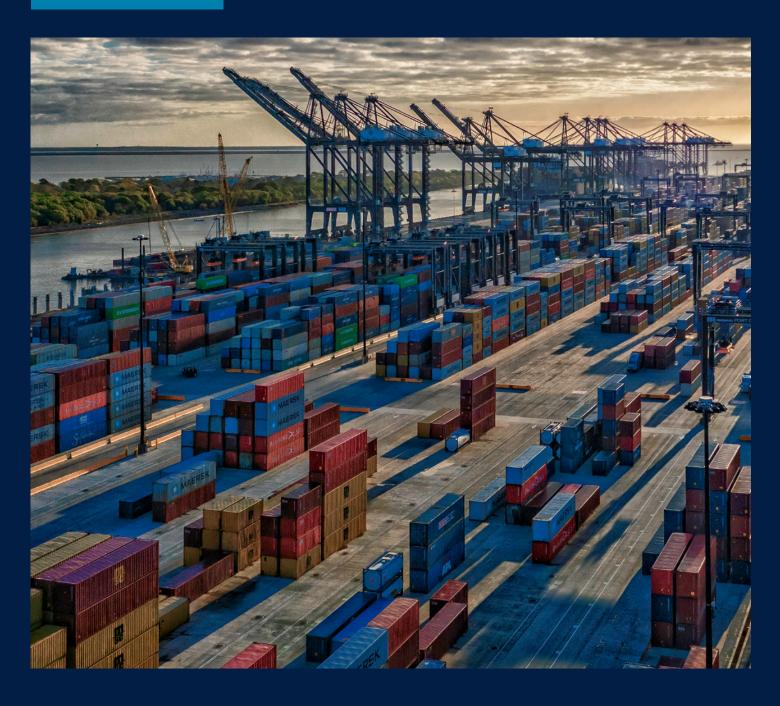
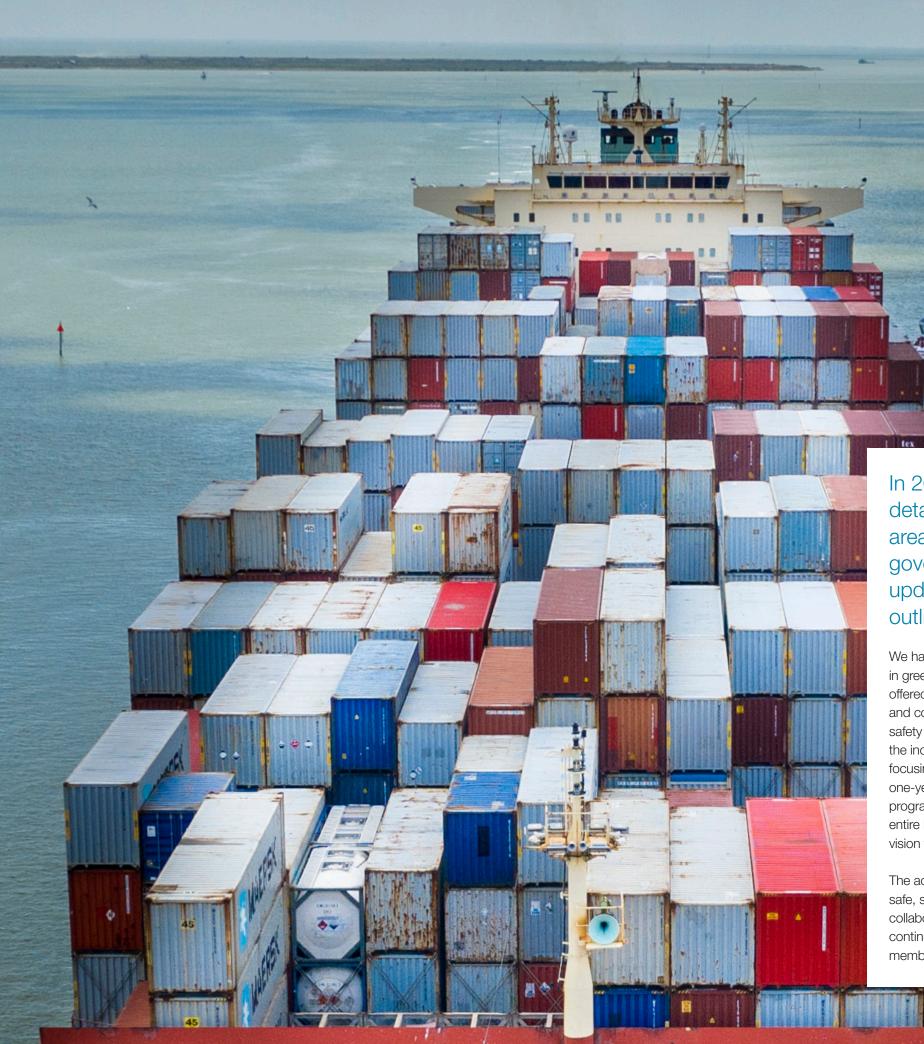


2022

ES<sup>2</sup>G

Environment, Social, Safety, and Governance





# Executive Director

In 2021 we published our first ES<sup>2</sup>G Report, detailing our initiatives and plans in the areas of environment, social, safety, and governance. Now, we are providing an update on our progress in key areas and outlining what's to come.

We have taken big strides in the past year, including awarding \$2 million in green spaces for local communities, choosing dredge companies who offered the best value and greenest equipment for our Project 11 work, and committing to carbon neutrality by the year 2050. We worked with safety in mind, and continue to record a lost-time incident rate well under the industry standard. We are off to a great start with our DEI initiatives by focusing on the future of the maritime workforce, and we celebrated the one-year anniversary of our minority and woman-owned business (MWBE) program. We accomplished these goals because of the hard work of the entire Port Houston team and I thank them for their commitment to our vision to be America's Distribution Hub for the Next Generation.

The actions you will read about in this report help Port Houston be a safe, stable, and sustainable business. As I've said many times before, collaboration and partnerships are key to our success, and we will continue to work together with industry stakeholders and community members toward ongoing regional prosperity.

Room Dutt

OGER GUENTHE

# Measuring what we manage

**COMMITTED TO** CARBON **NEUTRALITY** 









allocated for parks and green spaces in local communities Quantifying results of these initiatives is important to promote continuous improvement.



## **WORLD'S 1ST PUBLICLY-OWNED PORT**

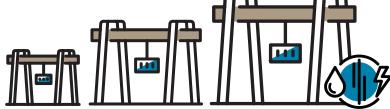
to be certified to rigorous ISO14001 environmental management system standard (2002)

Lost Time Incident Rate of

0.64 **DAYS** RECORDED, 79% below the industry average



**HYBRID-ELECTRIC RTG CRANES** 











summer interns on-boarded









DEI **INITIATIVES IDENTIFIED** to guide efforts for the next five years







S/MWBE FIRMS from July 2021 to June 2022

## **Environment**



## Committed to Carbon Neutrality

Port Houston announced its goal to be carbon neutral by the year 2050. The Port is planning to achieve a net-zero greenhouse gas footprint through technology upgrades, improving infrastructure and equipment, and using alternative fuels and energy sources. As part of the plan, Port Houston is also working toward eventually eliminating dockside emissions, transitioning trucks to low/no emissions vehicles, helping implement green shipping corridors as well as green marine and road fuels. Reaching our goal of net-zero emissions will not be a solo accomplishment; some of the identified projects that require outside collaboration are carbon capture and storage, development of hydrogen hubs, LNG bunkering, plastics pyrolysis, vessel bonnet service, and EV charging, micro-grids, shore power, and alternative power sourcing.

#### **PORT HOUSTON ALREADY:**

- Implemented 100% renewable electricity at its facilities
- Committed to purchasing hybrid electric rubber tire gantry (RTG) cranes, which will reduce crane emissions 90%
- Purchases only fully electric ship-to-shore (STS) cranes
- Welcomed its first electric drayage truck to the Bayport Container Terminal
- Signed MOUs with four companies to explore decarbonization opportunities
- Reduced emissions 55% since 2016



## **CARGO HANDLING EQUIPMENT** (CHE) ELECTRIFICATION

We recently ordered 26 new rubber tire gantry (RTG) cranes to work in the yards at Bayport and Barbours Cut Container Terminals. These cranes are hybrid-electric, which will reduce crane emissions 90%. With this order, 37% of our RTG fleet will be hybrid-electric. We are committed to purchasing hybrid-electric RTG cranes in the future, and we are also developing a plan to address the older cranes within our fleet.



#### **ALTERNATIVE FUEL DRAYAGE**

This year we made connections that resulted in the first electric drayage truck to visit Port Houston's terminals. The electric truck picked up a container from Bayport Container Terminal before delivering it to its next destination. This vehicle was manufactured by Nikola Corporation in Coolidge, Arizona and uses battery power instead of diesel. It was brought to Port Houston's public terminal by Sunburst Truck Lines, a family owned and operated intermodal freight handler for the Houston region.

The Port Houston team is also conducting exploratory discussions with others to work together to move the needle on identified initiatives like Decarbonization in Shipping, Plastics Pyrolysis Value Chain, and Global Ports Hydrogen Coalition. Port Houston participates on several boards to support decarbonization and acceleration of zero-emission truck adoption.

## **Port Houston continued** its commitment to the environment through both water and land.

- Port Houston supported Buffalo Bayou Partnership with its procurement of a new vacuum boat. The new boat is equipped with a 16-foot vacuum hose to allow for easy collection and removal of debris from our local waterways.
- Morgan's Point was transferred by agreement to the City of Morgan's Point, and Port Houston has planned a beautification and sight-and-sound buffer with City of Morgan's Point as part of an Industrial Agreement.
- In 2022, 35 trees were planted with Port Houston employee volunteer support in partnership with Trees for Houston, Sesco, and YES Prep East End Secondary School.
- We are working with Harris County Flood Control District on the creation of a wetlands mitigation bank. This mitigation bank will be used in assisting the process of developing acquired port property and creates a development strategy for long-term sustainability.

### 2016 Carbon footprint

reduced 0% Baseline

established Scope 2

. . . . . . . . . .

## 2020

#### 2022-25

#### 2030

70%

#### Scope 1

Replace and purchase zero-emission

#### forklifts and other CHE • Terminal expansions and optimal inland

operations are green

 Solar and wind generation implemented where appropriate

#### Distributed clean electricity generation and

#### resilient microgrids where value added

 Electric utilities capacity expansion commensurate with mobility demands

## 2040

90%

#### Scope 1

• CHE fleet turnover to zero-emission · Greenfield terminals optimized for

## efficiency, minimal emissions

• Electricity augmented as needed

### Carbon footprint reduced 100%

Scope 1 Yard cranes hybrid or electric

#### • Terminal tractors zero-emission

Other CHF zero-emission

 Pool cars and trucks zero-emission. Residual emissions offset with nature-based solutions

• Electricity 100% renewable since 2020, augmented

2050

• Vessels, trucks and suppliers at carbon neutral / net zero standards

· Remaining emissions offset · Investment profiles consistent with sustainability

Tenant-operated terminals and facilities meet

net zero standards

#### **Beyond Value Chain**

• State of the art is zero emission and/or carbon neutral technology and supplies for trucks, harbor vessels, ships, rai



Scope 1

Scope 2

Lead

Partner & Support

. . . . . . . . . .

Beyond Value Chain

## Purchasing carbon neutral materials

- Maximized waste recycling
- Tenant emissions strategies Encouraging tenants having carbon neutral

### **Beyond Value Chain**

- ture adoption of zero-emission drayage truck fleets and charging/fueling truck stops
  • Encourage transition to carbon
- neutral container ships

projects and technologies

• Encourage low/zero-emission locomotives · Encourage transport shuttles, containers on barge or other tech • Encourage hydrogen, carbon capture

• Encourage carbon neutrality of capital goods, professional services

 Developing offsets · Encouraging sustainable

### **Beyond Value Chain**

- Shore power maximized 7ero-emission vessels
- · Green shipping corridors emission locomotives

#### **Emissions Definitions:**

Scope 1 Fuel Scope 2 Electricity Scope 3 Suppliers and Employees Beyond Value Chain: All Others, Vessels, Trucks, Cargo Owners, et al Carbon Footprint: Controllable Scopes 1&2

\*All plans and projects subject to feasibility and business alignment - timing subject to technology development and commercialization cycles.

## **Environment**



#### FREIGHT MOBILITY RENEWAL

In collaboration with the Economic Alliance Houston Port Region, Port Houston is refreshing the regional freight priority project list. Other recent projects to streamline freight movement and reduce traffic congestion include the Port Road Drainage and Widening Project, planning with TxDOT for the replacement of the I-610 Sidney Sherman Bridge, and the SH-225 Planning, Environmental and Linkage Study. In addition, the Port Road Project is scheduled to be completed in 2023, and will improve drainage and add capacity, achieving emission reductions and congestion mitigation.



#### **DERA/TERP REPOWER GRANT**

We were awarded a Diesel Emission Reduction Act (DERA) 2021 Grant. This \$2.5 million award will assist with an \$8.4 million project to repower two twin screw marine vessels, a total of four engines on two tugboats. The four existing Tier 0 propulsion marine engines will be replaced with new Tier 4 marine engines. Expected lifetime benefits from this project will be a reduction of 984 tons of NOx and 15 tons of PM2.5.

We were also awarded the 2021 Department of Transportation Port Infrastructure Development (DOT PIDP) grant of \$18.3 million to construct container yard space. This project will support significant economic benefits, job creation, and expansion of petrochemical, manufacturing and agricultural industries, for a total cost of \$54.6 million. Additional lifetime benefits include:

- 262 tons NOx\* reduced
- 986 tons PM2.5\* reduced
- 267 tons VOCs\* reduced
- 32 million tons CO<sub>2</sub>\* reduced

In addition, we are submitting five Texas Commission on Environmental Quality SeaPort and Rail Yard Areas Emissions Reduction (TCEQ SPRY) grant applications.

\* CO2 = carbon dioxide, NOx = nitrogen oxides, PM2.5 = particulate matter of 2.5 microns or smaller, VOC = volatile organic compounds

### We cannot do it alone. Our strategy is that on some projects we will lead, others we will partner or support.

#### Lead:

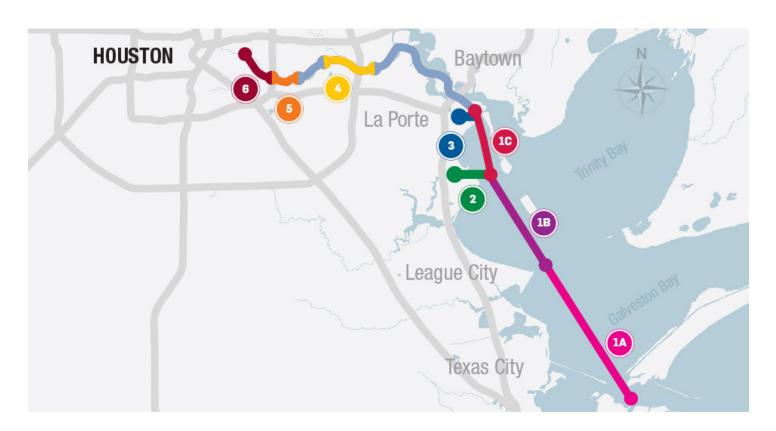
Port Houston takes the lead where we have the authority, resources, and control of the scope.

#### **Partner:**

As partner on an activity or initiative, we coordinate with other entities to deliver success.

#### **Support:**

We support activities and initiatives that align with our values when they are led by others. We lend expertise and resources as a participant and connector in coalitions and working groups.



#### **PROJECT 11**

The Houston Ship Channel Expansion – Project 11 has moved forward quickly in 2022 and dredging is now underway. Since October 2021 the Port Commission has awarded \$545 million in dredge contracts. With all of our awarded Project 11 contracts, we chose the top proposers in terms of best schedules, lowest costs, lowest estimated NOx emissions and most S/MWBE inclusion. The project received a major boost from the U.S. Army Corps of Engineers in January 2022 with \$142.5 million federal funds secured through the Infrastructure Investment and Jobs Act (IIJA). These funds were specifically designated to complete Segment 3 of Project 11.

Port Houston is leading this project in partnership with the U.S. Army Corps of Engineers (USACE). Project 11 is 82% funded now. According to the USACE study, Project 11 should add more than \$133 million annually in national economic value.

### **Project 11 Progress:**

- Segment 1A commenced in April 2022 and is being done by Great Lakes Dredging.
- Segments 1B and 2 are expected to begin this fall and are being done by Curtin Maritime and Weeks Marine.
- The Corps oyster mitigation project, which is building 45 acres of new oyster reefs in Galveston Bay, is 90% complete.
- We're also building approximately 376 acres of replacement oyster reef pads to prevent oyster reef erosion.
- Construction of Long Bird Island has begun, and birds have already been seen visiting the area.

To see where the dredges are working now visit www.expandthehoustonshipchannel.com

## Social



#### **PARKS & GREEN SPACE PROGRAMS**

Two separate projects to enhance green spaces for local communities have been allocated a total of \$2 million. \$1 million is allocated to Hidalgo Park and Oak Meadow, working in partnership with the Houston Parks Board.

An additional \$1 million is allocated to East Harris County Green Spaces. Projects include walking trail improvements in the Galena Park/Jacinto City area, a covered pavilion in the city of Shoreacres, multiple Spark Parks in nearby communities, and the addition of benches at the Turkey Run Park in Jacinto City.



#### **REVITALIZATION PARTNERSHIPS**

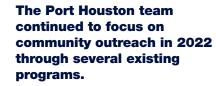
We have worked closely with community partners on a number of projects, including improving Target Hunger's Container Gardens, funding the replacement of playground equipment at El Jardin, and partnering with the Houston Toolbank to help revitalize the greenspaces at Isaacs Elementary School.



#### **COMMUNITY ENGAGEMENT EVENTS**

We have strategically increased our communication with the surrounding communities by launching individual meetings and informational luncheons. In the first three months of one-on-one meetings, our team met with more than 80 individuals who live and work around the HSC. We began our luncheon events with Precinct 2, presenting information about Port Houston's priorities.

Also, this year we are planning our first Posada event. Scheduled for December, this festival-style event will feature numerous booths of interest to the community and will be held at Milby High School.



- Port Houston awarded \$325.000 in Community Grants in 2022, with Equity Lens training to improve grants evaluation. Port Houston's Community Grants Program serves to develop and strengthen partnerships and create greater value for the region.
- The free Sam Houston Boat Tour returned in 2022 after a two-year absence due to COVID-19.
- The Port Commission Community Advisory Committee (PCCAC) has grown more comprehensive and diverse in membership to include grassroots community members, institutions, and civic organizations.





## **MARITIME EDUCATION OUTREACH**

The 22-acre Harbor Street bayou-front property is in

The property will be used to help showcase the Ship

the process of being gifted to the City of Houston.

Channel and provide green space to neighboring

communities to support recreation, resilience, and

**HARBOR STREET** 

economic development.

Port Houston has a strategic stake in the development of a robust workforce and a talent pool of future maritime leaders. In 2022 we re-instated our internship program after a pause due to COVID-19, and welcomed 12 interns in the summer of 2022. As part of our Maritime Education Outreach, we currently have seven Maritime High School programs embedded into five local school districts and will be assisting with the development of two new Maritime and Logistics programs located in Goose Creek and Channelview ISDs.



## **DIVERSITY, EQUITY & INCLUSION (DEI) INITIATIVES**

Port Houston recognizes that as an employer, community partner and regional economic engine we have a duty to reflect the diversity of our region. This year we identified 14 initiatives in our DEI Plan that will guide our efforts for the next five years. For example, the Diverse Talent Pipeline and Regional Workforce Development initiatives will focus on increasing the diversity of our applicant talent pool, identifying opportunities to retain our diverse employees, and integrating our Port Houston mentorship program into Yates and Austin High Schools.

### The Port Houston team also focused on existing social initiatives this year.

- Port Houston continued its employee tuition reimbursement program.
- Bi-weekly leadership and emerging leadership forums were held for employees.
- On-the-job training was conducted for electrician and mechanic apprenticeships, paired with education through San Jacinto Community College.
- Five hours of Compliance Training was required for all employees, totaling 3,600 hours covering topics like cybersecurity, workplace harassment, safety, DEI, and storm
- Port Houston Academy develops employees through courses including Business Acumen, Project Leadership, Financial Acumen, and Executive Communications.
- Port Houston manages FTZ 84, driving economic development and highlighting regional advantages to attract new business into Houston. In 2021, the general-purpose sites of FTZ 84 served 201 businesses and employed approximately 13,000+ individuals.



# **Safety**

## Governance



Port Houston leads the industry in Lost Time Incident Rate, which measures days lost by employees who were injured on the job. In 2022 through August, we recorded a Lost Time Incident Rate of 0.28 days, which is 79% below the maritime cargo handling industry average of 3.1 days.

# Employees at Port Houston enjoy a variety of benefits and resources to support their personal and professional needs, including:

- A full suite of health and welfare benefits
- Employee Assistance Program (offering a full array of professional counseling for multiple categories)
- Catastrophic Assistance Fund for disaster relief
- A Wellness program that promotes physical and mental health, healthy lifestyle choices, and self-care

## Safety continues to be a top priority.

- Port Houston's Security
   Department has been maintaining compliance with all regulatory requirements.
- Cybersecurity programs continue to be incorporated in our Facility
   Security Assessments and our
   C-TPAT security profile.
- Our ISO 28000 Security

  Management System procedures are
  being reviewed to incorporate the
  new 2022 standard requirements in
  time for our 2023 recertification.
- Police, Fire, and First Responders responded to more than 10,000 incidents in 2022 through August.



#### S/MWBE BUSINESS EQUITY PROGRAM

In July of 2021 Port Houston launched a
Minority-and Woman-Owned Business Enterprise
(MWBE) initiative to complement and expand on
the accomplishments of the successful Small
Business Program. Under the umbrella of Business
Equity, this is an organizational commitment and
investment to serving the local businesses in our
community.

- Total Small, Minority, and Woman-Owned Business (S/MWBE) enrollments at the end of the first year of the program was 1,436.
- 72% of the 1,436 enrolled S/MWBE firms were MWBEs.
- From July 2021 to June 2022, Port Houston awarded \$172.5 million to S/MWBE firms.
- There were 49 graduates of the OpPORTunity U program.



#### **LEGISLATIVE ADVOCACY**

We have been involved in advocacy on a number of pieces of legislation regarding our Port and our environment. This year we partnered with the Texas Hydrogen Alliance to advocate for Houston to be a hydrogen hub. We supported Senator John Cornyn's suite of hydrogen legislation, which includes the ACT bill, focused on ports. We have also worked with the Texas Ports Association, the Maritime Division of TxDOT, and participate on the Board of the National Association of Waterfront Employees (NAWE) on various advocacy efforts. The Port is also a founding member of the Blue Sky Maritime Coalition, focused on developing cleaner cargo movement applications and net-zero supply chains. The Port is continually advocating for greater investment in maritime and goods movement infrastructure and greener equipment.

# The Port Houston team also continued its focus on transparency.

- Our award-winning financial transparency is supported by clean audits the past eight years.
- This year was our 48th consecutive year to receive an award from the Government
   Finance Officers Association for financial excellence.
- We also received awards from the Texas Comptroller Leadership Program.
- Port Houston holds a certification that our investment policy meets standards of prudent public investing from the Government Treasurers'
   Organization of Texas, 2021-2023.
- We recorded revenue of \$520 million in 2021 and year-to-date through August revenue is up by 50%.

## What's Next?

## We have big goals for the future.

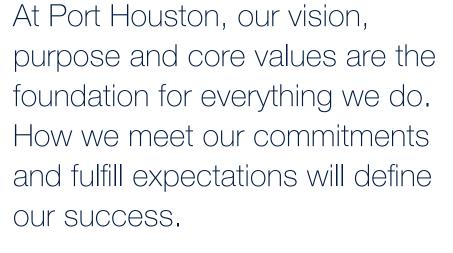
We have a lot of work ahead of us as we work toward carbon neutrality in the year 2050. We will diligently move forward along the defined roadmap, and refine the path as needed along the way.

At our terminals, we plan to increase collaboration on zero-emission drayage trucks and associated charging and fueling stations. We will work with TCEQ/TERP and truck owners and operators to advance this initiative. Also, going forward we will purchase only hybrid-electric rubber tired gantry (RTG) cranes and will explore retro-fitting older RTG cranes.

We will continue to focus on our community as well as the next generation of maritime workers. We plan to increase our Community Grants program to \$375k annually and will onboard the two additional Maritime and Logistics programs mentioned on Page 11. We will also continue vital sponsorships that enhance collaboration, including the Galveston Bay Foundation Annual Report Card and the Port of the Future Conference. In addition, we will grow our Houston International Maritime Conference (HIMC), which was held for the first time in 2022 and brings people together to discuss topics including sustainability and the future of the maritime workforce.

Our focus on supporting others who are making an impact will continue. For example, we are on the Board of the Blue Sky Maritime Coalition, a group that is working toward a green shipping corridor for the Houston Ship Channel. Regarding the Channel, the Houston Ship Channel Expansion – Project 11 will continue to progress and we expect to complete the improvements in 2025.

Grant funding will be vital to achieving many of our goals. We will explore all grant application opportunities in the areas of supply chain resilience, social equity, and environmental quality.



Our organization rose from a local, state, and national vision of global commerce, and for more than a century, we have realized that vision as the head and the heart of the Houston Ship Channel. Just as vessels need the experience of expert pilots, our Ship Channel needs the leadership of Port Houston.

Over the years, we have constructed public terminals, forged collaborations between businesses and governments, and fueled major projects to expand the capabilities of the nation's busiest waterway.

Today, we provide advocacy and leadership to the Channel and the more than 200 facilities that conduct business along its waters. We manage eight publicly owned facilities, two of which we directly operate. And we are a model for other ports to follow, as our public facilities not only lead the industry in access and competitiveness, but also include the area's largest breakbulk facility and two of the most efficient and fastest-growing container terminals in the country.

#### Mission

To move the world and drive regional prosperity

#### **Vision**

America's Distribution Hub for the next generation

#### **Values**

"We are READY" encompasses our core values of Respect, Excellence, Accountability and Diligence, and the focus on "You".

#### **Strategic Goals**



#### People:

Be the best place to work



#### Infrastructure:

Optimize infrastructure and channel capacity to serve the region



## **Partnerships:**

Develop and strengthen external partnerships



#### **Stewardship:**

Create greater value for the region

#### **PORT COMMISSION**

Ric Campo, Chairman

Dean E. Corgey, Commissioner

Clyde Fitzgerald, Commissioner

Stephen H. DonCarlos, Commissioner Roy D. Mease, Commissioner Wendy Montoya Cloonan, Commissioner Cheryl D. Creuzot, Commissioner

#### **EXECUTIVE LEADERSHIP**

Roger Guenther, Executive Director Tom Heidt, Chief Operating Officer Charles Thompson, Chief Information Officer Erik Eriksson, Chief Legal Officer Jeff Davis, Chief Port Operations Officer Jessica Shaver, Chief People Officer John Moseley, Chief Commercial Officer Kerrick Henny, Chief Government & Public Relations Officer Marcus Woodring, Chief PSEO Officer
Maxine Buckles, Chief Business Equity Officer
Rich Byrnes, Chief Infrastructure Officer
Tim Finley, Chief Financial Officer

Port Houston recognizes the collective commitment and concerted efforts of its leadership and staff and the continued support of its stakeholders in Port Houston's ES<sup>2</sup>G Report.

www.porthouston.com