Problem Statement

JetBlue wants to lower CO2 emissions from their JFK T5 Operations and secure affordable, reliable, clean energy sources. To achieve this, they need a clear path with a target and list of recommendations that can be shared with The Port Authority of New York and New Jersey, elected officials, financial stakeholders, and the general public.

Stakeholder Value Network

Current CO2 Inventory at JFK T5

99,000 metric tons of CO2

System Boundary

JFK T5 building

Parked aircraft

Ground Support Equipment

Take off

Landing

Public Transportation

Jet Fuel Related Emissions

Non-Jet Fuel Related Emissions

Proposed Target

-26% decrease in Non-Jet Fuel emissions, representing approximately 10% of total emissions at JFK Terminal 5.

Actions

• Potential for 3,500 kW DC Solar Panels
• Space for large scale solar installation

Electricity Generation

Operational Efficiency

• Higher use of Ground Power Unit
• Queuing procedure

Building Efficiency

• Data analytics for optimized HVAC maintenance
• LED lighting
• Sensors

Ground Support Equipment

• Conversion of gasoline and diesel equipment into electric