



Facility type	County Buildings
Project cost	\$14.2 million
Cost savings	\$2.1 million
Contract term	15 years
Contract type	GESA

ALLEGHENY COUNTY (2009)

Commonwealth of Pennsylvania

Allegheny County, a national leader in energy and water efficiency, once again turns to NORESKO to implement infrastructure improvements under a guaranteed energy savings agreement.

Since 1998, NORESKO has been a key partner in Allegheny County's infrastructure modernization, operational efficiency and sustainability efforts. In 2009, the county faced several financial and deferred maintenance challenges and county leaders turned to NORESKO to implement infrastructure improvements under a guaranteed energy savings agreement.

The project focused on the County Jail and the Kane Regional Nursing Centers. Both facilities house residents 24 hours per day, 7 days per week. Under the \$14.2 million agreement, NORESKO implemented a comprehensive set of 11 ECMs, including water conservation retrofits, lighting upgrades, HVAC and steam system upgrades and variable speed drives. Staff members at the jail also benefit from "lock out" features on plumbing controls that limit vandalism and repeated flushing by inmates. NORESKO also used certified green vendors, conservation products, and reclaimed all recyclable materials to reduce costs to Allegheny County.

Allegheny County was able to leverage grants and bond financing that were made available as a result of the American Recovery and Re-investment Act (ARRA) to pay for this fast-tracked project. The project is expected to deliver a first-year positive cash flow of over \$1 million on \$2.1 million of annually-recurring, combined energy and water savings.

The guaranteed energy savings project has enabled Allegheny County to reduce its carbon footprint, lower the cost of government for its taxpayers and improve its financial health.

Technical Highlights

- ▶ Water conservation retrofits
- ▶ Lighting upgrades
- ▶ HVAC & steam system upgrades
- ▶ Variable speed drives
- ▶ Corrections-grade plumbing
- ▶ Waste disposal system improvements

Environmental Impact

- ▶ Conserves 74,956 thousand gallons of water per year
- ▶ 3,519,361 kWh reduction in annual electricity consumption
- ▶ 8.8% reduction in CO₂
9.3% reduction in SO_x
7.3% reduction in NO_x
- ▶ Equivalent to removing 450 cars from the road annually