



PORT HOUSTON AIR QUALITY INITIATIVES

Mustapha Beydoun 2026 Houston Regional Air Quality Summit October 8, 2026



HOUSTON'S PORT

A SCALE LIKE NO OTHER



**309.5 MILLION
TOTAL TONNAGE**

**#5 CONTAINER
PORT IN THE U.S.**

HOUSTON'S PORT IS #1:

#1 Export state

#1 In exports of Petroleum
and Petroleum Products

#1 In resin exports, with 62%
market share

#1 Container port in the
U.S. Gulf Coast

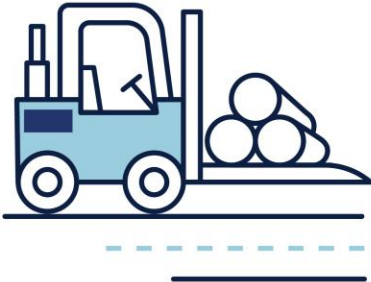
#1 In deep water vessel traffic

#1 Port in the U.S.



MORE THAN
**161 MILLION
CONSUMERS**
WITHIN 1,000 MILES

#1 IN STEEL
IN THE U.S.



HANDLES
75% OF CONTAINERS
IN U.S. GULF

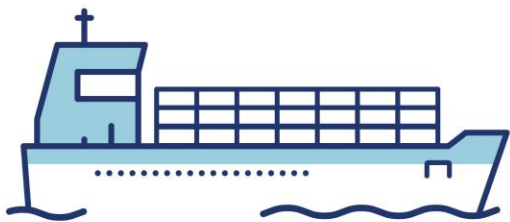


MORE THAN
8,000
DEEP DRAFT SHIP CALLS ANNUALLY

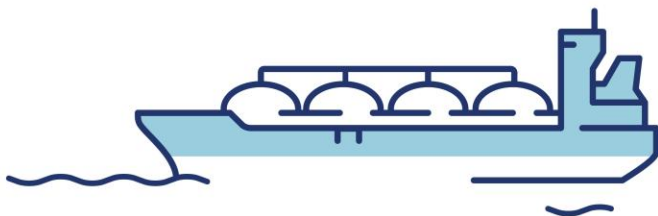


MORE THAN
200,000
BARGE TRANSITS ANNUALLY

A TYPICAL DAY ON THE HOUSTON SHIP CHANNEL



65 | SHIP TRANSITS



171 | FERRY TRANSITS



28 | OSV TRANSITS



381 | TOW TRANSITS



70 SHIPS IN PORT

645 TRANSITS

HOUSTON SHIP CHANNEL:

A FEDERAL WATERWAY



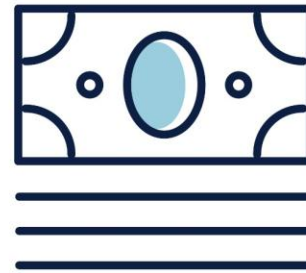
**1.89
MILLION**

JOBS IN TEXAS



**3.53
MILLION**

JOBS NATIONWIDE



**\$538
BILLION**

ECONOMIC IMPACT
IN TEXAS



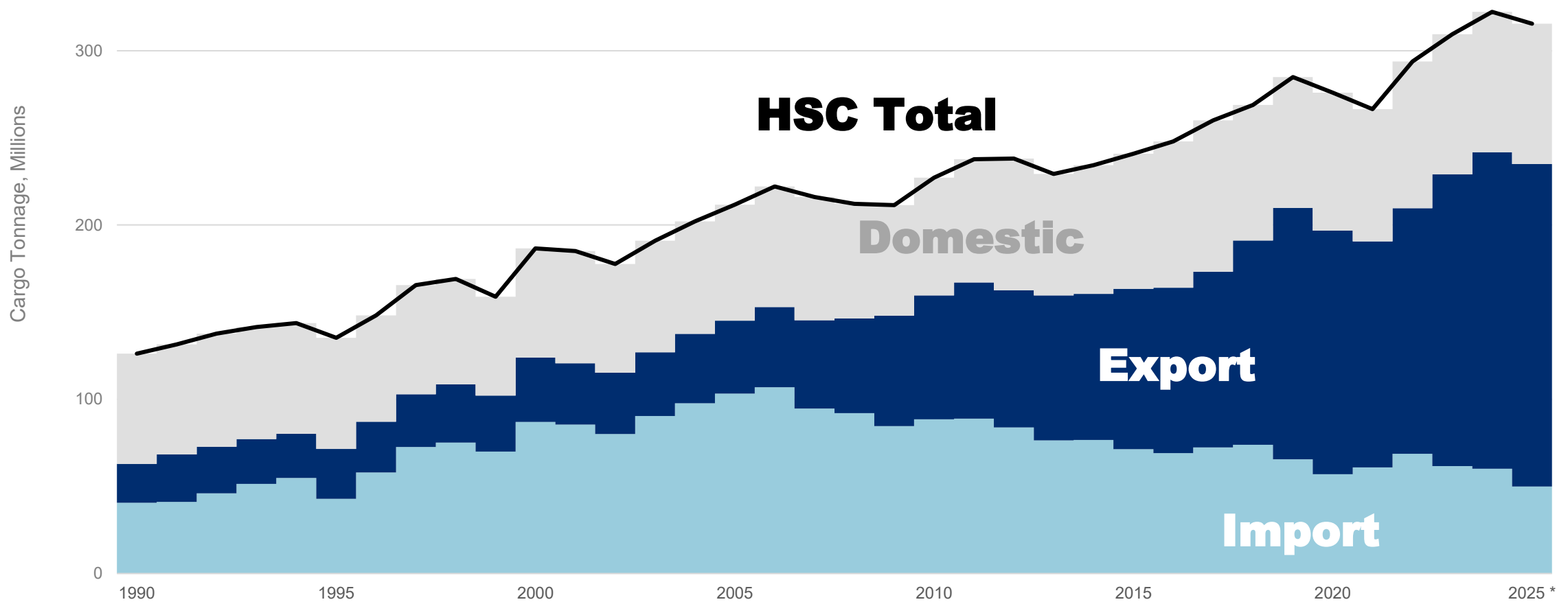
**\$987
BILLION**

ECONOMIC IMPACT
ACROSS THE U.S.

Note: Data sourced from 2022 Port Houston Economic Impact Report

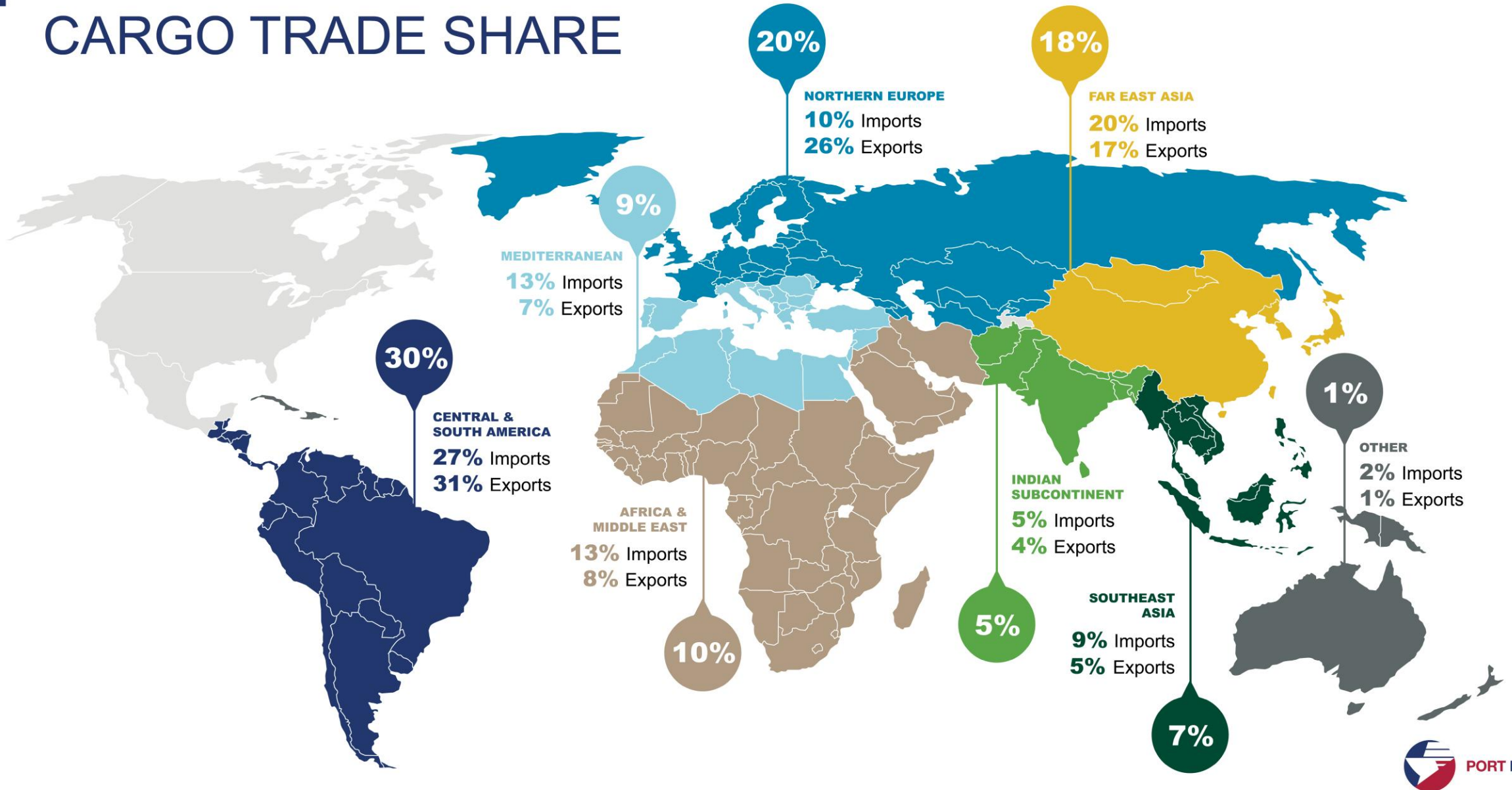
HOUSTON SHIP CHANNEL TONNAGE

1990-PRESENT



Note: 2024/2025 tonnage is estimated

HOUSTON SHIP CHANNEL: CARGO TRADE SHARE



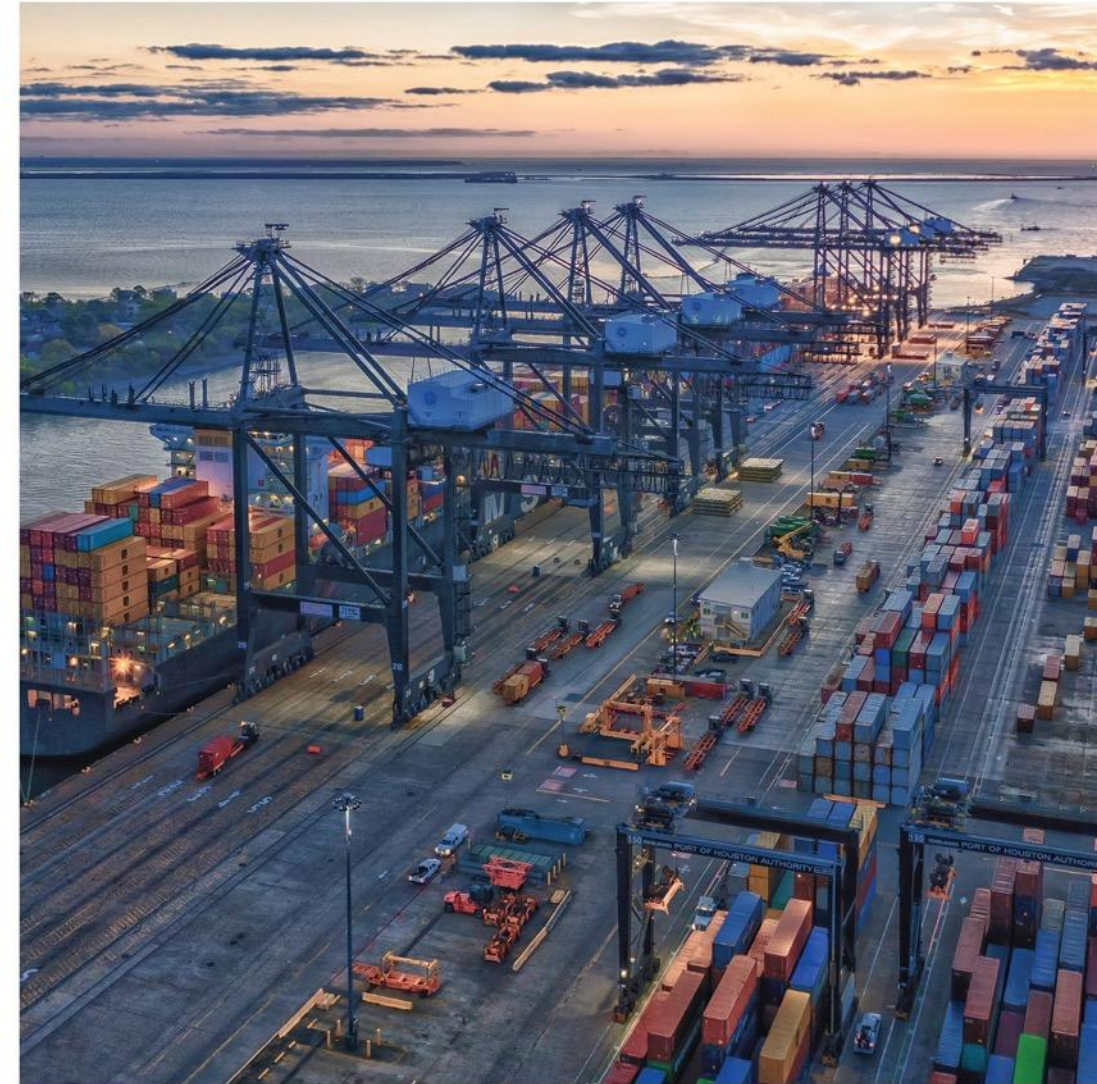
OUR TERMINALS



BIG GROWTH = BIG OPPORTUNITIES

Investment of \$2.4B in the past five years

- Construction of additional wharf space
- Added container storage space
- Expansion of Barbour's Cut entrance
- Improved traffic flow
- New Rubber-Tired Gantry cranes
- New STS cranes
- Houston Ship Channel Expansion — Project 11



PROJECT 11

PORT HOUSTON SEGMENTS COMPLETE

- Widening of the Galveston Bay reach from 530 feet to 700 feet
- Completed segments from Bolivar Roads to Morgans Point
- 15,000 – 17,000 TEU vessels can call at Bayport Container Terminal
- Additional segments led by USACE



| **PILLARS FOR FREIGHT EFFICIENCY**

GATES

- New software
- Reservation system
- Expanded hours



| **PILLARS FOR FREIGHT EFFICIENCY**

ROADWAYS

- Prioritize regional expansion of freight corridors
- Most critical issue for freight movement today

Nearly 99% of containers are moved via truck and we are anticipating container volumes will double within the next decade.

Roadways must have capacity to meet future needs.





INVESTING FOR THE FUTURE

**Increase capacity by investing \$2.1B
landside in public facilities over the
next 5 years**

- Wharves at Bayport Container Terminal
- Ship to shore (STS) cranes
- Rubber-Tired Gantry (RTG) cranes
- Additional container yards
- Rehabilitation of wharves and yards
- Redevelopment of general cargo and breakbulk docks

| TERMINAL EXPANSION



**Bayport Container
Terminal can
accommodate
5 ships at once.**

| ENERGY USE

- Since 2020, a **100% renewable electricity** agreement has powered all terminals
 - About 55k MWh/year
- More than 600 vehicles
- We use about 1.7 million gallons of diesel and almost 500k gallons of gasoline per year

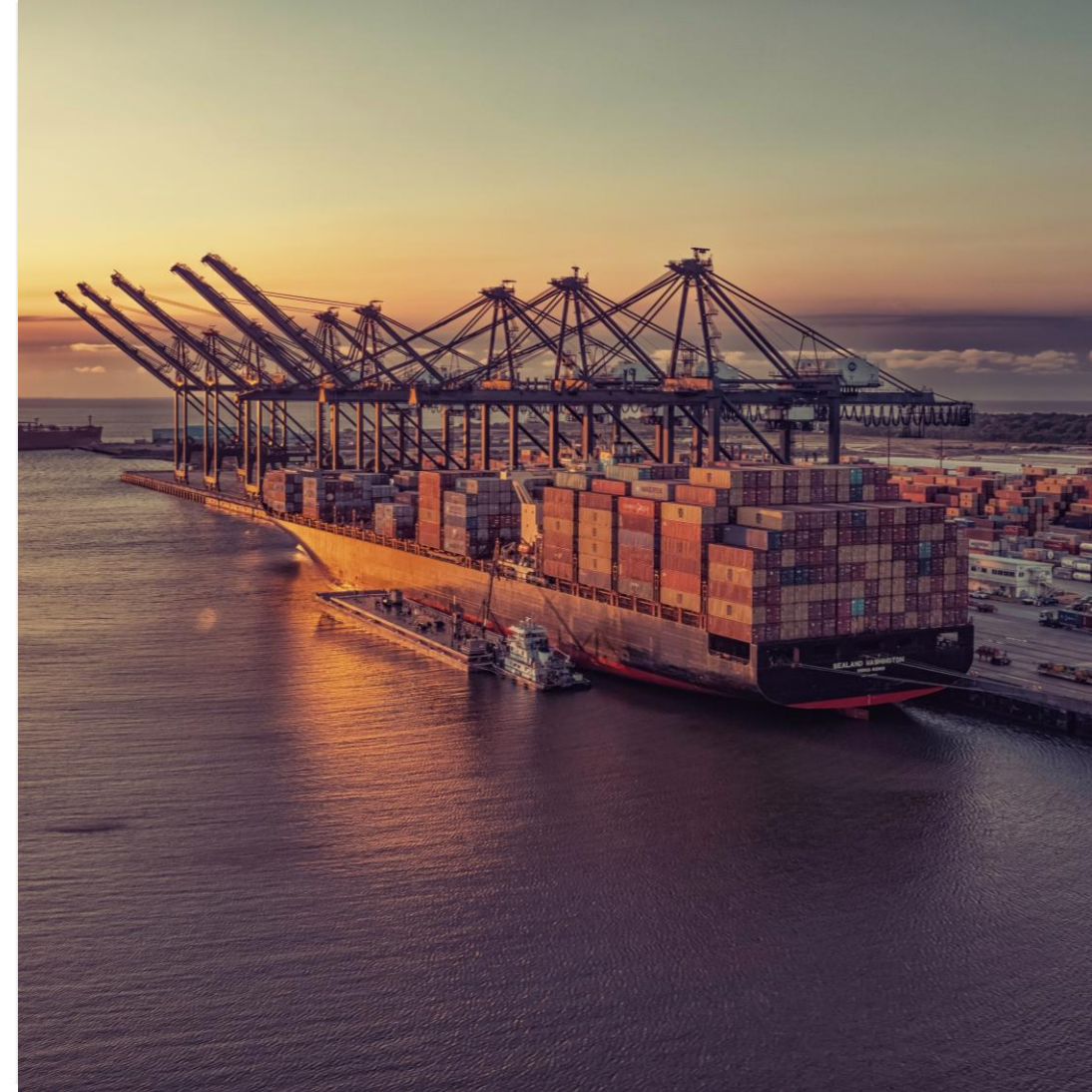


RUBBER-TIRED GANTRY CRANES (RTG)



| CRANES

- 35 ship-to-shore cranes (STS)
 - Fully electric
 - Consume around 2 MW each
 - Powered by 100% renewable electricity
- 163 RTGs
 - 81 are hybrid-electric, the others traditional diesel
 - Close to 90% NOx Reduction vs traditional diesel RTGs
 - Similar significant drops for PM and CO



CLEAN AIR STRATEGY & GOOD MOVEMENT EMISSIONS INVENTORY

*Port Houston
2025 Clean Air Strategy Plan (CASP) Progress Report*

Prepared for:



December 2025

Prepared by:

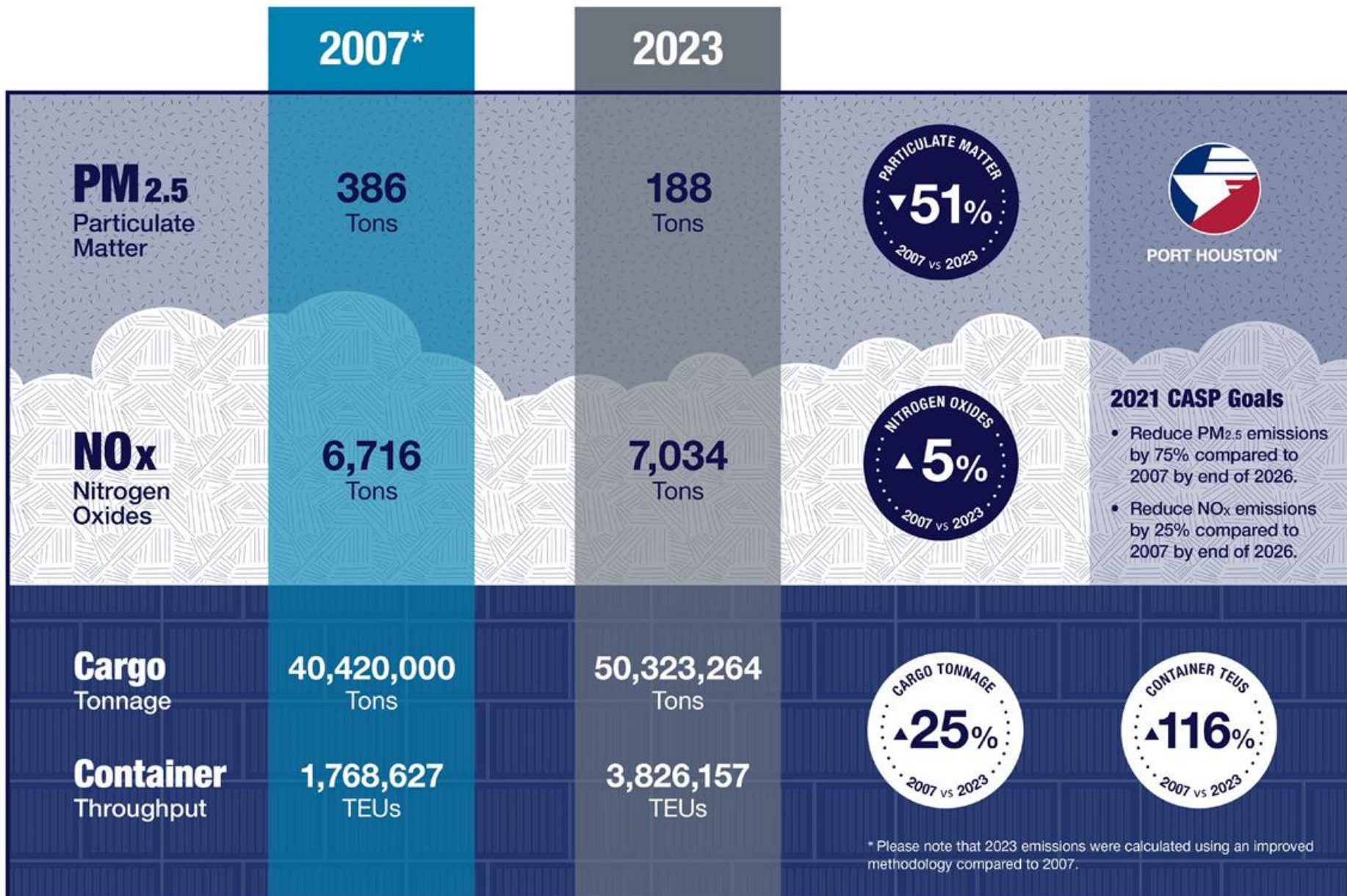


2023

GOODS MOVEMENT EMISSIONS INVENTORY



EMISSIONS 2007 - 2023



CLEAN PORTS PROGRAM (CPP) INITIATIVES

- Greenhouse Gas (GHG) Inventory
- Resilience Action Plan
- Truck Route Analysis
- Trucking Industry Collaborative
- Port Equipment Transition Assessment



M/V SAM HOUSTON BOAT TOUR

The M/V Sam Houston has been around since 1958, providing free, 90-min educational boat tours to the public

- 2,100,000 visitors have explored the Houston Ship Channel through this tour so far
- Our new and improved (catamaran design) boat, to be named the Liberty, is now being built, and will accommodate 150 passengers
 - It will be an electric hybrid





www.porthouston.com

THANK YOU