



ALLEGHENY COUNTY AIRPORT AUTHORITY  
PITTSBURGH INTERNATIONAL AIRPORT  
ALLEGHENY COUNTY AIRPORT

**Paul Hoback, Jr.**  
**EVP and Chief Development Officer**  
**Allegheny County Airport Authority**  
**Testimony – Subcommittee on Aviation**  
**May 17, 2022**

Good afternoon, Chairman Larsen, Ranking Member Graves and members of the Aviation subcommittee. I am Paul Hoback, Jr., Executive Vice President & Chief Development Officer at the Allegheny County Airport Authority, which operates Pittsburgh International Airport.

We are a medium-size hub airport with growing passenger traffic that nearly reached 10 million passengers in 2019. Likewise, our cargo operation, particularly international cargo, has grown dramatically over the past several years as an alternative to congested large gateway airports. Our airport sits atop 8,800 acres and is among the largest airport campuses the country. It enables us to be an economic driver for our region while providing opportunities to innovate.

Thank you for the opportunity to speak to you today about the efforts to address climate change at airports.

We know that the industry, like so many, needs to change. And at Pittsburgh International Airport we are leading the way through both broad and focused efforts.

For us, the biggest is the installation of the world's first airport microgrid to become entirely self-sufficient for power generation while significantly decreasing our carbon footprint at the same time.

After reading reports of power failures within similar institutions, we identified four goals; to improve airport resiliency and reliability, support our sustainability goals, lower our electricity costs, and support the local natural gas industry. We discovered the best way to do this was through an airport-wide microgrid powered by natural gas and solar energy. The microgrid began operation in summer 2021, and the effects were immediate.

The 23- megawatt microgrid serves as the primary electric power source for the PIT terminal and airport campus. It includes five natural gas-fired generators and nearly

10,000 solar panels that produce energy equivalent to powering more than 13,000 homes. The airport's peak demand is approximately 14 megawatts. Any excess power not used on site can be exported to the grid. By utilizing cleaner energy, versus importing it from the grid, the microgrid provides a yearly carbon reduction of over 8 million pounds; the equivalent of eliminating nearly 800 cars from the road or 9 million miles driven by passenger cars.

The solar array is constructed atop eight acres of an old landfill site; a practice the Pennsylvania Department of Environmental Protection is looking to duplicate in other parts of the state. We are in plans to double the number of solar panels in the near future.

The microgrid offers us resiliency in the event of a grid blackout or cyber-attack and an opportunity to utilize cleaner forms of energy generated locally. The microgrid is also inspiring change in the industry: in 2020 it was recognized as a "World Changing Idea" by Fast Company magazine, and in 2021 it won both the American Association for Airport Executives' (AAAE) Outstanding Sustainability Infrastructure Development and the Airports Council International's (ACI) North America Environmental Achievement Award for Innovation.

We understand the decarbonization goals within our industry and we are fortunate to be able to tap into a natural resource of our campus, where we have fourteen Marcellus shale wells. We recognize that the industry must move incrementally, primarily due to safety and cost factors and we view natural gas as a transitional step that will propel the aviation industry into the future.

As for the focused steps toward our goals, we make them everywhere: from providing free electric vehicle charging stations to airport customers, to adding water bottle filling stations throughout our terminals – saving more than 300,000 plastic bottles in 2021. We are one of a few airports in the country with apiaries on site as we contribute to rebuilding the honeybee population across thousands of acres of airport land. We also house an innovation lab, in partnership with Carnegie Mellon University, the xBridge, where we are testing technology to improve efficiencies in our airport. One of those projects is a natural purifier that uses algae to reduce carbon dioxide and increase oxygen – a concept we are studying to bring to our terminals.

While others in the industry may have slowed down in the face of the pandemic, we kept moving forward. In fall 2021, we broke ground to reshape the future of our region through our Terminal Modernization Program. Our 30-year-old facility, built accordingly to serve one major airline and connecting travel as a hub, will be right-sized and better aligned to the needs of the over 2 million people who call Pittsburgh home. We will reduce long-term costs through operating and maintenance efficiencies. An updated design will allow for an expanded security checkpoint, the elimination of a costly train, a newly configured international arrivals process, the implementation of modern

technology throughout the terminal and an efficient baggage delivery system, among other improvements. It will be also built by Pittsburgh – 81% of the construction contracts have been awarded to local companies, that will utilize locally-sourced and fabricated materials like steel, concrete and wood.

Sustainability will be a key focus of the new facility into the future. The new facility will feature outdoor terraces—both pre- and post-security—to ensure access to fresh air for passengers.

During construction, a minimum of 75 percent of waste generated will be recycled or reused, including concrete from existing airfield ramps that will be reused for new roads. Additional plans include rainwater harvesting and other water conservation efforts. We will achieve, at a minimum, LEED Silver but striving toward Gold certification.

Airports play a valuable role in transforming the aviation industry, through broad and focused initiatives. At Pittsburgh International Airport, we are leading the way through innovation; and would welcome others with us on that journey.

**I appreciate the opportunity to appear before the subcommittee. I look forward to answering any questions you may have.**

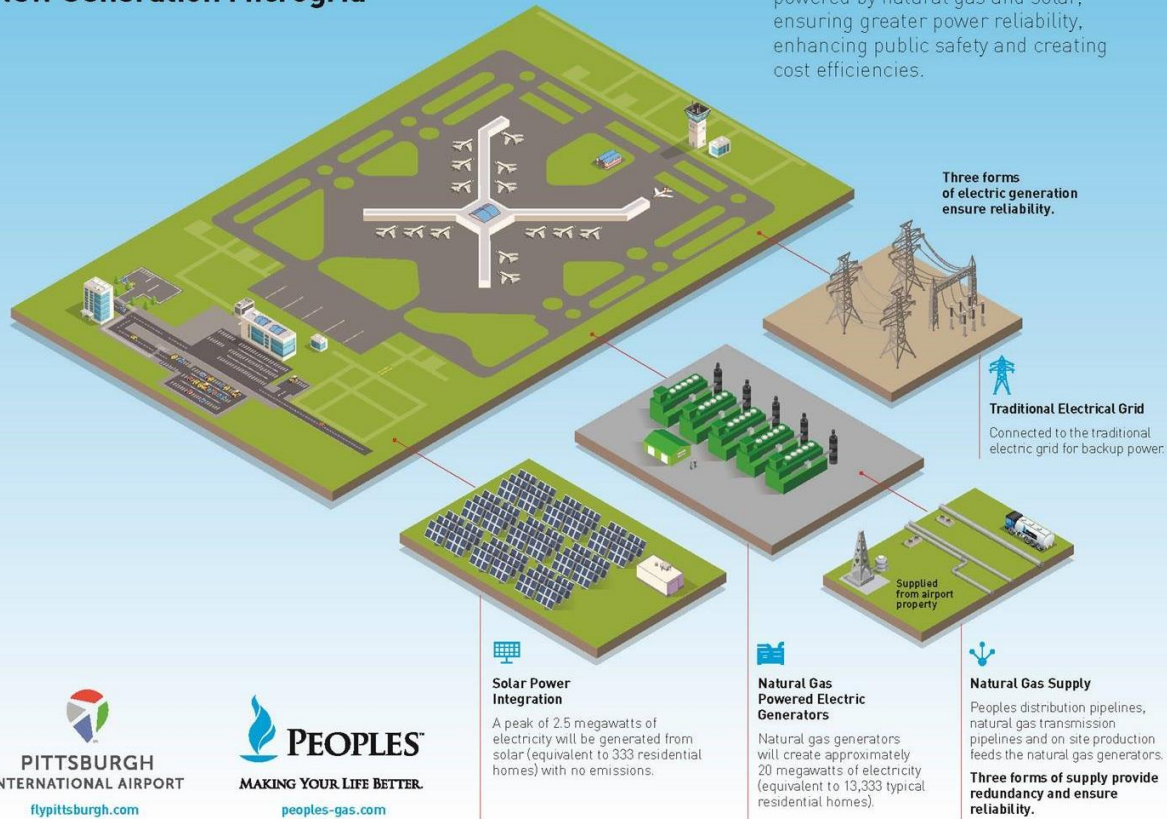
**APPENDIX:**



Pittsburgh International Airport Microgrid

## Pittsburgh International Airport New Generation Microgrid

Pittsburgh International Airport is building a first-of-its-kind microgrid powered by natural gas and solar, ensuring greater power reliability, enhancing public safety and creating cost efficiencies.



Solar Farm

Pittsburgh International Airport  
Landside Terminal, 4th Floor Mezz.  
PO Box 12370 | Pittsburgh, PA 15231-0370  
(412) 472-3500 | FLYPITTSBURGH.COM



Outdoor Terrace



Bees at our apiary

Pittsburgh International Airport  
Landside Terminal, 4th Floor Mezz.  
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(412)472-3500 | FLYPITTSBURGH.COM



Wood paneling in our new terminal

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