pollutants and GHGs

✳️ Address Scope 2 (purchased SCE electricity) by
generating LCFS Credits due to avoided
emissions

✳️ Further reduced Scope 2 emissions by
developing Renewable Energy Credits with
Biogas projects

Partnering with S/C partners, cargo owners and
major retailers to decarbonize Scope 3
emissions

*LCFS – Low Carbon Fuel Standard



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Resilience: Scopes 1, 2 & 3

LBCT's baseline emissions calculations were verified by 3rd Party Cameron-Cole, an independent firm located in SF, CA, POLB, SCE, CARB and SC AQMD



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- Evaluate the conformance of LBCT LLC's accounting and calculation methodologies, processes and systems to the WRI/WBCSD GHG Protocol.

Verification Criteria

Based on	Market-Based Scenario 2
53	4,253
51	(50,679)
53	(46,426)
42	(46,426)

materially correct, limited

1 | Page

Intensities: Cameron-Cole was unable to verify this scenario against the current protocol and is including it as supplementary.

2 | Page

3 | Page

Location Based

2022

Location Based

2021

Scope 1

2,110

4,253

Scope 2

16,627

15,620

Total (Scope 1 & 2)

18,737

19,873

Scope 3

27,103

na

Total (all 3 scopes)

45,841

RECs and Offsets

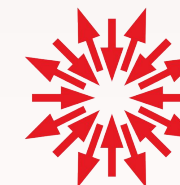
47,533

10,542

Net Emissions

0

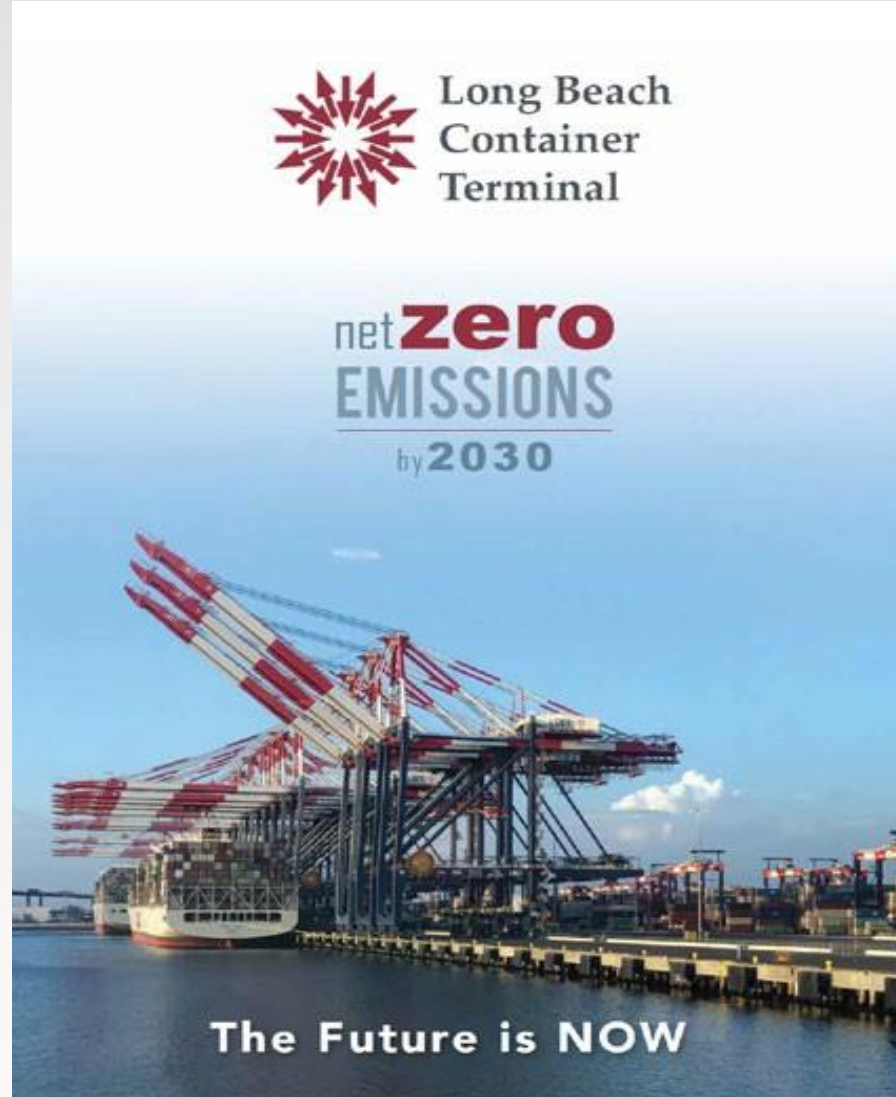
9,331



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*2021 and 2022: LBCT participates in LCFS, RECs and Offsets

tance of Reporting



- ❄ Forces rigor / in depth analyses of ESG and GHGs
- ❄ Facilitates ongoing stakeholder dialogue
- ❄ Demonstrates commitment to goals, actions and verification
- ❄ Communicates short and long term progress
- ❄ Highlights wins and challenges – warts and all!



cial Investment



More State and Federal Funding Available than ever before to incentivize action but remember the TINSTAAFL Principle.

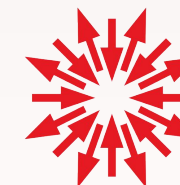
\$200 Million
Committed to Invest by 2030



Solar & Distributed Generation
Investigating Hydrogen/Other



Community Solar, Watershed Improvements, Marine Projects



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Funding Pursuits (Min 80/20% Match)

- ✿ Awarded PIDP 2022 \$37.5M to transition 60 Yard tractors = 93% remaining diesel emissions
- ✿ Waiting on \$45M CalSTA CHE Replacement Plan
- ✿ Submitted PIDP 2023 \$85M ZE First w/SC AQMD on complete Infrastructure Replacement Plan
- ✿ Awarded ~\$600K CORE/DERA – CARB/SC AQMD
- ✿ Pursuing Demos, Charging for POV & of course IRA



The **INFRASTRUCTURE
INVESTMENT
and JOBS ACT**



Inflation Reduction Act of 2022



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net zero EM Resilience

- ❁ Largest battery exchange buildings in the world – energy storage opportunity

Maximize potential for distributed generation and new innovations

- ❁ Develop renewables and invest in solar, wind and tidal demonstrations

3 large solar arrays and 5 LEED Gold buildings



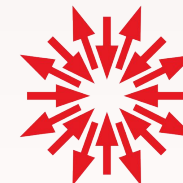
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Regeneration: Collaboration

- ✿ Understand what is important to your customers, communities and supply chains
- ✿ Provide transparent, accurate and verifiable data for compliance & competitive advantage GRESB
- ✿ Improve the quality of data through better monitoring and automating data collection and reporting – SFDR
- ✿ Open your site to key stakeholders including community
 - Enable customers to make more informed decisions and to leverage new products and



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Investing in improving our end-to-end data architecture will unlock opportunities to engage with stakeholders and enable customers to realize greater value

Current state

Manual or
Excel
logbooks

Estimating
emissions through
calc models &
assumptions

Manual
Transcription

Siloed
Reports

Data investments

Leveraging onboard
data Systems

Measuring emissions
through sensors

Integration
across
Networks

Online Dashboards

Unlocked value

Data-driven
decision
making

Close collaboration
with customers

Commercializin
g
decarbonizatio

Improved
efficiency &
productivity



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Regeneration



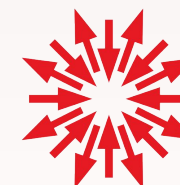
- ❁ Partner with the Ports and regional entities to support the local and global community
- Be a systemwide advocate in
- ❁ protecting the air, water, land, species and natural ecosystems
- ❁ Prioritize education, motivate workforce engagement, provide access and create new careers
- Recognize importance of



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Challenges / Opportunities

- ❖ Ensure shovel readiness for funding pursuits and invest in infrastructure first
- ❖ Return on Investment / Grant
- ❖ Internalizing the externalities
- ❖ Early adopter/technology readiness
- ❖ Meeting port and funding agency specifications and requirements (BABA)
- ❖ Robust metrics, cost/project management, audit support and reporting structures
- ❖ Engaging, exciting, empowering and

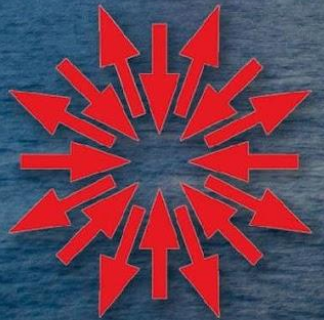


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