



Carrix/SSA Marine

*Net-Zero Port Operations: Key
Operational Strategies*

August 2026



Agenda

Carrix/SSA Marine Introduction

Progress to Date – GHG Emissions

Decarbonization Approach

- Operational sustainability strategies

Key Takeaways

Next Steps



Carrix

One of the world's largest independent marine and intermodal terminal operators including SSA Marine, Rail Management Services, and Tideworks

SSA Marine

Container

- 21 long-term leases and concessions and 6 container stevedoring terminal operations
- Advanced technologies at marine terminals for easy sorting, wheeled operations, ASCs and RTGs

Conventional

- Over 55 locations, including leases and concessions, across U.S. and Canadian coasts and waterways
- Capable of handling virtually every type of dry cargo (e.g., forest products, grain, steel, fruit, pulp, mineral ores, automobiles, heavy machinery, project cargo, yachts, etc.)

Cruise

- The leading cruise terminal operator and service provider in North America, serving 24 locations (U.S., CA, MX)
- Services include stevedoring, maintenance, operations, design & construction, ground handling and transportation services, port agency, and port & terminal management

Rail Management Services

- 62 U.S. intermodal rail facilities with Rail Management Services (RMS)
- Auto handling, chassis, on-dock rail, line handling, and equipment wholesale supply to Carrix facilities



76

years in operation

20,000+

employees

28.5M

marine TEUs

2.6M

automobiles

42M

tons conventional
cargo

17.1M

intermodal TEUs

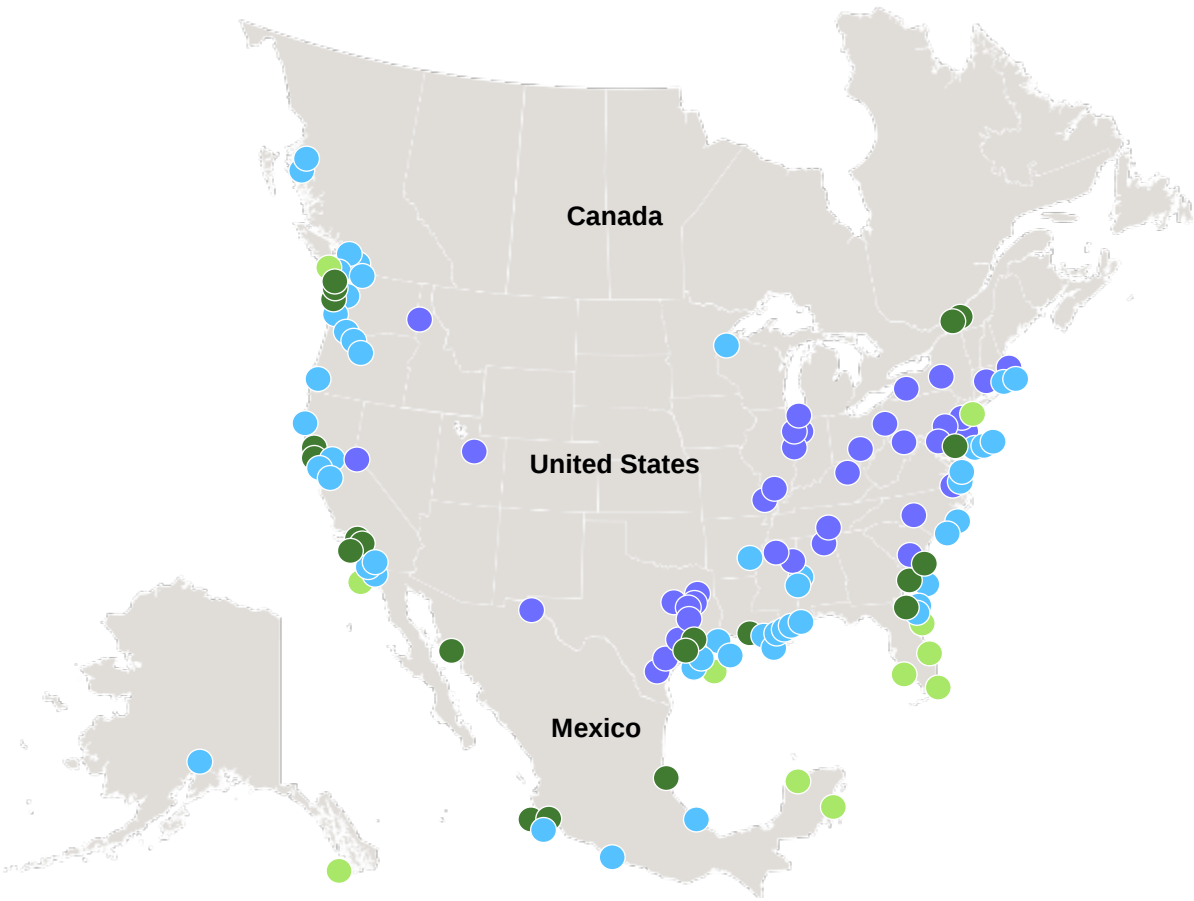
29M

cruise passengers

Carrix Operating Locations

All Divisions

North America



Central & South America



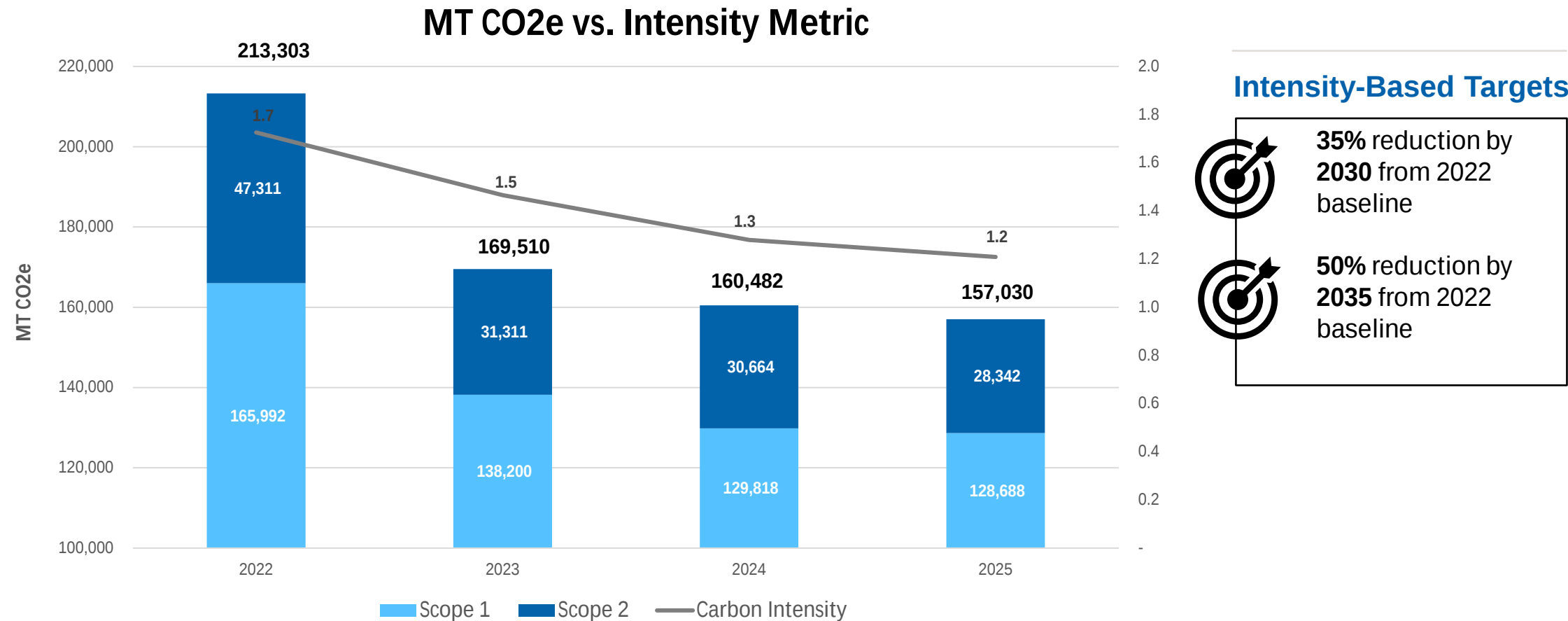
Asia



- SSA Marine Container
- SSA Marine Cruise
- SSA Marine Conventional
- RMS Rail Operations

Progress to Date

Carrix has made significant progress towards its short- and medium-term targets, achieving a **30% reduction** in GHG emissions in 2025 on an intensity-basis from 2022 baseline.



1) Total Scope 1 and 2 (market-based) using Carrix's operational control boundary in 2025. CO₂e is the carbon equivalent metric to equate emissions across sources

2) Includes rebaselined data from updated 2022-2025 emissions inventory

3) Intensity Metric: The amount of carbon dioxide (CO₂) emissions in **pounds of CO₂**, per unit of throughput in metric tons at each facility under operational control



Operational Sustainability Strategies

Carrix has identified **8** Sustainability Operational Strategies that play a **key role** in driving emissions reductions, as well as other operational, financial, and collaborative co-benefits.



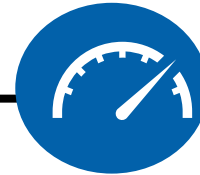
**Electrification of
CHE**



Renewable Fuels



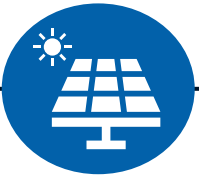
**Electrification of
Terminal Vehicles**



**Engine
Efficiency**



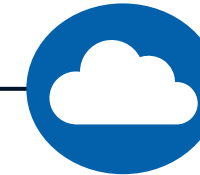
**Off-Site
Renewables**



On-Site Solar



LED Upgrades



Hydrogen



Electrification of CHE and Terminal Vehicles

Carrix has deployed **225+** units of low- and zero-emissions vehicles and cargo handling equipment to support terminal electrification and emission reduction efforts.

Funding & Strategy

- **\$300M+** secured in federal and state grant funding
- Charging infrastructure expansion underway across terminals
- Pilot programs supporting scalable equipment deployment
- LCFS revenue helping fund infrastructure investments

Operational Challenges

- Limited utility power and terminal electrical capacity
- Significant infrastructure and charging upgrades required
- Charging logistics and space constraints at active terminals
- Evolving battery performance and operational reliability

Key Lessons Learned

- Grant funding and utility coordination are critical
- Infrastructure planning must align with equipment deployment
- Pilot programs and mobile charging reduce implementation risk



Closing & Next Steps

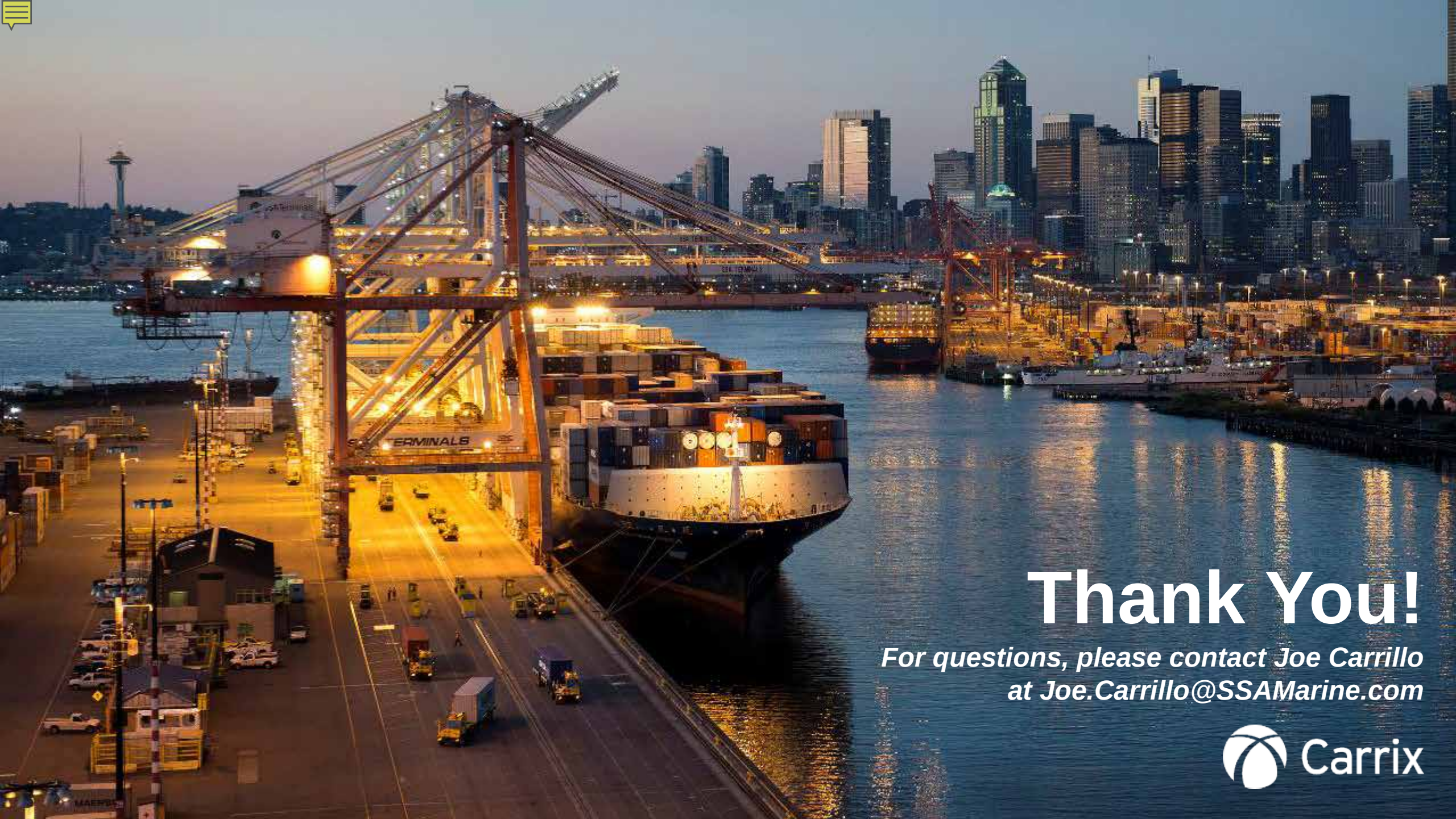
Key Takeaways

- Operational sustainability strategies are delivering measurable reductions
- Decarbonization must align with operational realities
- No single solution solves terminal emissions alone
- Practical implementation drives long-term progress

Looking Ahead – Future Decarbonization Priorities

- **EV pilot projects** | *EPA Clean Ports; Light-duty EV charging program*
- **Panama electrification pilots** | *STS cranes and terminal under evaluation*
- **Renewable energy procurement** | *RECs / PPAs*
- **Renewable Fuel transition** | *Focus on markets with viable supply*
- **Expanded solar deployment** | *Three Mexico sites operational in 2026 and identify California opportunities*





Thank You!

*For questions, please contact Joe Carrillo
at Joe.Carrillo@SSAMarine.com*

