City of Newark Newark, DE





The City of Newark is the third largest city in Delaware and has a goal to be a more sustainable city and increase renewable generation in its distributed electricity mix to 100% as soon as practical. They want a community that is socially fair, economically strong, and an environmentally healthy place to live, work, and play.

The City Manager's office worked with Seiberlich Trane Energy Services to modernize their facilities infrastructure, upgrade outdoor lighting, and create renewable energy through solar arrays throughout the city. They were able to do this at no cost to the taxpayers by leveraging the energy savings from upgrades that will pay for the entire project over 20 years.

Seiberlich Trane Energy Services went beyond just saving energy and improving equipment operations by installing a citywide street & pedestrian lighting control system as well as parking lot lighting controls to promote safety. Additionally, UVGI air purification systems were installed in city air handlers to improve indoor air quality.

"Working with Seiberlich Trane Energy Services, Newark accelerated its conservation goals as outlined in the Newark Community Sustainability Plan while simultaneously completing substantial facility improvements at a \$0 cost to Newark taxpayers. Through this partnership, Newark is more sustainable both in its building operations and environmental impact."

Tom Coleman, PE - Newark City Manager

CO2 Emissions

Project Objectives

- Improve city's lighting
- Increase operational efficiency of the facilities
- Complete long-term capital upgrades
- Create renewable energy through solar arrays
- Improve occupant comfort

Energy Conservation Measures Installed

- Interior & exterior LED lighting upgrades
- Lighting controls
- HVAC system upgrades including air handlers, chiller plants, boiler, water pump VFDs, and VRF units
- State of the art BAS hardware and software
- Building controls optimization
- 6 solar arrays: 2 ground mount and 4 roof mount
- New roofs
- Building envelope improvements
- UVGI air purification in air handlers
- Atrium UV window film

Project Results

The project improvements are expected to realize both energy and operations savings including:

- 3,456,139 kWh of electricity

Installed solar capacity

1,258 kW

ANNUAL ENVIRONMENTAL IMPACT OF PROJECT

Emissions Avoided From 545 Passenger vehicles driven for one year

Greenhouse Gas

Avoided From 309 Homes' energy use for one year

848 Tons of waste recycled

Greenhouse Gas

Emissions Avoided By

Carbon **Sequestered By**

