Airport Resilience Challenge

Resilient Solutions for Decarbonized Airport Operations

Keeping the region moving

The Port Authority is a bi-state agency serving the states of New York and New Jersey since 1921. Our commitment is to first-class operations as we meet demands of record-high use of our facilities.

Tunnels, Bridges & Terminals

122.2 million vehicle crossings
76 million at our terminals

Ports

7.4 million shipping containers

Airports

140.5 million passengers

PATH

284,000+ weekday riders
82.2 million/year

World Trade Center

35 thousand workers, 12 rail lines, Memorial Plaza + Museum

Aligning our ambitions to the Paris Agreement

2016
Transportation overtakes power generation to be the largest source of emissions in the USA

2018
IPCC report states that we have only 12 years left to limit catastrophic climate change

2017
United States withdraws from the Paris Climate agreement

2018
The Port Authority commits to aligning its ambitions to the Paris Climate Agreement

35%
Below 2006 levels by **2025**

80%
Below 2006 levels by **2050**

Taking action to achieve our 2050 target

We are also collaborating with a range of stakeholders to achieve reductions in scope 3 emissions

TRUCK REPLACEMENT PROGRAM

OCEAN GOING VESSEL INCENTIVES

PATRON CHARGING INFRASTRUCTURE

SUPPORTING OFFSHORE WIND

COMMUTER MODE SHIFT

ELECTRIC PORT EQUIPMENT

BUILDING GREEN FACILITIES

AIRPORT EQUIPMENT ELECTRIFICATION

CLEAN FERRY TECHNOLOGY

ALL-ELECTRONIC TOLLING

Mitigation + Adaptation at PANYNJ Airports

$30 billion investment program for 21st century airports – improved operations, customer experience, sustainability

Mitigation

- Conversion to zero-emissions of all airside equipment
- GSE charging infrastructure at gates
- Gate power + pre-conditioned air to reduce APU run-time
- EV charging for public parking
- On-site renewables
- Energy efficiency, EUI reduction
- Sustainable Design Guidelines (LEED Silver minimum, Gold target)
- Sustainable Infrastructure Guidelines

Adaptation

- Design Guidelines for Climate Resilience
- Some distributed energy systems @ terminals
- Collaboration with local utilities re: grid improvements for reliability/resilience
- Tidal gates/check valves for stormwater systems
- Flood protection/emergency generators for pump houses, lighting vaults, substations
- Optimizing/evaluating airport cogeneration

Achieving Resilience for a Zero-Carbon Airport

Enabling New York's decarbonization goals and ensuring resilience at airports, we must first…

Over 12 months:

Map planned airport decarbonization efforts over time to provide runway for solutions developers to propose clean, distributed, redundant power solutions for increasingly electric operations.