

Town of Minden, New York



Government



Bundled Energy Systems

Energy Performance Contract



The Town of Minden encompasses 33,000 acres in the southwestern border of Montgomery County in upstate New York and contains the Village of Fort Plain. The town's 4,200 residents live in one of the six hamlets in the town: Hallsville, Mindenville, Freybush, Fordsbush, Salt Springville and Brookmans Corners that are rich with historic, architectural, natural and cultural resources, some dating back to the 18th century. The mighty Mohawk River flows nearby.

The town partnered with SmartWatt to complete an energy systems optimization project that included LED lighting and heating system upgrades in their highway department building and courthouse.

THE CHALLENGE

The town featured a kerosene fired oil heating system in the highway department building that was costly to operate, produced uneven temperatures and slowed productivity. Additionally, the town had older exterior and interior lighting that was inefficient, energy intensive and expensive to maintain.

- **Lack of Budget:** The town lacked the budget for the project and endured their inefficient kerosene heating system for years because they couldn't afford to replace it.
- **Energy Costs:** The town's kerosene heating system was expensive to operate and didn't adequately heat the garage bays in the highway department facility.
- **Uneven Temperatures:** The inefficient and antiquated heating system didn't properly heat the facility, causing work to slow or stop altogether. The crew would return from plowing the town's roads only to sit in the breakroom to stay warm because the garage was so frigid.
- **Dim Lighting:** The fixtures installed in the courthouse were not properly designed for the space, making the output less than desirable and dim. Also, many exterior spaces lacked lighting altogether. Additionally, fixtures were not being controlled which meant energy dollars being spent to light the spaces that were not in use.

“Our town is now operating more efficiently and safely. SmartWatt is the best thing that has ever happened to us.”

- Cheryl Reese, Town Supervisor



THE SOLUTION

To reduce energy costs and maintenance and enhance occupant comfort, the town implemented a bundled energy systems optimization project. The project was funded through an energy performance contract, requiring no up-front capital and the ability to use guaranteed energy savings to pay for the project.

- **LED Lighting:** Interior and exterior LED fixtures were installed throughout the highway facility and courthouse. The LED fixtures require a lower wattage than the original fixtures while still providing equivalent or higher light levels. Appropriate light levels are key to safety and visibility for all who work and visit the space.
- **Heating System:** A new boiler and infrared heating system was installed in the highway department building generating warmth for workers while reducing energy costs for the town.

THE IMPACT

The new heating system is now adequately heating the facility, keeping workers warm in the garage and able to work, even on the coldest days. Additionally, the cost to operate and maintain the efficient system has been drastically reduced. The light levels and enhanced visibility has resulted in positive feedback from the users of the space and enhanced safety.

Financial Impact

\$17K

total annual cost savings

Annual kWh savings: **18,771**

Annual natural gas savings: **19,612 therms**

Environmental Impact

13 Tons

carbon dioxide saved annually

By removing this quantity of CO₂ from the atmosphere, these projects will have the same effect on the local environment as:

Saving **1,484 gallons** of gasoline

Planting **12.5 acres** of trees