



Update on Port Authority's Sustainability Program



THE PORT AUTHORITY
OF NEW YORK & NEW JERSEY

Sustainability Program

Comprehensive Goals

- **Board adopted PANYNJ Sustainability Policy in March 2008**
- **Policy Goals**
 - Reduce GHG emissions by 80% by 2050 (2006 baseline)
 - For GHG emissions that cannot be reduced, purchase offsets with a goal of net-zero emissions by 2010
 - Promote sustainability concepts among tenants and customers
 - Adapt facilities to reduce climate change risks



Sustainability Program

Accomplishments to Date

- **Reduce Greenhouse Gas Emissions**

- Engineering's Sustainable Design Guidelines
 - Update to include Sustainable Infrastructure Guidelines
- Port of NY & NJ Clean Air Strategy
 - Truck Replacement Program/Clean Truck Program
- George Washington Bridge LED Lighting
- Hydrogen Fueling Station (JFK)
- LED Taxiway Lights at JFK and Stewart Airports
- Recycling Programs (Newark and LaGuardia)
- New PATH PA-5 Cars Regenerative Braking and Anti-idling Devices

- Environmentally Friendly De-icing Chemical (PATH)
- Green Vehicle Fleet Program (Operations)

- **Offset Greenhouse Gases**

- Carbon Offset Program
- Annual GHG Inventories

- **Promote Sustainability**

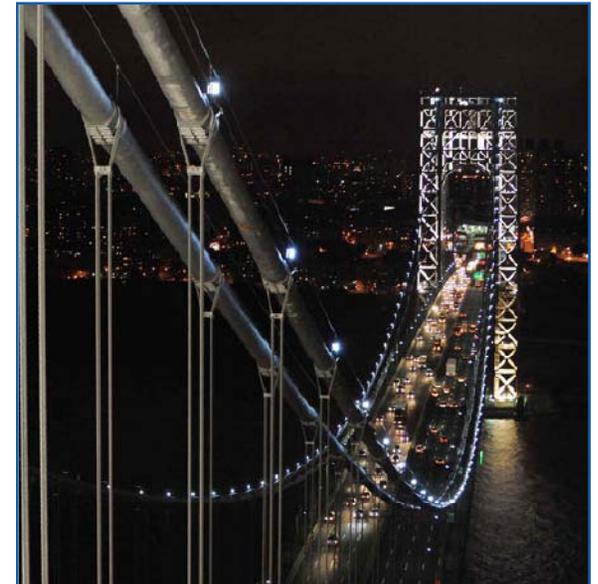
- Green Construction Program (Engineering)
- Green Pass Discount Plan (Tunnels, Bridges and Terminals)
- Recycling Programs (Newark and LaGuardia)



Sustainability Program

Highlights

- **PSE&G Direct Install Program**
 - Approximately 5M KW-hours and close \$1M in annual savings with \$6M in avoided capital costs
- **LED Lighting**
 - Award-winning GW Bridge
 - Annual energy & maintenance savings close to \$50K
- **Demand Response Program Participation**
 - 11 facilities over \$45,000 in direct revenue
 - Adaptive strategy for climate change
- **Energy Audits and Utility Tracking Projects**
 - Over \$3M recovered



Sustainability Program

Highlights (continued)

- **Offset Procurement**

- Evaluated 17 regional projects
- 82,500 tons CO₂ offsets purchased, representing 25% of 2006 footprint

- **Hudson-Raritan Estuary Resources Program**

- \$60M to preserve open space in Hudson-Raritan Estuary



- **Clean Truck Programs**

- Truck Replacement Program: Replace pre-1994 trucks with vehicles having 2004-2007 EPA engines
- Clean Truck Program: Jan 2011: Pre-1994 model trucks banned Jan 2017: All trucks must meet or exceed 2007 federal emissions standards



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2010 Goals

- Evaluate innovative technology projects in Port District
 - Wood waste project (Newark, NJ)
 - Organic waste project (JFK)
 - Renewable energy including biomass project (Stewart)
- Register PANYNJ GHG Inventory
- Award RFP for a wind energy project in Port Jersey
- Launch and promote online carbon calculator
- Develop PA Climate Adaptation and Resiliency Program



Sustainability Program

2010 Goals

- **Expand airport recycling and airport sustainability planning**
- **Advance sustainable design in tenant redevelopment projects**
- **Green Fleet**
 - Purchase Green Vehicles, including Plug-in Hybrids, CNG and FlexFuel (E85)
 - Through EPA Grant, Install Active Diesel Particulate Filters on all PA Diesel Vehicles
 - Continue to Use and Evaluate Hydrogen Fuel Cell Vehicles at JFK and Explore Potential Expansion to Buses
- **World Trade Center**
 - Implement sustainable design guidelines, including LEED gold alternative path
 - Continue to purchase Renewable Energy Credits for One WTC, Transportation Hub, and Memorial
- **Enhance environmental component of approved products program**



Sustainability Program

\$1 Million Recommendation

- **Procure carbon offsets for at least 35% of PA footprint**

- Methane capture project in Rodman, NY
- Methane capture project in Sussex County, NJ (*New*)



- **Advisory services to evaluate future offset projects**

- Includes innovative technology projects in Port District (wood waste, organic waste)

- **Regional carbon-mitigating projects will continue to be advanced to the Board for procurement on a project-by-project basis**

