# A Behavior Based Energy Conservation Program at Suffolk County Community College

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### Suffolk County Community College Overview -

- Founded in 1959.
- Largest Community College in NYS.
- Over 26,500 students enrolled across three campuses and two extension sites.
- Gross Building Square Footage: Over 1.3 M
- Annual Utilities Budget of \$5.5M (pre-project).







### Cenergistic Overview



VALENCIACOLLEGE







- Established in 1986 Leader in Behavior
  based EPC's,
  specializing in K-12
  and Higher Ed.
- More than \$4 billion in energy savings with a client average of 26%
- 1,360 clients in 48 states
- Programs are in over
   22,000 buildings
   nationwide



### SCCC Sustainability Initiatives





















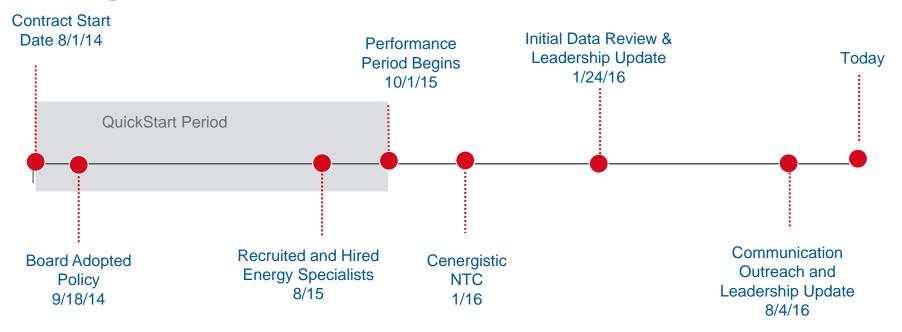






Inspiration, Information, Action

#### **Program Update**

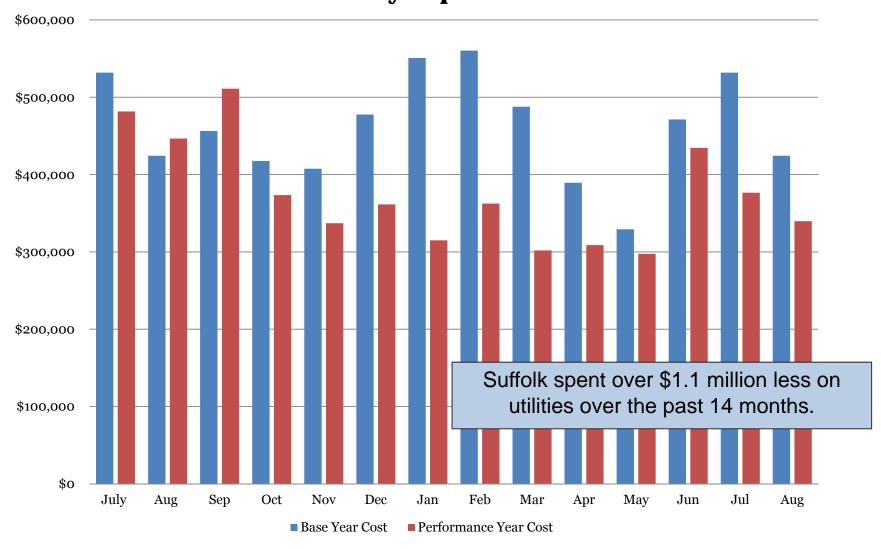


- 50% Shared Savings
  - After ES salary expenditures and Suffolk expenses. Adjusted for weather and commodity cost.
- Primary Focus is on schedule and building optimization
- 5 Year Contract

Board adopted Policy and Guidelines -

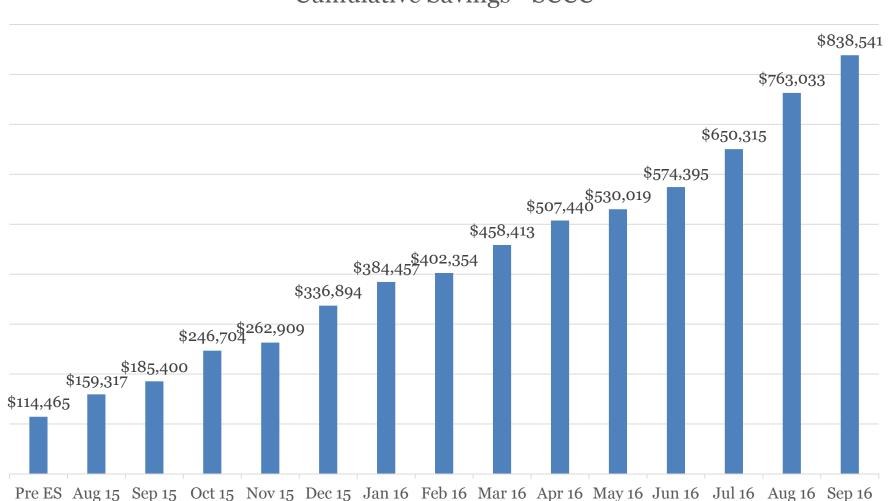
	<u>Occupied</u>	<u>Unoccupied</u>
Cooling:	74-78	85
Heating:	68-70	55

#### Raw Utility Cost Comparison Raw Utility Expenditures



## Monthly Savings Trend Program Savings to Date: \$838,541

**Cumulative Savings - SCCC** 



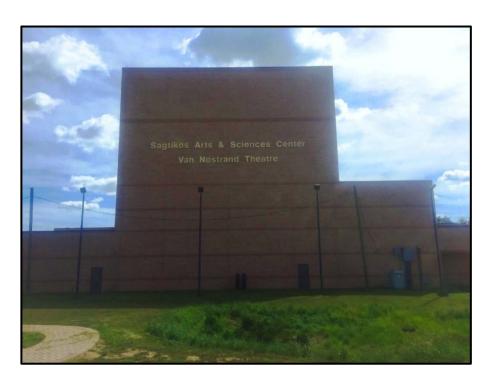
# A Day in the Life of an Energy Specialist

- Perform occupied and unoccupied building energy audits of 50 buildings
- Receive one-on-one training from Cenergistic staff
- Review building schedules and set HVAC equipment to match building use
- Adjust set points to match program guidelines
- Take advantage of college breaks to increase energy conservation savings
- Verify utility bills accuracy and analyze trends
- Communicate our energy program goals to students and staff





### Sagtikos Building Case Study



- Found HVAC equipment did not respond to schedule
- 5-day Simple Payback Period
- Project anticipated to save \$100,000 annually

College Investment: \$1,150 Johnson Controls Tech. Visit		
Month	<u>Savings</u>	
June:	\$7,711	
July:	\$8,565	
August:	\$14,418	
September:	\$12,148	

### **Projected Savings**

Current Savings 13.3% \$838,541 Projected Savings 24% \$1,308,996

Monthly Difference: \$39,204

- Reinvest savings in fixing equipment and controls
- Enhance energy conservation program visibility
- Apply organizational resources more efficiently
- Augment communication/outreach plan with high level involvement

### **Lessons Learned**

- Energy Specialist Hires
  - Critical. Can take time.
    - Where do they fit in? Bargaining unit issues
    - Cenergistic's new business model
- Relationship with Plant Operations
  - Operational Reliability vs. Energy Savings
- Budgetary Inclusion
- Tangential Benefits
  - Great resource for Utility cost data
  - Puts new focus on energy/sustainability issues

## Thank you!

Questions?