

# *Sachem Union Free School District*

## *Energy Performance Contract*



## *Project Completion Update*

*November 14, 2012*

*Presentation by:*

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# *Project Overview*

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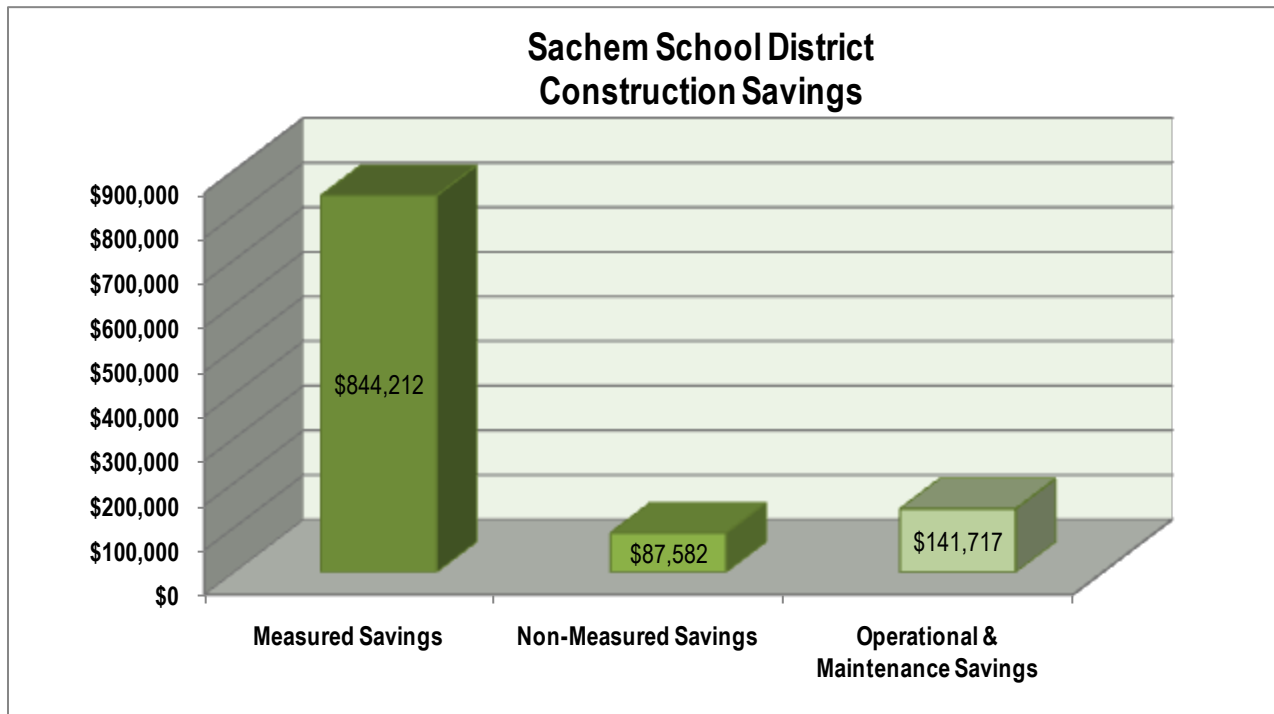
- Sachem School District and Johnson Controls signed an energy performance contract in 2009.
- A total of twenty four (24) Facility Improvement Measures are installed across the district.
- The project guarantees \$914,346 in energy savings per year.
- The project guaranteed \$155,000 in rebate incentives.

# *Facility Improvement Measures*

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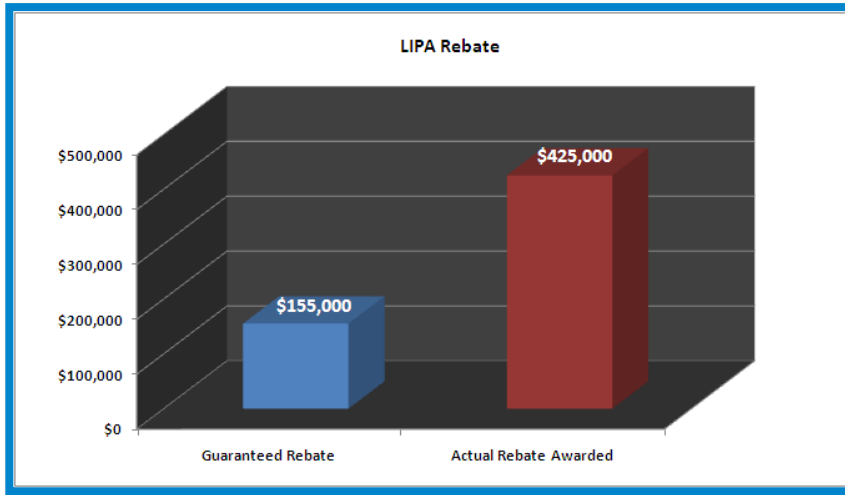
- Lighting Retrofit/Upgrade
- Lighting Fixture Controls
- Building Envelope Improvements
- Energy Management System Upgrade
- Steam Traps Replacement
- Pipe and Valve Insulation
- Boiler Replacement
- Boiler Controllers
- Hot Water Heaters
- Window Film
- Insulation and Siding
- Heat Reclaiming System
- VFD's on Fans and Hot Water Pumps
- Water Valve Controllers
- Vending Machine Controllers
- Pool Covers
- Wireless Clocks
- Solar Photovoltaic
- Wind Power Generation
- Waste Oil Heater
- Block Heater Timers
- Synchronous Belts
- Transformers
- Computer Power Management

# Construction Savings



*Sachem School District has realized savings of \$1,256,423 during the two (2) year construction period.*

# LIPA Rebate

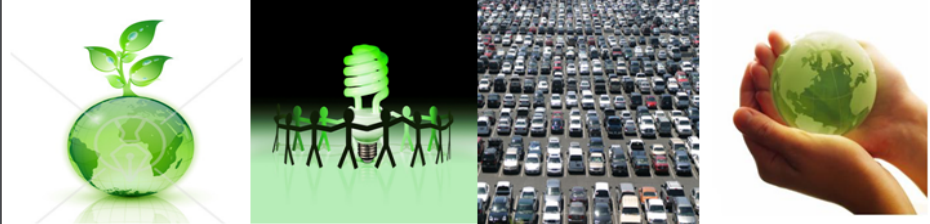


Sachem School District received the \$425,000 in LIPA Rebates for Lighting and Lighting Controls Retrofit



Sachem School District board at LIPA's Rebate Check Presentation

# Environmental Impact

Sachem Central School District Environmental Impact			
<b>Construction Energy Savings Period (May 2010 - June 2012)</b>			
Annual Kilowatt Hours Saved	4,157,844	kWh	
Annual Natural Gas Saved	24,672	MMBtu	
Annual Oil Saved	-	MMBtu	
Propane Gallons Saved	-	MMBtu	
<b>Emission Reductions</b>	<b>In One Year</b>	<b>In Three Years</b>	<b>In 18 Years</b>
Pounds of Carbon Dioxide	9,846,873	29,540,620	177,243,721
Pounds of Sulfur Dioxide	29,868	89,604	537,626
Pounds of Nitrogen Oxide	13,513	40,540	243,240
Metric Tons of Carbon Dioxide	4,467	13,400	80,397
Metric Tons of Sulfur Dioxide	13.5	41	244
Metric Tons of Nitrogen Oxide	6.1	18	110
			
<b>Equivalent Impact</b>	<b>In One Year</b>	<b>In Three Years</b>	<b>In 18 Years</b>
Passenger Cars off the Road	965	2,895	17,370
Passenger Car Miles Driven	11,580,016	34,740,047	208,440,284
Planted Acres of Trees*	1,343	4,028	24,171
Gallons of Gasoline	508,619	1,525,858	9,155,151
Barrels of Oil	10,388	31,164	186,986
Number of Powered Homes	571	1,713	10,280
*1 acre of Trees = 400 Trees			

## *Next Steps..*

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- JCI will present a detailed Measurement & Verification report after 12 months of project completion.
- JCI will provide consultation on Energy Star and Green Ribbon Schools Program.