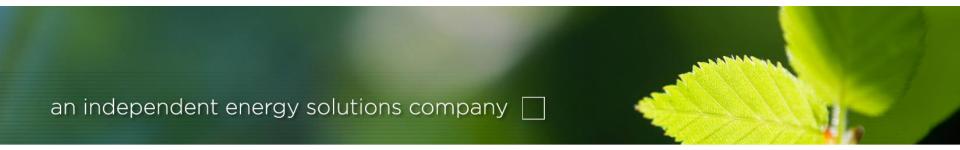
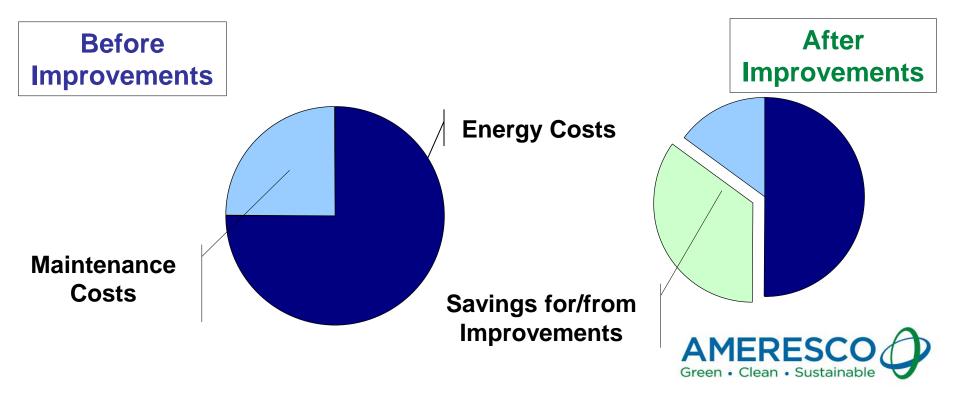
Overview of Energy Savings Performance Contracting





What is Performance Contracting?

- Energy Savings Performance Contracting (ESPC) is a technique that uses utility cost savings to reinvest into the facility or property covering the cost of improvements within a specified period of time (<18 years per NYSED laws)</p>
- All institutional, commercial and industrial building owners/managers can use an ESPC to address their portfolios



What Can ESPC Accomplish?

- □ Significant reduction in utility expenses of up to 30%
- □ Infrastructure modernization
 - Installation of new energy related equipment/systems
 - Incorporation of capital improvements
- □ Equipment inventory consistency
- □ Better management and tracking of energy use
- □ Environmental Stewardship mitigation of greenhouse gases
- Shift risk of delivery and performance from district taxpayers to ESCO
- Implemented with no up-front capital costs and guaranteed savings for the project term



Wappingers CSD ESPC Phase I

- □ Cost: \$8.8 Million
- □ NYS Aid: \$3.9 Million
- □ 14 ECM's implemented
- □ All buildings received upgrades

- Lighting System Improvements
- Lighting Controls
- Exterior Lighting
- Building Management System
- Boiler Replacements
- Steam Trap Replacements
- Infiltration Reduction
- Variable Frequency Drives
- Premium Efficiency Motors
- Walk-in Freezer and Cooler Controllers
- Computer Load Management
- Gym De-Stratification Fans
- Pipe Insulation
- vending Machine Controls



Wappingers CSD ESPC Phase II

Benefits

- Several Schools still contain some pneumatics controlling the buildings
- Roy C Ketchum HS is in need of several energy upgrades (EMS etc)
- Aging buildings and equipment in need of modernization
- ESPC's are best done in concert with capital projects

Constraints

- Some of the remaining ECM's have long paybacks
- Roy C Ketchum HS uses very little energy
- Phase I project is performing very well; only a finite amount of savings can be derived



Solar PV System Progress in NYS

- NYS has taken vast strides in making solar more practical
- NY-Sun incentive has made it possible for districts to see immediate benefits
- Cost of solar PV installations has dropped dramatically in recent years

The NY-Sun Initiative Solar Powering New York



Solar PV System Options

ESPC

- Wappingers CSD will **own** their PV system
- Any excess solar generated will be banked by the district
- ESCO is responsible for maintenance & upkeep
- The district will receive state-aid on the total cost
- ESCO takes full risk & responsibility

PPA

- Wappingers CSD will buy their power from the installer
- Any excess solar generated will be sold to the grid at a much lower cost
- District may be responsible for maintenance & upkeep
- No part of the PV system will receive state-aid; despite being approved by SED



LED Lighting

- □ Cost has dropped significantly in the last 3 years
- □ Compatible with new fixtures and ballasts for easy installation
- □ Long lasting fixtures (Over 50,000 hours)
 - Operations & Maintenance savings accepted by SED





ESPC vs Capital Project

- □ The districts takes on significant & unnecessary risks
- Over 25 years of successful experience has made us very good at what we do
- ESPC's can bring vast improvements to your buildings while alleviating requirements for your next Capital Project
- □ NO VOTE NECCESARY
 - An additional 10% in State Aid available for a successful vote





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