

The Future is NOW



Long Beach
Container
Terminal

Photo Courtesy of the Port of Long Beach

net **zero**
EMISSIONS
by **2030**

Progress
Report
2024

2



Statement from the CEO

We are excited to share the progress and achievements we have made from 2023-2024, including monumental equipment deployments and additional grant funding wins. Over the last year, we secured over \$36.5 million in federal and state grant funds for cargo handling equipment and infrastructure, bringing our grant funding to over \$100 million. These funds support terminal-wide efficiency to minimize truck idling and gate congestion, improve safety, reduce local and global emissions, support equity, and create jobs. We've already transitioned 67% of our conventional cargo handling equipment to electric and deployed 207 pieces of electric equipment in addition to five ongoing demonstrations. In 2023-

2024, LBCT deployed two ship-to-shore electric cranes and one rail crane to relieve wharf and rail bottlenecks. A second battery exchange building was finished this past year, establishing LBCT as the site of the world's 2 largest battery exchange buildings since the first deployment in 2016.

Through all of its equipment and infrastructure projects, LBCT maintains the highest standards for customer service. In 2023-2024, LBCT continued to have the fastest truck turn times, shortest vessel berth stays, and shortest rail dwell times of any terminal in San Pedro Bay. In addition to providing unparalleled service, LBCT made substantial progress towards environmental, social, and governance targets this year, earning a 96% GRESB score and ranking 1st among peer container ports. LBCT's unwavering commitment to environmental and community responsibility is reflected in our efforts to meet our 2030 goals. An efficient and robust goods movement economy does not need to come at the expense of the local community's clean air and public health.

Looking towards 2025, LBCT is preparing for new state and regional regulations to reduce emissions from the goods movement sector. Though we are well-positioned to meet and exceed requirements, we work closely in collaboration with regulatory, community, and industry partners to best address changing legislation and demands. With your continued engagement, we are confident that we can achieve our incredibly ambitious goal. Thank you for your support over the years, helping LBCT transform into a global model for efficient, socially responsible, and environmentally sustainable goods movement. We appreciate the partnerships that have helped us accomplish innumerable goals this year and look forward to what next year brings.

A handwritten signature in black ink, appearing to read 'Anthony Otto'.

Anthony Otto, Chief Executive Officer
Long Beach Container Terminal





Progress Report 2 2023-24

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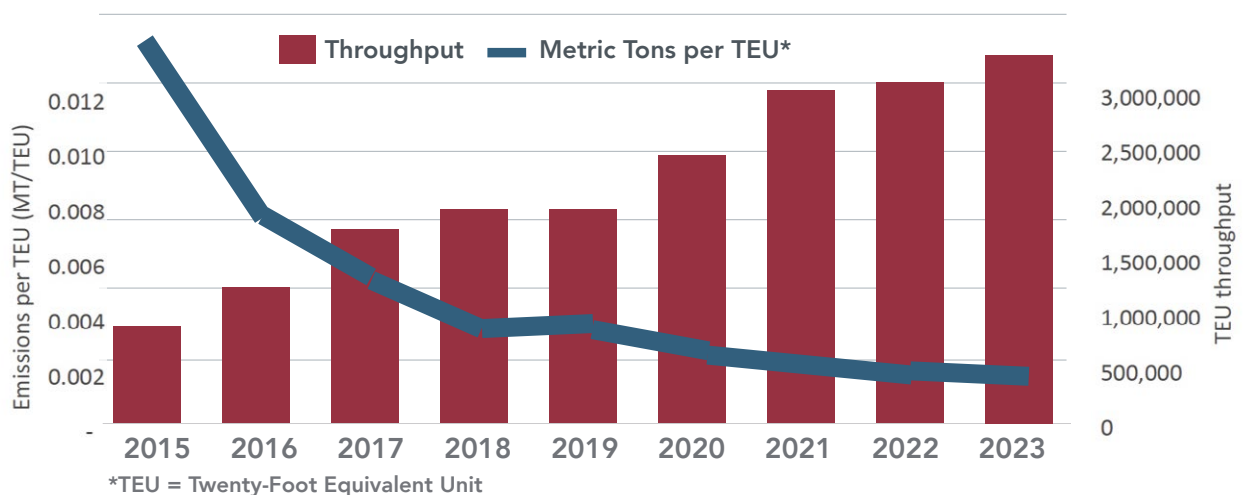
The Continued Success of LBCT's 3 Pat

Pathway 1 READINESS

Located in California, the most stringently regulated economy, LBCT boasts the lowest emissions per container worldwide. Through a combination of federal and state grants, LBCT has been awarded over \$100 million since 2022 for zero-emission (ZE) equipment and infrastructure deployments. Its fully electrified dual hoist ship-to-shore cranes, dual transaction truck lanes, electrified stacking cranes, and semi-automatic intermodal rail cranes can accommodate almost half the regular freight traffic of the Port of Long Beach. Over the next six years, **LBCT will eliminate all Scope 1 emissions.**

- To date, secured over **\$102.6 million**, including **\$36.5 million this past year** in grant funding for zero-emission cargo handling equipment (CHE), including terminal tractors (UTRs) and forklifts, and charging and fueling infrastructure
 1. **\$34.9 million** from the Federal Highway Administration Reduction of Truck Emissions at Port Facilities program to support the LBCT Electrification Advancement Project (LEAP), which directly reduces emissions by replacing fossil-fueled maintenance, management, and security vehicles, as well as work crew and touring buses. This grant is designed to reduce emissions and improve overall terminal efficiency with higher-performing technologies. Project goals include addressing safety, local air pollution and global emissions reduction, community equity and justice, workforce development, job quality, and economic productivity.
 2. **\$1.373 million** from the South Coast Air Quality Management District (SCAQMD) and California Air Resources Board (CARB) to deploy 3 UTRs and associated infrastructure.
 3. **\$273,000** from the SCAQMD for 5 IBC carts, reaching a total of 8 battery-electric IBC carts in operation.
- Deployed 2 fully electric ship-to-shore cranes and one rail crane to relieve wharf and rail bottlenecks
- Installed the world's 2nd largest battery exchange building; 1st largest was completed at LBCT in 2016.

Carbon Emissions per Container, 2015-2023



Reasons for decreased emissions in 2023

1. Scope 1 emissions are lower due to lower fuel consumption and 100% of the diesel fuel is renewable fuel
2. Biogenic emissions or emissions produced with biological processes from renewable fuel are included as part of scope 2 emissions
3. 10% reduction in Scope 1 based on fleet electrification and renewable diesel use
4. 100% reduction in Scope 2 market-based emissions due to Low Carbon Fuel Standards (LCFS), Renewable Energy Credits (RECs), and offset purchases

Year	Throughput/ TEUs*
2015	703,715
2016	986,065
2017	1,408,322
2018	1,566,091
2019	1,509,796
2020	1,954,047
2021	2,422,422
2022	2,513,901
2023	2,797,428

*TEUs = Twenty Foot Equivalent Containers -
Standard Container Metric



photo by Art Wager

Pathway 2 RESILIENCE

LBCT continues its investments in renewable energy, a lower-carbon electricity grid in partnership with Southern California Edison (SCE), and off-terminal carbon investments to eliminate Scope 2 emissions. In 2023 and 2024, SCE transitioned from 43% to 52% renewable electricity sources, advancing LBCT's goal toward a more resilient grid. As a newer terminal, LBCT was constructed to withstand increasingly severe weather and climate hazards, including high winds and rising sea levels. Investment in resilience prepares the terminal to further address Scope 3 emissions before most terminals reduce Scopes 1 and 2.

LBCT's commitment to resilience is demonstrated in the Port of Long Beach (POLB)'s Clean Air Action Plan and LBCT's Net Zero 2030 Strategy and Implementation Plan. LBCT works closely with the POLB, the City of Long Beach, Los Angeles County, and Southern California Edison (SCE) to plan for uncertainty, climate risks, and grid resilience. Microgrids are being constructed, and LBCT continues to discuss long-term grid resilience strategies. LBCT has already demonstrated that it can grow from 700,000 TEU to 2.8 million TEU without burning more fuel.

The California State Lands Commission reports that sea levels at the Port of Long Beach are expected to rise 5-24 inches by mid-century and 17-66 inches by the end of the century. In anticipation of this, the POLB enacted a Climate Adaptation and Coastal Resiliency Plan to manage direct and indirect risks related to climate change and coastal hazards. LBCT also works closely with SCE to identify and address climate risks, guided by SCE's Climate Adaptation Vulnerability Assessment.

SCE has a goal of 85% renewable energy by 2030 and a requirement to be 100% renewable by 2045. This year, LBCT met with SCE and the Edison International Board to review an extensive list of



objectives, and we came up with a detailed action item list.

LBCT participates in the High Impact Climate Collaborative, providing strategic input on broader regional challenges in the maritime industry. LBCT is laying the foundation for our regeneration pathway, which requires the most forward-thinking solutions by going through an extensive risk management effort with detailed risk registers. In the past year, we've met with innovative startups developing ways to harness green energy, deploy renewable fuels at a mass scale, and repurpose some of the Port's older oil well facilities to ensure greater resilience. These conversations will continue.

SCE's recent Climate Adaptation Vulnerability Assessment (CAVA) evaluated climate impacts to utility assets, operations and services. Through global climate model (GCM) projections, CAVA studied exposure, vulnerabilities and adaptations from hazards including temperature, precipitation, flood, drought, wildfire and sea level rise.



Pathway 3 REGENERATION

True decarbonization requires innovative solutions: new fuel sources, cutting-edge approaches to renewables and carbon offsets, and major projects incorporating zero-emissions, fuel decarbonization, and community benefits. LBCT supports ongoing green corridor work, regularly meeting with ocean carriers as they adopt dual-fuel engines. LBCT is also working with the Port of Long Beach to find bunkering solutions for clean methanol and to

support new and expanding regional truck charging. LBCT is tackling emissions from sources over which the terminal has little direct control, demonstrating its influence in industry-wide decarbonization. Staff participate actively with multi-industry groups, universities, and public agencies to advance our mutual objectives of improving the quality of life for residents surrounding Long Beach.

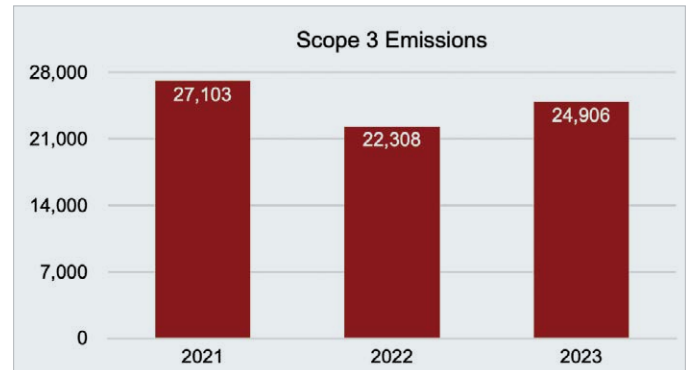
Supply Chain Partner Emissions Have Decreased by 8% since 2021

Scope 3 emissions are generated by entities not owned or operated by LBCT, such as ships, trucks, and trains, and LBCT began tracking its Scope 3 data in 2021. Scope 3 emissions make a significant impact on the wider community, and our stakeholders want to see action. Major shippers such as Walmart, Amazon, IKEA, and Nike actively seek operators who can transport their goods with less or no carbon emissions. LBCT has engaged cargo owners through forums such as Advanced Clean Transportation (ACT), Sustainable Brands, and GreenBiz/Trellis to let them know we are their best Scope 3 partner for reducing supply-chain emissions. The indirect nature of Scope 3 emissions makes it difficult to measure, but they represent 75% of total emissions across all sectors. Identification, measurement, and targeted reductions are necessary. LBCT's approach involves:

1. Identifying data sources of Scope 3 emissions through a mix of primary and modeled data
2. Identifying emissions hotspots, or business units responsible for a disproportionate amount
3. Determining emissions reduction levers, particularly in areas where LBCT holds significant influence
4. Prioritizing emissions reduction strategies based on actionability and level of impact

In 2023, ships, trucks, and trains generated 24,906 metric tons of CO₂ at berth or on LBCT's terminal. Although this is significant, it is 8% lower than our baseline year of 2021. Alternative fuels promise a cleaner future.

Scope 3 emissions depend mainly on vessel activity and the use of shore power at berth. Although the criteria pollutants are lower for Scope 3 due to cleaner vessels, trucks, and locomotive engines, these sources still depend on fossil fuel. The use of shore power by vessels at LBCT helps reduce overall Scope 3 emissions. Further, LBCT zeroed out any remaining emissions by buying renewable energy credits and high-quality carbon offsets related to steel waste recovery, ensuring 100% carbon-neutral operations for Scopes 1, 2, and now Scope 3!



2023-2024 Net Zero Achievements

Despite operational changes, LBCT maintained high performance levels in 2023-2024 and remains highly transparent through comprehensive reporting. In the first half of 2024, LBCT lost one of its services, resulting in the loss of 1 ship per week for 26 weeks. LBCT's business model only works well if all three berths are fully operational. Customers must not only demand clean operations but be willing to participate in green premiums, incentives, guaranteed volumes, and long-term contracts.

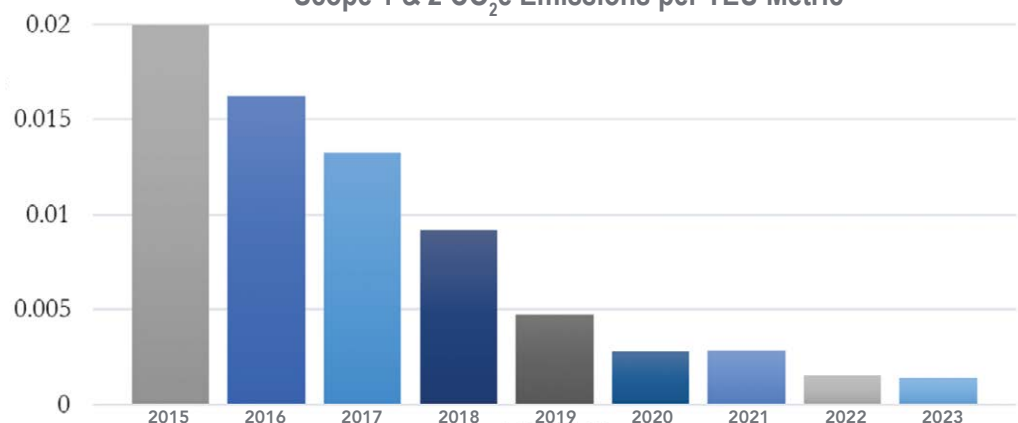
In addition to reporting Scope 1 and Scope 2 emissions and achieving Carbon Neutrality for Scope 1, LBCT calculates and invests in offsets to bring the majority of Scope 3 emissions to Carbon Neutrality. LBCT also reports to CARB and the SCAQMD every month.

LBCT's Twenty-foot Equivalent Unit (TEU) throughput increased by 10% in 2023 compared to the previous year. Despite this double-digit cargo increase, Scope 1 GHG emissions—mainly equipment and vehicles used at the terminal—only increased by 2%. Since the baseline year of 2021, Scope 1 emissions have declined 9%, and the quantity of zero-emission ECH increased by 20%. Renewable diesel, which

has a lower lifecycle carbon intensity, comprised 100% of the diesel fuel purchases in 2023 and 2024. On a per container basis, LBCT has achieved an 88% reduction in equipment-related emissions overall. Scope 1 emissions per TEU metric have reduced by 88% since 2015, while quadrupling cargo.

Our Scope 2 emissions, which reflect our electricity use, have grown 157% since 2015 (pre-transition), which is unsurprising given our investments in electric zero-emission equipment. Electricity emissions will challenge us as we continue to electrify our terminal, and depend largely on SCE's progress toward a 100% renewable grid. LBCT's commitment to Low Carbon Fuel Standard credit generation and Renewable Energy Credit investments in the Central Valley helps to keep our Scope 2 emissions in the negative zone.

Scope 1 & 2 CO₂e Emissions per TEU Metric



Did you know?

During the supply chain crisis associated with the COVID-19 pandemic, ports faced shortages of dock workers and truck drivers while over 100 ships sat off the coast of the San Pedro Bay Port Complex. If ever there was a time to prove the success of LBCT's model, it was then. LBCT received every ship on time, offloaded and loaded them on schedule, while accommodating an additional 40-50 ships.

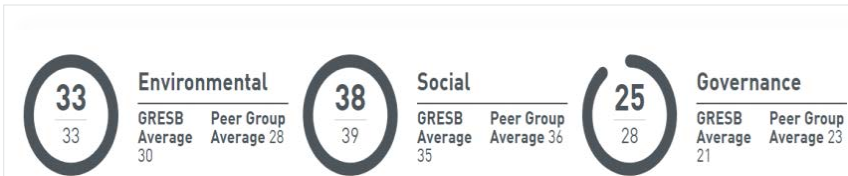
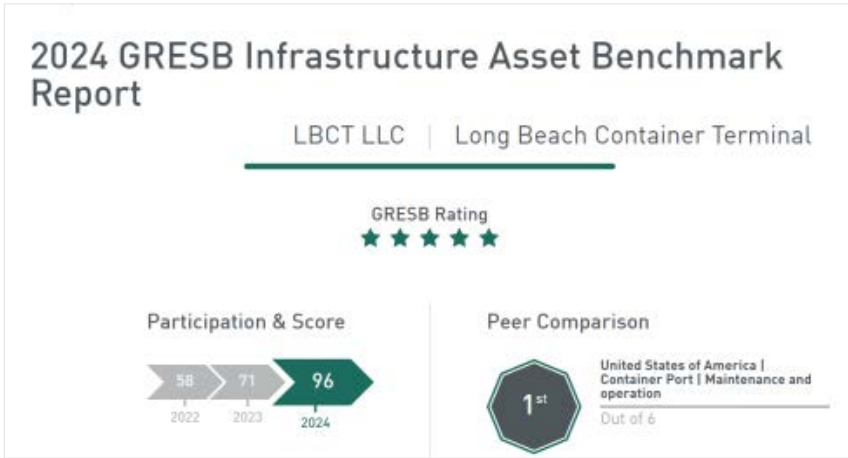


LBCT ranks #1 in Environmental, Social, & Governance Progress



G R E S B

GRESB is an independent organization that provides validated environmental, social, and governance (ESG) performance data and peer benchmarks to improve business intelligence, industry progress and engagement, and terminal decision-making. GRESB scores help LBCT assess the performance and risk of assets to identify opportunities for sustainable growth. In 2024, LBCT ranked first among other container ports, indicating performance and management well above average compared to peers in the transportation and port sectors. GRESB's monitoring and accountability push LBCT to constantly improve and report on risk metrics such as safety, air and water quality, waste, and human resource management. The insights provided by annual GRESB scores guide LBCT's approach to net-corporate commitments, demonstrating key strengths and growth in asset performance and management.



Regulatory Landscape



California Air Resources Board

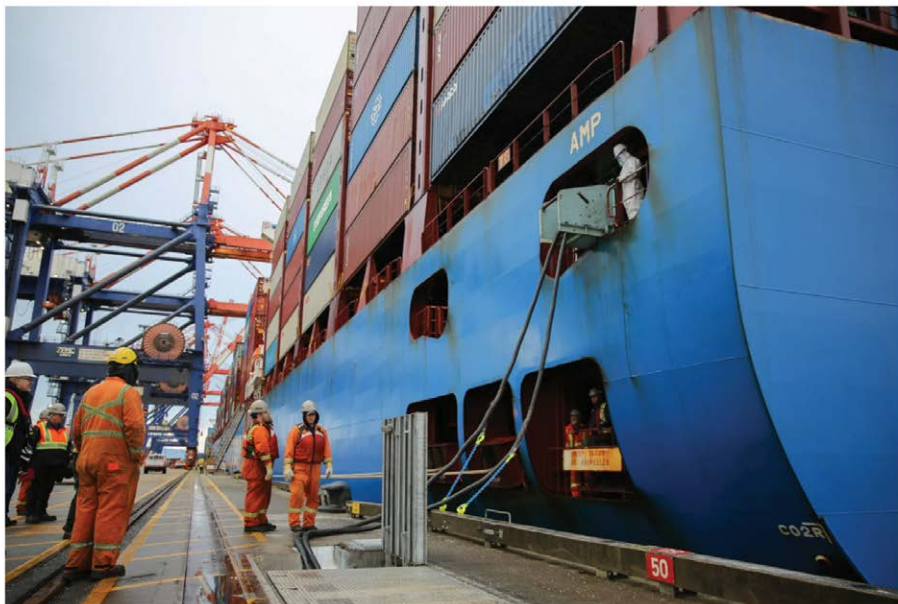
At-Berth Regulation

LBCT committed to 100% shore power usage under CA's amended At-Berth Regulation, which reduces exhaust emissions from ships while loading and unloading cargo. LBCT has required 100% shore power usage for years and is well-positioned to comply with the new requirements that began in 2023, including stricter reporting and faster connection times. The 2020 At-Berth Regulation requires operators of ocean-going vessels visiting California ports to report their vessel information to CARB within 30 calendar days of departure.

The At-Berth Regulation requires a terminal and/or vessel line to pay \$1900 per hour for each hour after the two it takes to board the ship and the one hour to depart for any minute beyond those limits. LBCT worked closely to develop safety standards, roles and responsibilities and

communication protocols with the vessel team, the maintenance team that connects the ships, the terminal resources team, the carrier lines and with potential on-call electrical vendors and experts. Today the process runs smoothly as the team communicates daily and meets monthly to review events, actions and agreements. Each month, LBCT must provide detailed reports about vessel visits, engine characteristics, and any exceptions to the regulation. LBCT agreed to the more stringent at-berth requirements even before the amended regulation came into full force, putting LBCT in a good position for ongoing negotiations with vessel lines and CARB.

The remediation fund is an additional compliance option designed to be used in specific limited circumstances. Regulated entities can apply to pay into the fund to remediate uncontrolled emissions during a vessel visit to a regulated berth as long as they made investments toward using a CARB Approved Emissions Control Strategy (CAECS) but were not able to connect due to a qualifying circumstance. The funds collected are directed toward projects that reduce emissions in port communities. In early 2024, LBCT worked in concert with the vessel lines and jointly paid in to the remediation fund twice.



Prince Rupert Port Authority

Vessel Incident Events (VIE) & Terminal Incident Events (TIE)

These are designed to provide regulated vessel fleets and terminal operators a limited number of visits where, for some reason, emissions cannot be eliminated during a regulated vessel visit. It may be due to power outages or safety. Vessel or terminal operators can use a VIE or TIE in the event that they are unable to meet the emissions reduction requirements of the At-Berth Regulation, allowing for some operational flexibility. LBCT used three TIEs in 2024, and one customer used one VIE.



Indirect Source Rule: PR 2304 Approach



Establish further NO_x emission reduction targets
Set beyond Ports' own 2023 target



No cap on port cargo volume
Ports and terminals not required to delay or turn away cargo



Facilitate investments in zero-emission ports
Stay competitive as world-class ports



Require ZE infrastructure planning and implementation
Meet federal, state, and local goals and requirements



Ports and terminals set their own plans
*Self-determine paths toward emission reduction targets**



Compliance flexibility with multiple options
Allow for technological and economic uncertainties

* Within reasonable limits and meeting plan development and approval requirements set in rule

Courtesy of AQMD

South Coast Air Quality Management District (SCAQMD) Indirect Source Rule (ISR) for Commercial Marine Ports

In 2022, the SCAQMD began a public process to develop an Indirect Source Rule (Proposed Rule 2304) to reduce air pollution from local marine ports. The rule would cap nitrogen-oxide emissions from seaports and marine terminals and set progressively more stringent emission-reduction targets leading up to 2031. AQMD fully acknowledges LBCT's ongoing commitment to clean air even as the more sensitive Marine Ports ISR is in progress. The Ports and maritime industry have voiced opposition to the rule due to the anticipated impacts of restricted goods movement and the long-term effects on port jobs and revenues. LBCT identified a potential risk for the ISR to pass emissions costs to shippers, trains, trucks, and tugs.

In August 2024, SCAQMD voted unanimously to adopt a Railyard ISR to reduce harmful pollution from trains, trucks, cargo handling equipment, and railyards. Clean air advocates are continuing to call for the adoption of the Marine Ports Indirect Source Rule. Still, in September 2024, over 200 business, labor, and agricultural organizations signed a coalition letter to urge the Mayors of Los Angeles and Long Beach to oppose the rule. The letter emphasized that planning and developing the actual infrastructure is necessary to transition to ZE technology.



Priority Actions 2023/2024

PRIORITY ACTION

1

PLANNING & PROCESSES

GOAL Operationalize net-zero equipment and infrastructure procurement/deployment into annual policy, planning, management, and budgeting processes throughout LBCT



What We Promised

- Create a cross-departmental team to integrate zero emissions across the company
- Develop a budget protocol
- Review worker training policies and meet with local training organizations
- Develop procurement policies and procedures
- Add carbon-neutral requirements to vendor contracts
- Review infrastructure development policies

What We've Done This Year

The LBCT Net Zero Leadership Team continues its work. In 2023, with the help of Carbonauts, LBCT formed 3 Net Zero Action Plan Committees to institutionalize net-zero planning at all levels: the **Terminal Operations and Fleet Management Team** (the ZEV Team), the **ESG Reporting and Metrics Team** (Heroes to Zeros), and the **Community Outreach and Workforce Education Team** (WE CANnect).

Highly motivated employees were identified for these committees. Three workshops were held beginning in January 2024 to lay out the roles, identify participants, and define goals and desired outcomes. The Carbonauts also helped LBCT create engaging social media posts throughout the year to celebrate successes, provide tips and tools, and identify local events and opportunities for employees to work, live, and play more sustainably.

LBCT's Workforce Education team has been actively establishing relationships with Harbor Occupational Center, Long Beach City College, CSU Long Beach and three local high schools: Jordan, Cabrillo and Poly. The next decade towards Net Zero promises many new jobs and opportunities for our future workforces.

A great deal of resources, time and effort were put into refining the budget and civil and electrical engineering plans. And that was just to get to 30% completion which enabled the acquisition of grants. The remaining design will take place over the next year so that infrastructure equipment purchases can begin in late 2025 and early 2026. Procurement activities including the development of Requests for Qualifications and Proposals are set to begin in late 2024 and early 2025. LBCT looks forward to working with highly capable, confident and cost-efficient partners.



Turning Challenges into Opportunities

LBCT's recent achievements ensure that we can take advantage of new funding opportunities, but infrastructure readiness and rising costs remain key challenges. First, because of the way grants are typically funded, LBCT is forced to install charging infrastructure in small deployments using a piecemeal approach. Every time LBCT breaks up the terminal to install new charging equipment, operations can be impacted and economies of scale can be lost. LBCT aims to install all of the zero-emission infrastructure at once and are actively seeking funds to help facilitate this. A related funding challenge is the disconnect between funding for infrastructure and equipment, as it is difficult to demonstrate a positive cost-benefit ratio. However, the infrastructure is necessary to connect Zero-emissions equipment.

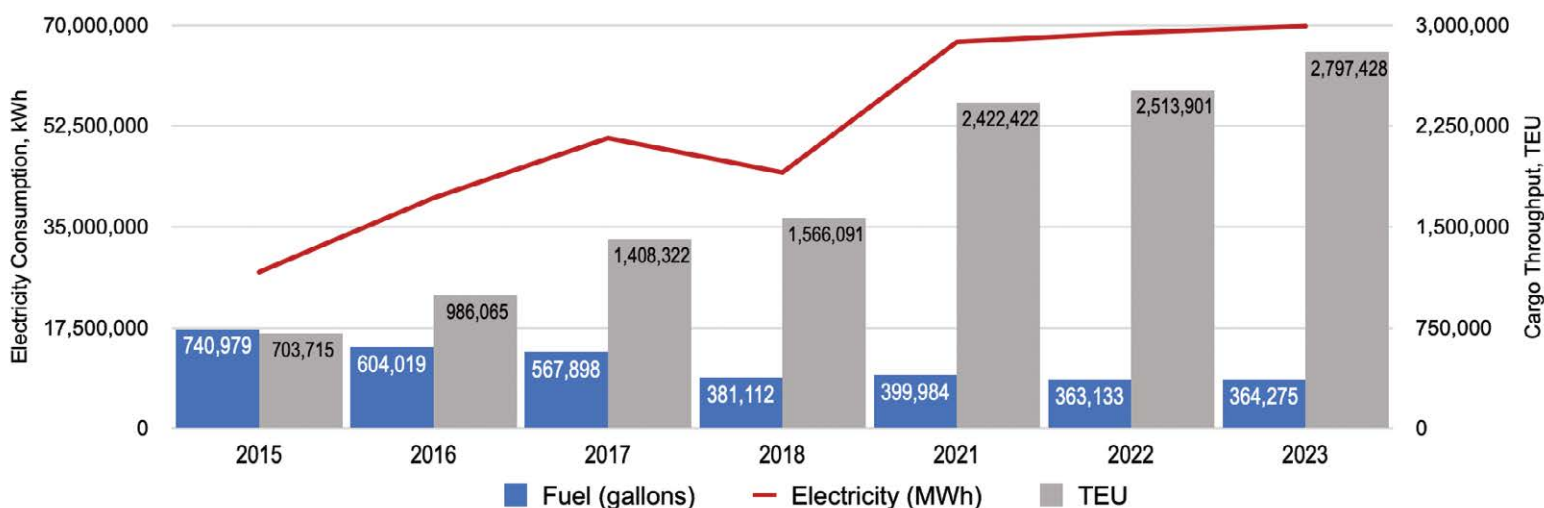
Second, equipment and materials costs are rising more dramatically than LBCT had anticipated. Price increases are driven by rising competition for zero-emission equipment, rapidly evolving charging technologies, grant-related sourcing and manufacturing requirements, availability of government grants, and inflation. This past year alone, LBCT's Net Zero 2030 costs went from \$200 million to \$250 million, a significant increase! Zero-emission equipment costs a whopping 5 to 6 times that of more traditional equipment, and it is recommended by industry experts that LBCT

consider 20-30% contingency costs without even accounting for the necessary infrastructure. Rising costs make public funding, grants, and incentives even more critical.

While LBCT's throughput has quadrupled as shown on the graph below, it is also clear that the use of electricity has increased. As stated in our resilience pathway, SCE is striving to shift most of the electricity it provides to renewable, and the Port of Long Beach will benefit from this strong partnership. The relationship between the Port of Long Beach and LBCT is critical to short and long term success, and all the stakeholders are looking to both leaders to ultimately benefit goods movement growth, financial sustainability and protection of public health. LBCT is also speaking to multiple energy partners to look at ways to produce and store greater levels of energy over the coming decades. As alternative fuels and battery chemistry evolve, so will the opportunities to reach net zero.



2015-2023 Fuel, Electricity, and TEU Throughput



LBCT NZ 2030 PLAN: EQUIPMENT DEPLOYMENT





EQUIPMENT, FACILITIES, & INFRASTRUCTURE

GOAL Convert fossil-fueled equipment and vehicles to zero emissions over the next 5 to 7 years and ensure sufficient infrastructure to support the goal



What We Promised

- Develop a 5 to 7 year equipment plan to replace fossil-fueled equipment and vehicles
- Develop engineering design drawings, construction schedules, and cost estimates
- Conduct annual technology feasibility assessments
- Pursue all available state and federal grants for CHE & non-CHE
- Participate in technology demonstrations
- Require supply chain partners to transition to ZEV
- Install additional solar installations
- Explore new on-site power generation projects to reduce dependence on the grid and reduce Scope 2 emissions
- Conduct an energy audit every three years

What We've Done This Year

LBCT's master infrastructure design plan and equipment replacement plan were initially estimated to cost \$200 million. LBCT continues to work with innovative technology developers, including Orange EV, Mafi, Gaussin, and Heliox, to accelerate the advancement of zero-emissions terminal equipment and creative charging solutions. Last year, LBCT conducted an energy audit to identify and address facility energy loads. As LBCT revised and refined the infrastructure master plan in the face of new challenges and rising costs, this year provided many opportunities to advance efforts, which is most evident in LBCT's many grant proposals and successful awards.

In 2025, the ZEV Team expects to go into full swing with further equipment demonstrations, documenting terminal equipment opportunities and challenges while working closely with the workforce to ensure buy-in. Eventually, training materials will be developed by the equipment manufacturers as all the cargo handling equipment will remain human-operated.

Equipment under demonstration in 2023 and 2024



Orange EV Yard Tractor



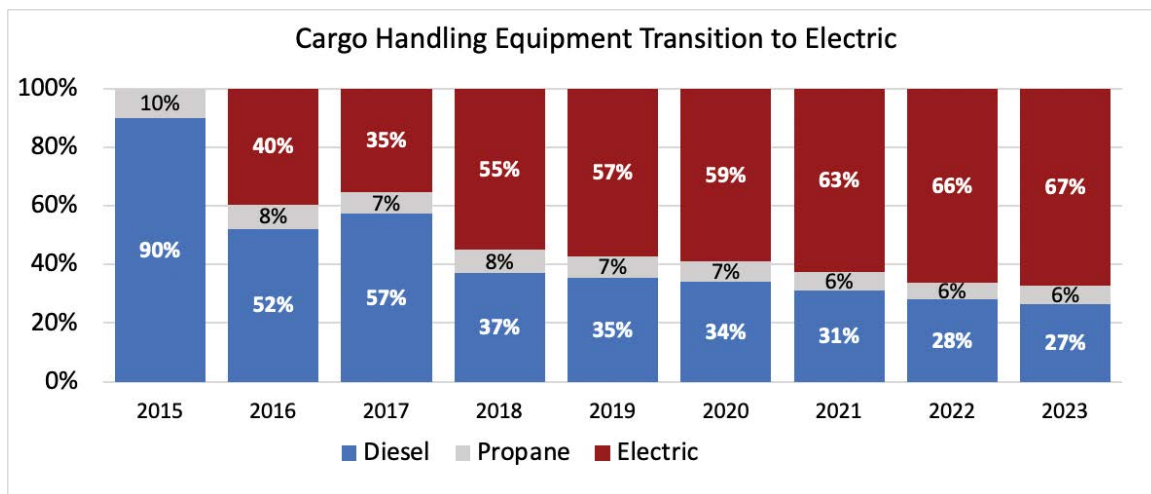
Heliox Charger



Mafi Yard Tractor

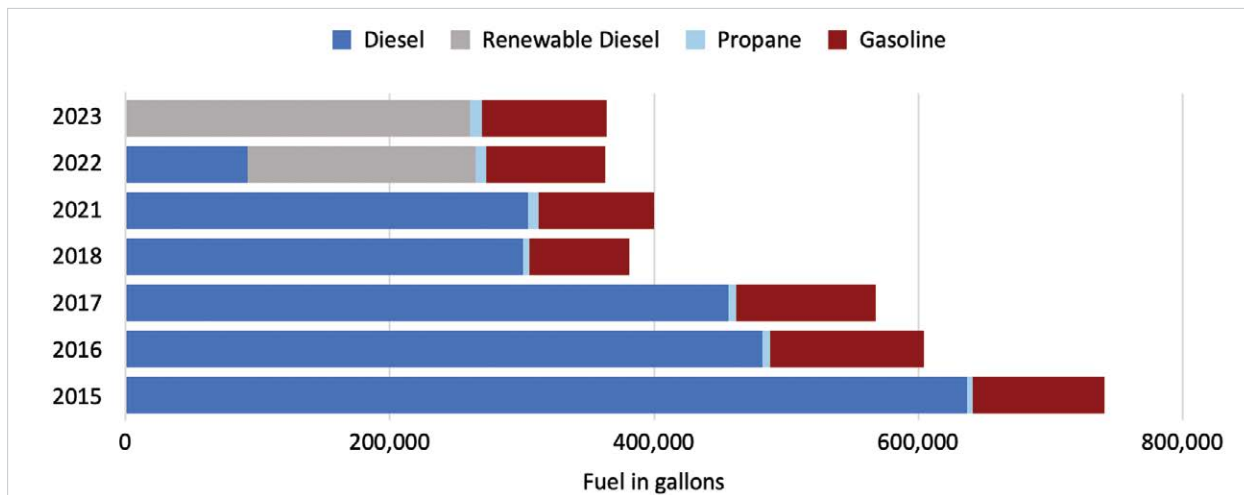


Gaussin Yard Tractor

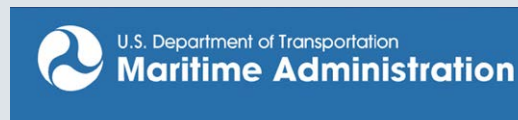


LBCT has transitioned 67% of its conventional CHE. All of the ZE CHE is battery-powered, with direct electric connections for cranes and electric charging stations for mobile equipment. Equipment deployments have achieved exceptional operational performance and reliability, with an overall reduction in maintenance intervals.

To date, LBCT has invested over \$1 billion into terminal ZE CHE, but an additional \$250 million is necessary to replace the remaining diesel, propane, and gasoline-powered vehicles. Much of the grant money also presupposes or envisions that the equipment be BABA compliant which means that it is built and bought in America. This remains a challenge as the US has drastically outsourced activities like mining and manufacturing to a great extent over the last 3 to 4 decades. Bringing it back will take some time. LBCT will put all and every effort into partnering with US equipment manufacturers, electrical and construction companies.



Grant funding organizations



U.S. Department of Transportation
Federal Highway Administration

FUNDING & ADVOCACY

GOAL Support supply chain partners in the systemwide transition to Net Zero through policy advocacy; secure grant funds to offset LBCT's own risk as an early actor



U.S. Department
of Transportation

**Federal Highway
Administration**

We thank our local, state, and federal legislators for their support.

 **CONGRESSMAN
ROBERT GARCIA**

 **SENATE MAJORITY LEADER
LENA A. GONZALEZ**
REPRESENTING SENATE DISTRICT 33

 **JOSH LOWENTHAL**
Assemblymember, 69th District

What We Promised

- Develop a 5-year funding strategy identifying potential projects and funding sources
- Actively engage the POLB to seek grants on LBCT's behalf
- Advocate for grants from state and federal agencies
- Educate regulatory agencies on the impacts of proposed laws
- Support customers and vendors in complying with regulations

What We've Done This Year

LBCT has continuously updated the Net Zero 2030 Master Plan and applied for several significant grants to fund the remaining \$150M of necessary improvements, including an \$74M request to the Environmental Protection Agency, \$62M to SCAQMD Carl Moyer, \$22M to the California Transportation Commission's Trade Corridor Enhancement Program and, \$25M to the US Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity (RAISE) program.

Creating the nation's first net zero emission terminal requires an incredible investment, and knowing that the price tag has gone up significantly, we recognize that we cannot do it ourselves. **In the past year, we received over \$36.5 million in grants:**

- **\$34.9 million** from the Federal Highway Administration Reduction of Truck Emissions at Port Facilities program
- **\$1.25 million** from the South Coast Air Quality Management District
- **\$396,000** from the CARB Clean Off-Road Equipment Voucher Incentive Project (CORE)

But we still have a large gap to close. Price increases caused significant shortfalls on two grants. Such price increases often occur during the extended period of negotiations and contracting between award announcements and actual project start dates. Though many grants were awarded and some are still pending, others were unsuccessful. LBCT needs public funding to complete all the necessary zero-emission infrastructure at one time, ensuring a complete transition to net-zero emissions by 2030. The funds also would allow us to convert every remaining vehicle and piece of equipment – from the maintenance trucks to the shuttle buses that transport dockworkers – to zero emissions.

We continue to work with our legislators to create funding opportunities. Over this past year, LBCT has met with countless elected officials in Long Beach, Sacramento, and Washington, DC, to rally support for our ambitious environmental goals. Our success would demonstrate that cleaner, more efficient goods movement is possible for every seaport across the world.



PRIORITY ACTION

4

COMMUNITY RESPONSIBILITY

GOAL Effectively integrate community considerations into LBCT climate actions



What We Promised

- Evaluate specific community Net Zero projects
- Develop a 305-acre watershed management program
- Partner with the City, County and the Port of Long Beach to support the local community and ecosystems
- Explore ways to prioritize education, workforce development, and jobs
- Consider wind and tidal projects, other renewable electricity projects, and offsets

What We've Done This Year

To organize our efforts, our employees have established a **Workforce Education and Community Action Network (WE CANnect)**. This committee is working to further our community responsibility and stewardship goals as it seeks opportunities for LBCT to be involved in local causes. Through this fulfilling and impactful network, employees have opportunities to participate in numerous activities involving the local schools, rescue missions and community of West Long Beach like food banks, donations, mentorship for our youth, beach cleanups, and backpack giveaways.



Community Engagement

Local High School/College Students

In 2023, LBCT became a major sponsor of the Port of Long Beach Women in Trade Luncheon, which connects students with strong female leaders in global trade and logistics. This event led LBCT partnering with Cabrillo High School's Academy of Global Logistics (AGL) and Jordan High School's Architecture, Construction and Engineering (ACE) Pathways. LBCT prioritized these educational partnerships, providing mentors an advisory board presence, and terminal tours for the upperclassmen. This also educates them about career opportunities available through training, internships and apprenticeships.

For the 8th year in a row, LBCT invested in local students by providing funds for the Oceans of Opportunity scholarships. LBCT also sponsored Orange Coast College and the Aquarium of the Pacific's Ocean Conservation and Community Science dual enrollment course. The class was invited to a guest lecture/presentation at LBCT highlighting the impact of the global shipping industry on the world's oceans. Finally, LBCT provided a guest lecturer for CSULB's ITE students this year and is open to doing many more tours and presentations for students in 2025.





Children Today

LBCT's employees are passionate about their relationship with the nonprofit organization Children Today. Through this partnership, they conducted a "Day of Service" where LBCT provided assistance for a number of facility maintenance projects, sponsored their Annual Holiday Store, and provided backpacks and school supplies for their graduating preschool students.



The Local Hearts Foundation

As a regular partner of this West Long Beach nonprofit, LBCT became a major sponsor of the annual Turkey Giveaway last Thanksgiving and followed that up with a sponsorship for their Holiday Toy Drive, School Supply and Back Pack Drive. These events are life changing for attendees, and we continue to find ways of improving Port-impacted neighborhoods.



Strategic Outreach Plan

LBCT's Strategic Outreach Plan was developed to help incorporate stakeholder considerations into planning, reporting, and actions. It provides a framework for the development of educational materials, identification of stakeholder partners, opportunities for two-way engagement, digital communication tools for stakeholders and the public, and plans for terminal tours and other engagement mechanisms. The plan also outlines the direction and utilization of LBCT's resources to ensure an effective outreach strategy. LBCT is actively conducting a six-year outreach campaign to educate stakeholders and the public about LBCT's commitment to safety, leadership, and climate actions, focusing on environmental justice while bringing awareness to LBCT's role in adaptation and climate resilience.



Environmental Leadership

Outside of education, LBCT continues to build on its partnership with the City of Long Beach Parks, Recreation and Marine Department. For the second year, LBCT sponsored the California Coastal Cleanup event in Long Beach and this year became



a major sponsor of the Earth Day Beach Clean Up. Through its relationship with the City of Long Beach, LBCT was introduced to the Friends of LA River advocacy group and sponsored the 2024 Great LA River Clean Up event.

LBCT also connected with the Conservation Corps of Long Beach to discuss potential opportunities to support sustainable projects throughout the city, thereby providing educational employment for local youth. In summer 2024, LBCT became a sponsor of the Conservation Corps annual fundraiser event "Dine on Pine."

LBCT presented to conferences across the world, from the **TOC Europe Conference** in Rotterdam, to the **National Association of Waterfront Employers Conference** in Vancouver, to **Accelerate Change Together (ACT)** in Las Vegas. The Port of Long Beach even asked LBCT to represent the region and its progress at the **Tri-State Commission** (California, Oregon and Washington) in Eugene, Oregon in September of 2023.



USGBC CA
U.S. GREEN BUILDING COUNCIL CALIFORNIA

LBCT is recognized as a global leader in environmentally sustainable goods movement. Not only was its leadership invited to the White House to provide input on how the administration can better support net zero transitions, but the prestigious **Sustainable Innovation Project of the Year** was awarded to LBCT in 2023 by the U.S. Green Building Council in Los Angeles.

Protecting Blue Whales & Blue Skies

All of LBCT's customers participate in the Protecting Blue Whales and Blue Skies program to reduce the risk of ship strikes by maintaining vessel speeds of 10 knots or less in Vessel Speed Reduction (VSR) zones. Shipping companies enrolled in the program are monitored to ensure compliance within VSR zones. These efforts help protect whales while reducing underwater noise, air pollution, and greenhouse gas emissions.



Labor Partnerships

LBCT maintains strong partnerships with waterfront labor and other union partners, as demonstrated by the long-term contract agreement with the International Longshore and Warehouse Union (ILWU), signed in 2023. LBCT cultivates trust among labor partners, with a commitment to training and upskilling the workforce to prepare for a zero-emission future. LBCT ensures that new zero-emission terminal equipment is human-operated and built by American manufacturers. Further, LBCT's grant agreements provide for much of the infrastructure to be installed by members of the International Brotherhood of Electrical Workers (IBEW).

LBCT provides comprehensive, innovative, and effective training opportunities for its workforce, preparing them to install and operate zero-emission equipment. LBCT partners with the Ports of Long Beach and Los Angeles on various workforce initiatives, including the joint Goods Movement Training Campus. LBCT's WeCANnect committee is continuing to implement a series of workshops to "upskill" employees.



photos this page courtesy of the Port of Long Beach

LBCT Tours and Media Coverage

LBCT's terminal tours provide an overview of yard and gate processes, rail yard operations, battery exchange operations, ship-to-shore cranes, shore power, relevant regulations, and more. Many presentations and tours were given in 2023/2024 to various customers and industry organizations, agencies,



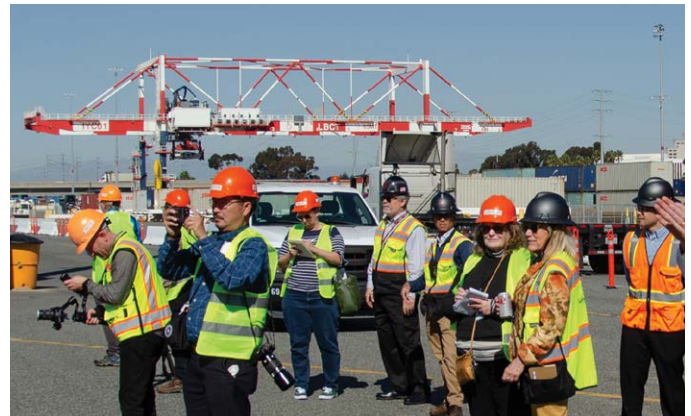
community groups, elected officials, and the media. LBCT hosted meetings and tours for many environmental and neighborhood groups, including the Los Angeles Chapter of the United States Green Building Council. LBCT also partnered with the City of Long Beach's Parks, Recreation and Marine department to bring a Senior Citizens group from Houghton Park on a tour.

Visits were made by numerous federal, state, and regional agencies including the US Environmental Protection Agency, US Department of Transportation, US Department of Energy, US Coast Guard, CA Energy Commission, CA Department of Transportation, CARB, and SCAQMD.

On April 12, CCA held its inaugural Solutions Tour at LBCT. It also visited zero-emissions battery-electric yard tractors at SSA Marine Terminals and the battery-electric truck ride-along at WattEV with trucks made by Nicola, Volvo, Freightliner, and RIDE. Each stop showcased tangible progress towards cleaner air and opportunities to reduce port emissions.



LBCT was also a sponsor of CCA's annual **Toast to Clearing the Air** event.



courtesy of CCA





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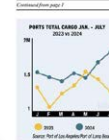
Port of Long Beach terminal earns top sustainable award

By **DONNA LITTLEJOHN** | dlittlejohn@scng.com | Daily Breeze
PUBLISHED: December 11, 2023 at 11:52 AM PST

The Long Beach Container Terminal was recently named "Project of the Year" during the U.S. Green Building Council-Los Angeles' Sustainable Innovation Awards.



Ports: Local Facilities Report Record July Numbers



Bloomberg

Economics **Port of Long Beach Smashes All-Time Record With October Surge**



The LBCT container terminal at the Port of Long Beach in Long Beach, California. Photographer: Lauren Justice/Bloomberg

By [Laura Curtis](#)
November 14, 2024 at 1:57 PM EST

LONG BEACH
BUSINESS JOURNAL

As cargo volumes boom, Port of Long Beach has its busiest month ever

[illegible]

Looking Ahead

LBCT's astounding progress toward zero-emission operations in 2023-2024 demonstrates the terminal's unwavering commitment to 2030 goals. Key challenges remaining include the availability of equipment, the ability to test resiliency, the risk of early-generation deployments coupled with rapid technology development, charging management, workforce training and engagement, grant management complexities, and concerns over long-term reliability.

2025 promises to be an exciting year. After releasing several Requests for Proposals, LBCT anticipates bringing on short- and long-term partners to help meet its Net Zero ambitions. There have been successful yard tractor deployments with a commitment to testing many more technologies and vehicles. Federal and state grants are crucial in meeting implementation challenges.

LBCT will continue to work with its regulatory partners to minimize community impacts while supporting a strong goods movement sector. SCE's progress toward a renewable grid will be monitored, and LBCT will seek other ways to generate cleaner and more sustainable energy on its terminal.

Most importantly, LBCT will continue cultivating even more customer, industry, regulatory, and community partnerships. Let's ensure that our world-class terminal is full all year long with shipping lines and cargo owners that care about clean air coupled with high productivity, and know how to reward partners like us who have and will continue to make significant investment in people, planet and profit. When LBCT achieves its 2030 net-zero emissions goal, we all succeed.

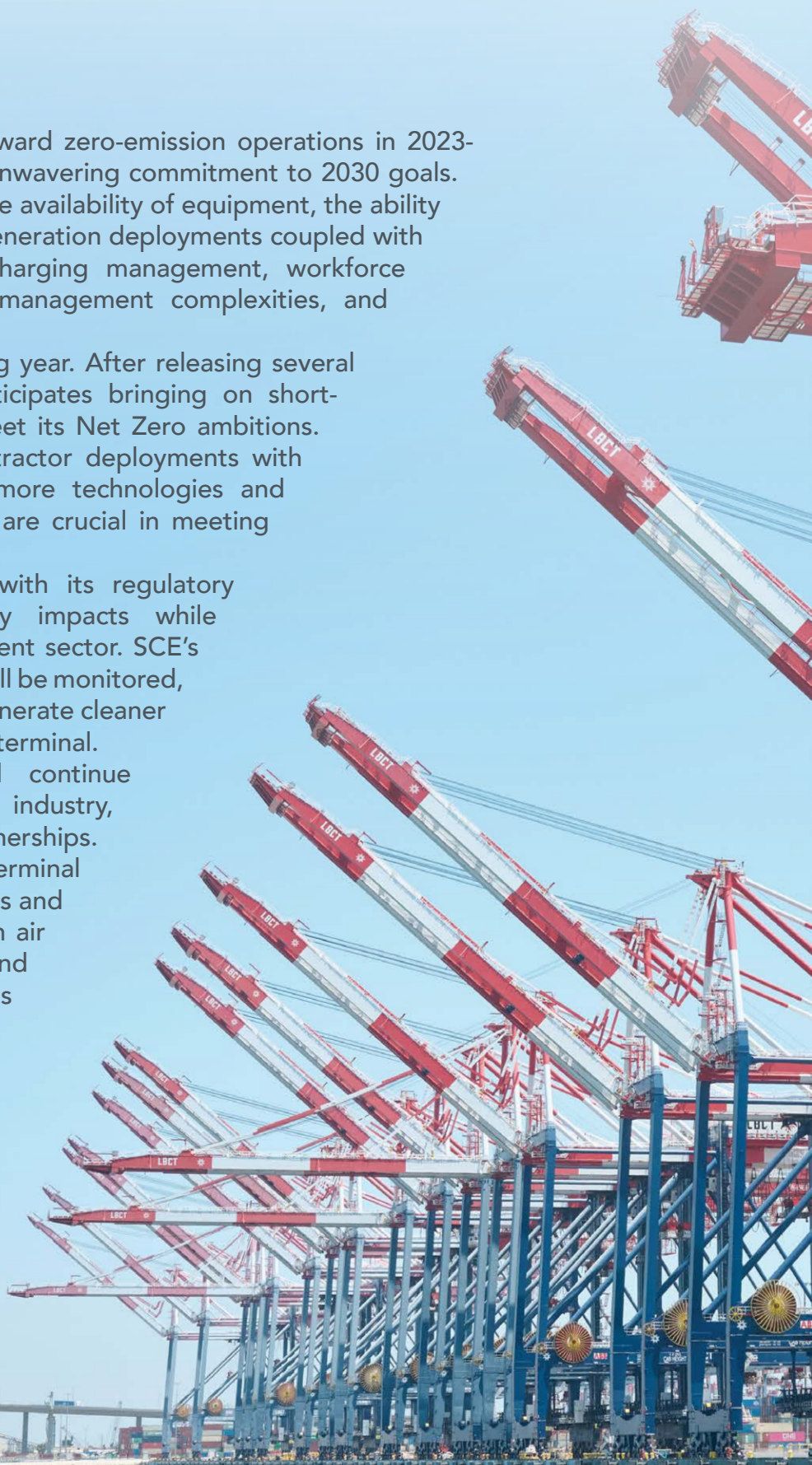




photo by Otto Mejia

Get the Full Story

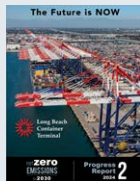
Each year LBCT demonstrates progress achieved, highlights its wins and opportunities, while transparently presenting challenges.



In 2022 LBCT published the Net Zero 2030 Strategy summarizing activities from 2016 through 2021.



In 2023, LBCT published Progress Report 1 highlighting its 2022/2023 activities towards Net Zero 2030.



In this Progress Report 2, LBCT summarizes priority actions taken in 2023/2024 to continue the journey to Net Zero 2030.



**Long Beach
Container
Terminal**

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photo by Windzephyr