## smartwatt Energy Systems Optimization Solution Cortland County, New York



## THE CHALLENGE

Aging and energy-intensive equipment, inefficient lighting and drafty windows in several historic buildings throughout Cortland County was negatively impacting occupant comport, and driving up utility costs year-after-year.

## THE SOLUTION

Cortland County understood that a bundled energy systems approach was the most efficient option for updating their aging equipment, reducing energy usage and enhancing occupant comfort. Unfortunately, finding the start-up capital for the energy efficiency upgrades was going to be a challenge. Utility Energy Performance Contracting (UEPC) provided the solution they needed to fund the program. Implementing performance contracting gave Cortland County a budget-neutral solution: paying for the project over time with the guaranteed energy savings.

The project included 19 unique Facility Improvement Measures across 8 County buildings, including the County Office Building, Courthouse, Public Service and the Jail. Improvements included: tinting and replacing windows, replacing boilers, rooftop units, cooling towers, water source heat pumps and transformers, upgrading other HVAC equipment, interior and exterior LED lighting upgrades, VFD installations, building envelope modifications, water conservation measures and energy management system upgrades.

This historic restoration was bundled with capital equipment items for equipment at or beyond end-of-life, and low cost [fast payback] items to provide comprehensive and deep energy savings -- and an overall reduction in County utility spend of 37%.

## THE IMPACT

This project helped Cortland County reduce its energy usage, replace aging equipment, and enhance occupant comfort, while maintaining the integrity and historic look and feel of their buildings.





Annual natural gas savings: **\$88.9 K**