



PORTMIAMI
netzero

**Resiliency & Supply Chain
Improvements**



PORTMIAMI



**MIAMI-DADE
COUNTY**

Supply Chains are Broken

- U.S. supply chains are under duress
 - Ships are at anchorage on the West and East Coasts
 - Ocean freight rates Asia-U.S. up 900%
 - Empties for U.S. exports are not available
 - Labor shortages – highlighted by truck driver shortages
 - Fuel prices
 - General inflation
 - Geo-political conflict
 - Goods out of Stock

Generational Supply Chain Shifts

- Inland Empire 1970's Before massive shift of manufacturing to China
- BY 1990 Ports of LA/LB become nations busiest
- 2000 West Coast Strike shifts significant volumes to East Coast Ports
- 2020 after NAFTA passage 60,000 trucks cross U.S./Mexico border daily

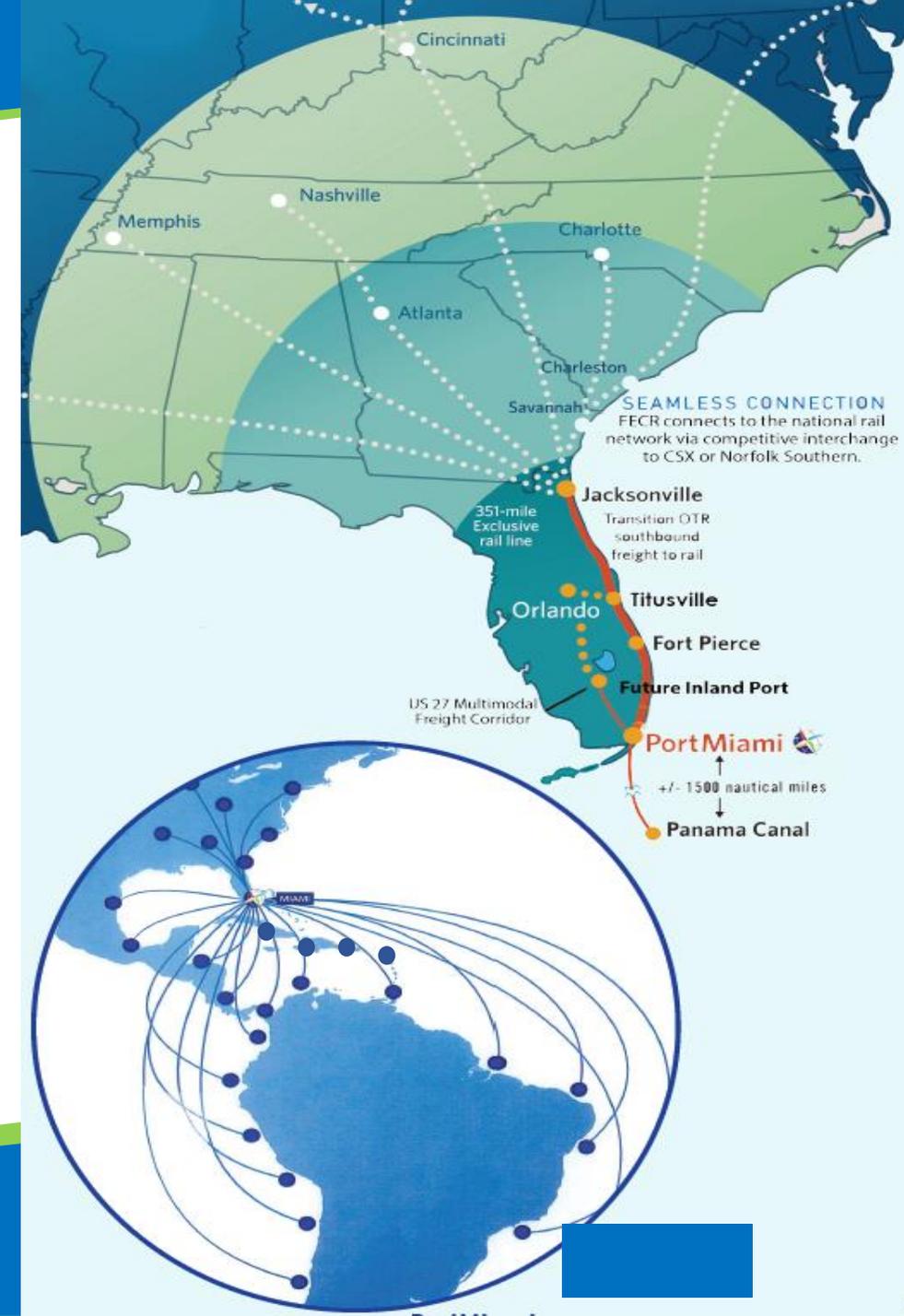


Next Sea-Change for U.S. Supply Chains is Here

Major Market Drivers have been identified

1. Acceleration of nearshoring to Western Hemisphere
2. Drought in west shifting agricultural sourcing to Latin America
3. 1 in 16 US citizens (18 million) live between Miami/Orlando
4. Geo-political adversity with China and supply chain security
5. Truck congestion and costs at US/Mexico border
6. High freight rates for US/Asia Ocean shipment
7. Labor shortages
8. Fuel costs
9. Environmental and Social drivers
10. Product shortages
11. Lack of supply chain capacity for US Exports

Infrastructure Grants once in a generation opportunity





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PortMiami is accelerating the development of its **visionary and transformational program to develop the nation's first end-to-end net zero carbon emission supply chain** in line with the County's 2030 50% emissions reduction goal, while also working towards the County's economic development goals.

The Infrastructure Investment and Jobs Act (IIJA) is an **unprecedented opportunity to solve supply chain congestion, disruption and double-digit cost increases**

- With environmental justice (electrification of the supply chain)
- Social justice (in underserved areas and workforce training)
 - A \$1.2 trillion package with **\$17.5 billion dedicated to ports**
 - **PortMiami seeking \$400-\$500 million** in grant funding over 5 years
 - Including the MEGA Grant Program



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Cargo Demand is growing at double digit rates

- CA, GA, VA, NY are congested with ships at anchor for weeks
- Central/South Florida population reaching 18 million residents
 - Plus serving the consumption of 120 million annual visitors
- Companies are nearshoring in reaction to China and Eastern Europe
- More fruits and vegetables will come from Latin America instead of S.W. U.S.
- More sustainable infrastructure needed
- Labor shortages require more efficient rail served supply chains

Overview On-Port Net Zero Infrastructure

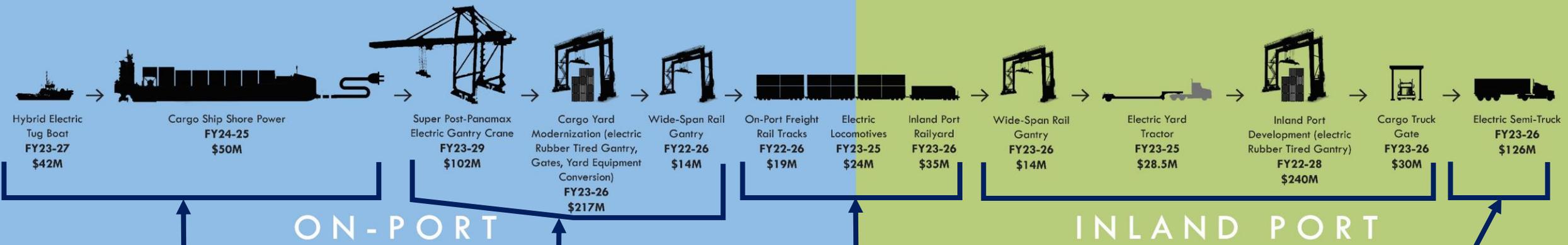


ON-PORT PROGRAM

- 1 Electric Tug Boats
- 2 Shore Power
- 3 Super Post-Panamax Electric Gantry Cranes
- 4 Cargo Yard Modernization
 - Automated Truck Gates Project
 - Electric Rubber Tired Gantry
 - Conversion of Yard Equipment to Electric
 - Electric Reefer Expansion
- 5 Railyard Capacity Upgrades
 - Railyard Expansion
 - Wide-Span Rail
- 6 Electric Locomotives
- 7 Co-Generation Facility and Other Renewable Energy Sources

Bi-Directional (Inbound & Outbound)

PORTMIAMI NET ZERO SUPPLY CHAIN PROGRAM



Cargo vessels assisted to berth by hybrid electric tugs and then plug into shore power

Cargo is transloaded by electric container handling equipment

Cargo is transported to Inland Port via electric locomotives in partnership with FEC

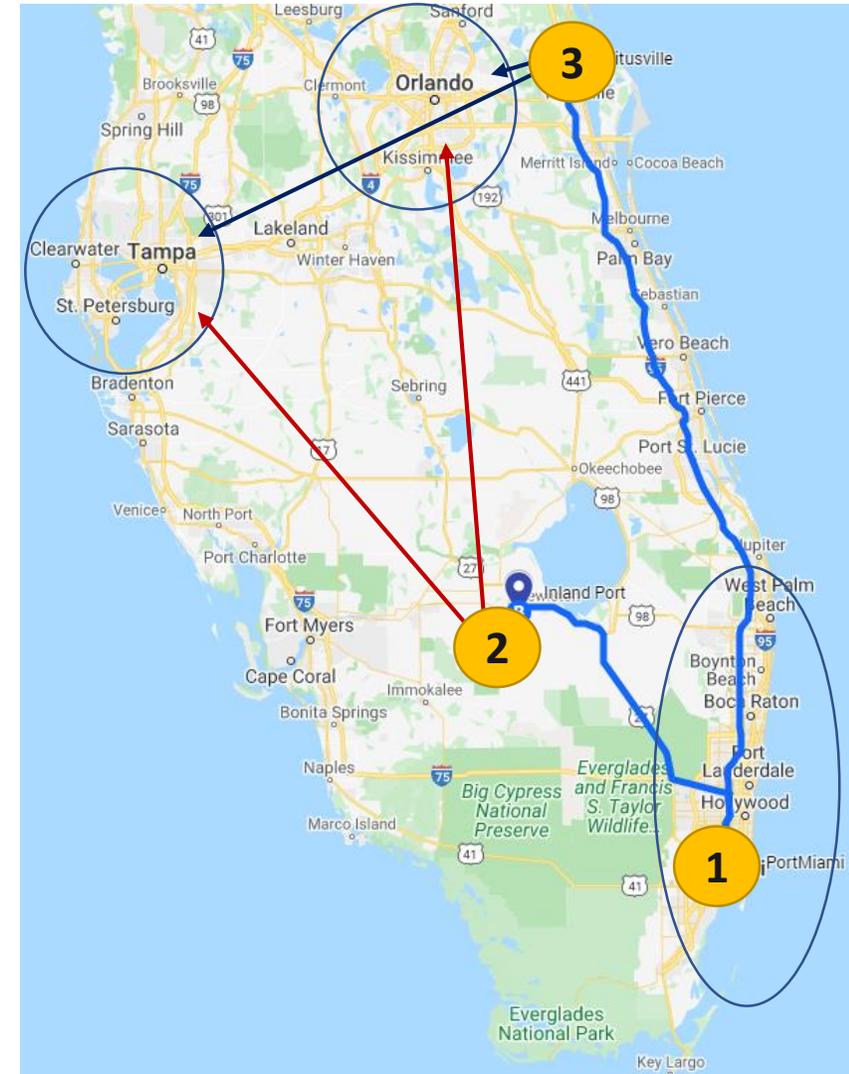
Electric container handling equipment and technology for innovative operations

Final delivery to distribution centers on electric truck fleet

- Estimated Total Program Cost: \$700-800 million
- Costs shared among PortMiami, port partners, and federal/state grants.

Inland Port & Export Consolidation Center

- An Inland Port will **significantly increase Miami-Dade County's regional economic competitiveness**, boosting cargo capacity and with expanded access to every major Florida market. (Orlando, Tampa, Ft. Meyers, Naples, Ft. Lauderdale, Palm Beach, Tampa)
- PortMiami evaluating Inland Port locations inside the County and a Regional location outside the County.
- An Inland Port provides at least a **50% increase in container volume capacity**, driving economic growth in Miami-Dade County and increasing the Port's regional reach.
- **Business partnership opportunities** with major online retailers, international firms, and more.



- 1 – Site within Miami-Dade County
- 2 – Site between MDC and Orlando (e.g., Hendry County)
- 3 – Site near Orlando/Tampa market (e.g., Titusville)

Western Hemisphere Growth Opportunities



PROJECTIONS

- PortMiami handled 1,254,062 TEUs of containerized cargo in 2021 and could rise to 1.75 Million by 2025.

USDA GROWTH IN IMPORTS

- The USDA estimates that by 2027, 75% of all fruit and 50% of all vegetables consumed in the United States will be imported (LATAM).

NEARSHORING AND CONGRESS/DC AGENCIES

- Latin America and the Caribbean share a cultural affinity with Miami
- Labor and transportation costs in the Western Hemisphere are below those in China.
- Congress has made nearshoring, a primary foreign policy objective, introducing legislation such as HR 7579, the Latin American Nearshoring Act.
- The Inter-American Development has made nearshoring a priority in countries such as Costa Rica, Argentina, Colombia and Chile.
- The Association of Latin American Free Zones (AFZA) launched Relocate LATAM, a specialized platform for reshoring, nearshoring and offshoring.
- 2020 Gartner survey found that a third of 260 leading global companies plan to move part of their manufacturing out of China by 2023.



Far-Reaching Local, Regional and National Benefits

PORTMIAMI NET ZERO SUPPLY CHAIN PROGRAM

ECONOMIC DEVELOPMENT



- Land set-aside for designated Distribution Centers
- Offices / Maintenance Facility

FY23-29
\$20M

RESILIENCY



- Electric Vehicle / Equipment Charging Station
- Solar Farm (Agrivoltaics)
 - Cogen Facility
- Reducing Heat Island Effect through Tree Canopy
 - Porous Materials
 - Utilities
- LNG Direct Supply
- Drainage / Wetland

FY23-29
\$110M

EQUITY



- Workforce Training
- Labor Support
- Acquisition of Land in Underserved Areas

Broadband
FY23-29
\$25M

TECHNOLOGY



- Port Yard Equipment
- Phytosanitary Treatment and Cold Chain Processing
 - CBP at Inland Ports
- Federal Inspection Facility On-Port
 - Crane Management Facility
 - Drone Deployment
 - Trouble Resolution

FY23-29
\$100M

TRANSPORTATION



- US-27 Improvements
- New Rail Corridor
- Inland Port Roadways

FY23-29
\$50M

ELEMENTS

Economic Development
in partnership with national retailers, e-commerce firms and more

Resiliency
Improvements to mitigate impacts of climate change, sea level rise, and environment

Equity
Progressing underserved communities by investing in labor, work force training, apprenticeships

Technology
improvements in cargo operations to increase efficiencies leading to increased capacity and safety

Transportation
investment in highway and rail eliminating bottlenecks and improving goods movement

Partner Support

PortMiami has received support from key partners, stakeholders, and potential business partners, including:



PortMiami
1015 North America Way, 2nd Floor
Miami, Florida 33132

Norfolk, January 18th, 2022

Subject: Expression of Interest

To the attention of Mr. Eric Olafson, Director Global Trade & Business Development for PortMiami.

Dear Sir,

I make reference to our conference call dated January 13th, 2022 with Mr. Stanley Rigaud and Mr. Nimrod Simeon, during which we discussed the future development of an Inland Port with rail connectivity in



525 Washington Blvd, 16th Floor, Suite 1660, Jersey City, NJ 07310

STRICTLY PRIVATE & CONFIDENTIAL

February 22, 2022

Ms. Hydi Webb
Interim Port Director, Port of Miami
1015 N. America Way, Suite 200
Miami, Florida 33132

SUBJECT: *Letter of Support for Port of Miami Grant Funding Applications.*

Dear Ms. Hydi Webb,

Ports America is pleased to provide this letter of support to the Port of Miami (the "Port") regarding 2022 grant funding application opportunities for investments in marine container terminal facilities, including upgrades to gate and rail infrastructure at the Port of Miami.



February 17, 2022

PortMiami

1015 N. America Way, 2nd Floor

Miami, FL 33132

Subject: Expression of Support

To the attention of Hydi Webb, Interim Port Director:

In reference to PortMiami's Green Initiative to reduce congestion and emissions, while increasing cargo throughput and jobs.



February 17, 2022

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- Cargo partners
 - CMA CGM
 - Ports America
 - Seaboard
- Existing and potential business partners
 - City Furniture
 - Port of Barranquilla, Colombia



PortMiami Creating Green Partners in Trade