

# Port Authority Environmental and Energy Programs Update

Board Meeting  
July 23, 2015

# The Office of Environmental and Energy Programs

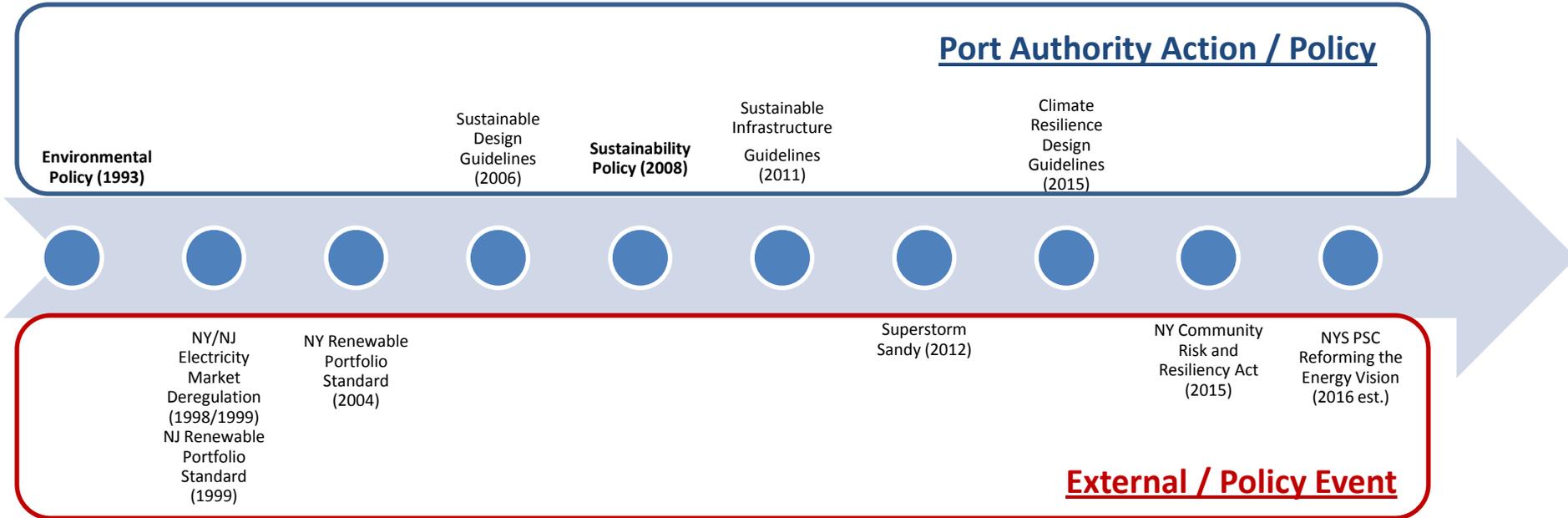


## Department Mission

OEEP, in partnership with Line Departments, improves the environmental and energy performance of Port Authority operations and capital investments, supporting the agency's core mission of moving commuters, travelers, and global shippers effectively.

- 2004: Office established to provide centralized leadership, guidance and accountability on environmental matters
- 2009: Office mandate expanded in recognition of the nexus between energy production and use and environmental performance.

# Port Authority Policy in Regional Context



# Highlights – Energy

- Utility metering improvements: \$15 million recovered from corrected billing, pursuing an additional \$2.4 million
- Energy efficiency projects: \$6 million in annual savings, an approximate 9% reduction in PA GHG reductions
- Solar arrays installed at
  - Newark Liberty International Airport
  - PATH – Harrison Car Maintenance Facility
  - Stewart International Airport
- Retail energy supply: electricity and natural gas reverse auctions - \$5 million savings
- Shore power at Brooklyn Cruise Terminal, on-site generation at port facilities



# Highlights – Natural Resources

- **Port Clean Air Strategies**
  - EPA Breathe Easy Award
  - Truck Replacement
  - Ocean Going Vessel Low Sulfur Diesel Fuel Incentive
  - Cargo Handling Equipment
- **Green Roof – Holland Tunnel Administrative Building**
  - Energy and water cost savings
  - Reduced storm water runoff and increased roof longevity
- **Green Cleaning Products / Go Paperless Initiative**
- **Natural Resource Conservation**
  - Hudson-Raritan Estuary Resources Program – 400 acres
    - Preserves important ecosystems and habitat
    - Provides for public access to waterfront
    - Creates a buffer around PA facilities



# Advancing Regional Sustainability Objectives

- **Advanced Metering Infrastructure**

- Largest sub-metering program of its kind in New York
- Integrate PA Utility Management Platform with New York Energy Manager

- **Stewart International Airport Microgrid**

- NY Prize award for feasibility study
- Partnership with Central Hudson Gas and Electric, Town of New Windsor, NRG
- Enhance resiliency – grid-independent, renewables and battery storage
- Demonstration project for NY’s “Reforming the Energy Vision”

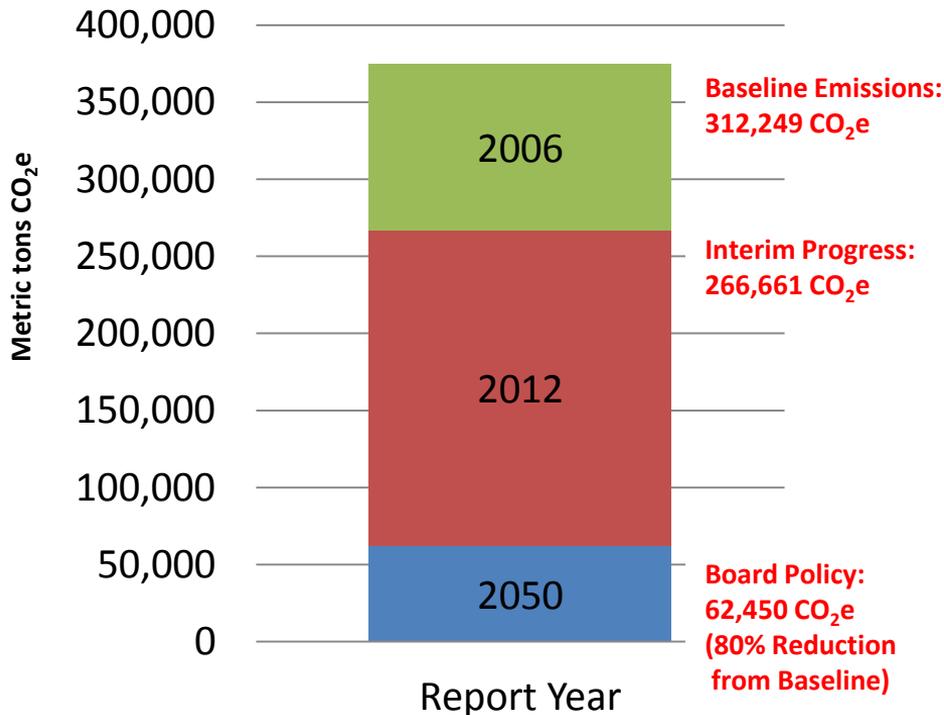
- **Clean vehicles and infrastructure**

- Port Authority member of Zero Emissions Vehicle Task Force
- 17 EV charging stations: JFK (5), LGA (5), EWR(5), PABT (2)
- Port Authority fleet third greenest in nation
- NYSERDA grant for anti-idling technology – PA fleet vehicles
- Potential for EV charging at Brooklyn Cruise Terminal



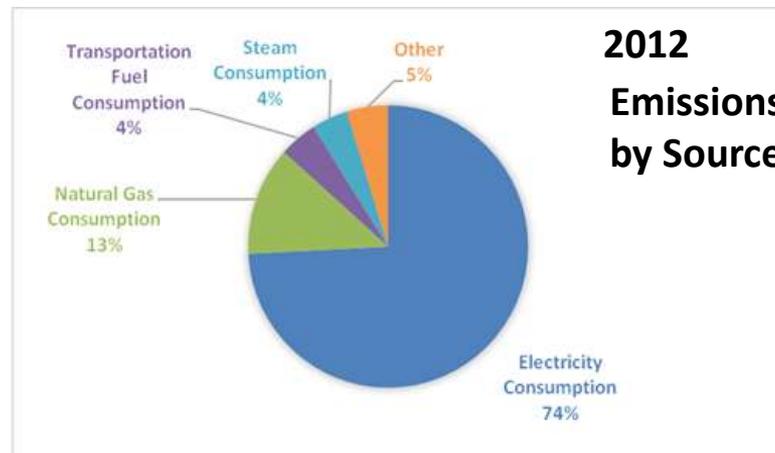
# Progress Towards Sustainability Goals

## Emissions by Report Year



## Snapshot of 2012 figures:

- 500,000 megawatt-hours (electricity/year)
  - Annual consumption of 18 Met Life stadiums
- 267,000 metric tons CO<sub>2</sub>e (carbon dioxide equivalent)
  - Annual emissions from 56,000 passenger vehicles



# Environmental Sustainability Policy - Update

- **Environmental Sustainability Policy has not been updated since 2008**
- **Update to capture:**
  - Need to integrate sustainability and resiliency efforts post-Sandy
  - Heightened focus on water – conservation, reuse, improved metering and infrastructure
  - Support innovation in “clean” technologies that grow the regional economy
  - Incorporation of sustainability into capital planning:
    - Issuance of Green Bonds
    - Enhance consideration of impacts of PA projects on host communities
- **We anticipate presenting the updated Policy to the Board in September 2015**

