

#### Client Success Stories

## Sustaining a Culture of Conservation

Loudoun County Public Schools, VA



NUMBER OF STUDENTS

69,000

PROGRAM START

1993

SQUARE FOOTAGE

9,135,180

TOTAL REPORTED SAVINGS

\$61,629,458

AVG REPORTED SAVINGS

29%





#### Client Success Stories

The Nation's Only 70% ENERGY STAR Leader

**Decatur County Community Schools, IN** 

**ENERGY STAR LEADERS** 

U.S. Environmental Protection Agency

NUMBER OF STUDENTS

2,200

**PROGRAM START** 

2008

TOTAL REPORTED SAVINGS

\$2,437,592



Decatur Community Schools is the only organization in the nation to achieve 70% ENERGY STAR Leader status! In addition, the district was the first in the nation to be recognized by ENERGY STAR for 50% reduction in energy consumption. It is the only entity in the nation to have achieved a 60% and 70% reduction recognition for a single year. All of the district's schools earned the ENERGY STAR for 2010, 2011 and 2012.



#### Client Success Stories

#### **Saving Energy to Meet Mandates**

St. Johns County School District St. Augustine, FL

In today's economic climate, school administrators are expected to provide more services in smaller classes with less money. Unfunded mandates have put more pressure than ever on tight budgets. By cutting 47 percent off the district's secondlargest budget line item, St. Johns County Schools district was able to provide teachers and support staff with experience compensation. The St. Augustine Record editorial board took notice, and praised the district's efforts. The U.S. Environmental Protection Agency's ENERGY STAR Program presented the ENERGY STAR to 35 schools, most for three years in a row.

"School's energy cost savings can keep classrooms on top"

Editorial Board St. Augustine Record Editorial, February 12, 2010 NUMBER OF STUDENTS

27,866

PROGRAM START

2009

SQUARE FOOTAGE

4,766,108

TOTAL REPORTED SAVINGS

\$29,213,474

AVG REPORTED SAVINGS

47%

NUMBER OF PERFORMANCE MONTHS

68

KBTU USE PER SQUARE FOOT (EUI): BASELINE YEAR

61.54

KBTU USE PER SQUARE FOOT (EUI): LAST PERFORMANCE YEAR

30.37



#### Client Success Stories

## **Energy Savings Leads to Keeping Funds in the Classroom**

Sarasota County Schools Sarasota, FL

Since partnering with Cenergistic in 2008 on a comprehensive energy management program, Sarasota County Schools has saved over \$20 million in energy costs. The district was able to redirect those savings into other priorities — including new schools — all while continuing to cut energy use.

Five buildings have received ENERGY STAR Certification, placing them in the top 25 percent most energy efficient in the nation.

"In 2007, when the program began, our kilowatt-per-hour usage was almost 100 million. By 2011 that usage was reduced by 13 million, to 87 million kilowatts per hour, even though we added three new schools during that period."

Jon Hampton Energy Specialist Sarasota County Schools NUMBER OF STUDENTS

41,083

**PROGRAM START** 

2008

SQUARE FOOTAGE

6,245,527

TOTAL REPORTED SAVINGS

\$20,836,121

AVG REPORTED SAVINGS

27%

NUMBER OF PERFORMANCE MONTHS

74

KBTU USE PER SQUARE FOOT (EUI): BASELINE YEAR

52.72

KBTU USE PER SQUARE FOOT (EUI): LAST PERFORMANCE YEAR

42.76



#### Client Success Stories

## Using Less Electricity While Adding Square Footage

Marion County Public Schools Ocala, FL

"School District's Utility Bills Continue to Shrink" — the newspaper story congratulated Marion County Public Schools' energy program for having cut energy use per square foot by 30 percent, and saving 26 percent off of expected energy costs since partnering with Cenergistic.

Sixteen of their buildings received ENERGY STAR Certification<sup>®</sup>, bringing national recognition of the district's conservation success.

"Marion County Public Schools used less electricity in 2011 than it did seven years ago, despite the fact that the district has added 1 million more square-feet of space during that time."

Joe Callahan Staff Writer Ocala Star-Banner NUMBER OF STUDENTS

41,888

PROGRAM START

2006

SQUARE FOOTAGE

6,147,194

**TOTAL REPORTED SAVINGS** 

\$22,250,638

AVG REPORTED SAVINGS

27%

NUMBER OF PERFORMANCE MONTHS

97

KBTU USE PER SQUARE FOOT (EUI): BASELINE YEAR

49.48

KBTU USE PER SQUARE FOOT (EUI): LAST PERFORMANCE YEAR

39.49

#### Cenergistic<sup>\*</sup>

## Case Study:

# Gilroy Unified School District — The Value of Our Expertise

"This is thanks to due diligence. ... This money would have otherwise been paid out ... and it was saved thanks to excellent work ...."

Jaime Rosso Trustee Gilroy Unified School District



#### **CHALLENGE**

A large public school district in Gilroy, California experienced a serious **pressurization issue** with the second phase build of its largest high school. The issue made it impossible for the building to operate efficiently, **increasing energy consumption** and costs.

#### They needed a working solution — fast.

#### **DISCOVERY**

A Cenergistic<sup>®</sup> engineering team assessed the building, reviewed previous remediation approaches and met with maintenance and operations teams to understand the issue. They researched possible causes, tested equipment and analyzed the building's overall environment/efficiency.

The engineers quickly determined that the building was designed with a less-than-optimal air flow exchange, preventing the appropriate levels of air pressurization required to meet ASHRAE standards and/or maintain energy efficiency.

#### Our engineers provided two recommendations to the district:

- Architect re-engagement for potential retrofit-redesign option(s)
- 2. Alternative equipment solution

Gilroy's Chief Business Officer opted to pursue the alternative equipment solution and added exhaust fans.

Additionally, performing building assessments and billing audits as trained by Cenergistic, GUSD's Energy Specialist pored over city sewer impact fees — realizing the **District owed significantly less than it had paid the year before**.

#### Cenergistic<sup>\*</sup>

#### **IMPACT**

## Partnering with Cenergistic delivered three major wins for GUSD:

- Cenergistic's engineering team reviewed a lingering, problematic issue and recommended a cost-feasible solution the District was able to implement without a costly redesign and/or retrofit.
- 2. The Energy Specialist's diligent bill auditing helped Gilroy Unified School District realize more than \$895,000 in sewer connection fee reduction alone.
- Additional efforts by the Energy Specialist, Cenergistic engineers and experts brought in a variety of rebates delivering an overall \$1.3 million special savings on top of the \$2.1 million savings the district realized by reducing energy consumption.

#### Gilroy USD Special Savings Report — Excerpts

Meter Code	Meter Name	Billing Period	Category	Value Description
G72005	Brownell MS	Feb 2011	PG&E WGSC	\$439.53 PG&E Winter Gas Savings Credit
G72005	Brownell MS	Feb 2012	PG&E WGSC	\$361.75 PG&E Winter Gas Savings Credit
	Natural Gas	:	\$801.28	
	Brownell MS	:	\$50,919.87	
[CHS] Christopher HS Energy Type: Electric				
E59404	Christopher HS - Bldg D, E and Poo	Feb 2011	Rebate	\$58,616.00 PG&E Efficiency Lighting Rebate For Christopher High School.
E59404	Christopher HS - Bldg D, E and Poo	Nov 2012	Rebate	\$7,704.00 RSG VFD addition
Energy Type: Natural Gas	Electric	:	\$66,320.00	
G81585	Christopher HS	Feb 2011	PG&E WGSC	\$953,05 PG&E Winter Gas Savings Credit
	Natural Gas	:	\$953.05	
Energy Type: Sewer				
S2044-00	Christopher HS	Mar 2011	Utility Rate Reduction	\$875,000.00 Christopher HS Sewer Connection Fee Reduction
52044-00	Christopher HS	Mar 2012	Utility Rate Reduction	\$2,384.37 Credit due to delayed reclassification for sewer charges from flat-rate to usage-driven.
S2045-00	Christopher HS	Mar 2012	Utility Rate Reduction	\$1,268.19 Credit due to delayed reclassification for sewer charges from flat-rate to usage-driven.
Sewer: \$878,652.56				
Christopher HS: \$945,925.61				
		ALTERNATION OF THE PARTY.	A CONTRACTOR OF THE PARTY OF	
SVMS] South Valley MS Energy Type: Electric				
65995	South Valley MS	Aug 2011	Rebate	\$29,866.00 PG&E Ecology Action Retrofit Project Rebate
	Electric: \$29,866.00		\$29,866.00	
nergy Type: Natural Gas				
532005	South Valley MS	Feb 2011	PG&E WGSC	\$95.19 PG&E Winter Gas Savings Credit
61005	South Valley MS	Feb 2011	PG&E WGSC	\$43.70 PG&E Winter Gas Savings Credit
661005	South Valley MS	Feb 2012	PG&E WGSC	\$203.23 PG&E Winter Gas Savings Credit
597340	South Valley MS	Feb 2011	PG&E WGSC	\$11.95 PG&E Winter Gas Savings Credit
Natural Gas: \$354.07				
South my man.				



## Case Study:

# Lafayette School Corporation, IN — Redirecting Funds from Savings, Earning Media Recognition



"To be real honest, I was skeptical that we could reach this level of savings because we believed we had been using energy efficiently and had upgraded many of our systems."

> Les Huddle Superintendent Lafayette School Corporation

#### **CHALLENGE**

Educating 7,000 students across 14 sites and managing 1.6 million square feet of facilities in Central Indiana, Lafayette School Corporation face annual energy expenses topping \$2.4 million and rising.

- LSC officials knew they had to control costs.
- Parents were already overburdened with a sagging economy.
- Increased school fees were not an option.

School administrators researched possibilities. The Chief Financial Officer suggested an energy conservation company he'd successfully worked with before, and the district partnered with Cenergistic.

#### **DISCOVERY**

Cenergistic engineers and experts reviewed operations and identified energy-saving opportunities throughout the system.

- Operational changes reduced energy consumption.
- Negotiations delivered a unit-cost rate cut based on energy use reduction.

#### **IMPACT**

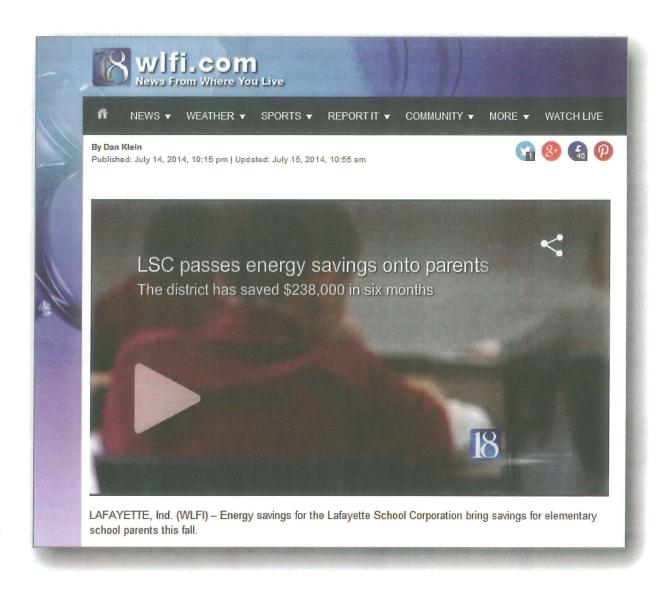
Today, the district uses less energy, paying for it at a more favorable rate.

The utility company estimates a \$110,000 annual savings based on this change alone.

#### Local media covered the program's progress:

- In the first four months, the program exceeded savings projections and cut expected energy costs by 22 percent.
- A few months later, the board reduced book rental rates for parents — using \$100,000 of energy savings to fund the cuts.

The board was pleased to pass savings on to students and parents, and the district earned kudos from its local media outlet for its financial stewardship.

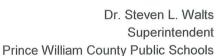


#### Cenergistic<sup>\*</sup>

## Case Study:

# Prince William County Public Schools — Optimization During Heating Season

"Rather than sending \$19 million to our energy providers, our conscious efforts will allow the money to remain in our budget to help classroom teachers, to save jobs and quality programs, and to invest in providing a World-Class Education."





#### **CHALLENGE**

One of the largest public school systems in Virginia was looking to maximize efficiencies at its newest high school, where they struggled to control energy costs and consumption.

A beautiful, state-of-the-art, 320,000+ square foot campus that opened in 2011, Patriot High School serves more than 2,260 students. The district's maintenance and operations group turned to energy conservation partner, Cenergistic® for guidance.

#### **DISCOVERY**

Cenergistic immediately **began assessing environmental and operational conditions**. The engineers supervised systematic adjustments to:

- Hot and chilled water
- Space temperatures
- Outside air ratios
- Pre-occupancy sequences
- Hot water differential pressures
- Time of day schedules
- Lighting and plug load items
- Holiday shutdown procedures

Frequent auditing and testing ensured compliance to new procedures and that systems operated as intended.

#### Cenergistic<sup>\*</sup>

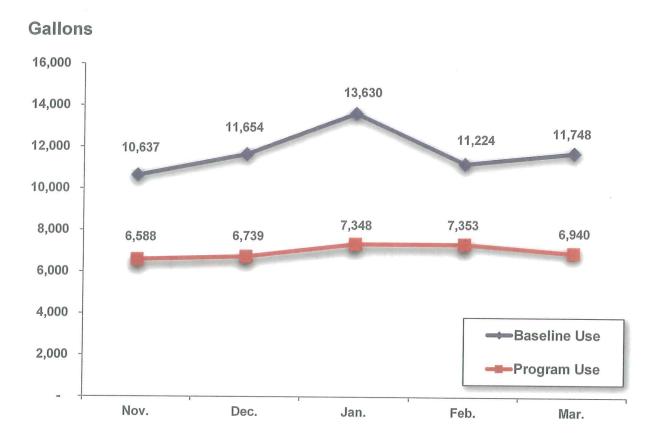
#### **IMPACT**

After effectively implementing optimization adjustments, in the first heating season, Patriot High School cut Fuel Oil consumption 40%!

Cenergistic provided Prince William County Public Schools with the **information**, **tools and resources** necessary to effectively manage its energy conservation efforts and capture significant savings opportunities.

Less than two years into the program, the district has **saved more than \$7 million system wide**.

## Patriot High School Fuel Oil Consumption





## The New York Times

**Energy Education Client Success** 

August 14, 2011

## With Post-Its and Checklists, Schools Cut Their Energy Bills

By WINNIE HU

Simple yellow Post-it notes with the message "When not in use, turn off the juice," pointedly left on classroom computers, printers and air-conditioners, have helped the Mount Sinai School District on Long Island save \$350,000 annually on utility bills.

Energy consumption in New York City's 1,245 school buildings is down roughly 11 percent since 2008, as motion detectors have been installed on classroom lights and unused refrigerators and freezers have been unplugged for the summer.

In Yonkers, energy savings have financed \$18 million in new boilers, windows and other capital improvements that the Westchester County district could not otherwise afford.

Schools, once known as energy wasters, are embracing conservation in increasing numbers. A desire to practice the environmentally friendly principles discussed in classrooms has been heightened by soaring energy costs and tighter budgets. With the help of a growing industry of energy consultants, school officials are evaluating every detail of their daily operations, like the temperature of the swimming pool and the amount of electricity the cafeteria ovens use, and are replacing energy-guzzling equipment with more efficient models.

Supporters say that even small adjustments can pay off almost immediately. "If we tested schools in efficient use of energy, many of them wouldn't get a passing grade," said C. David Myers, president of building efficiency for Johnson Controls, which has joined with



In New Jersey, the schools in Holmdel Township have lowered their electric and gas bills by about 50 percent since 2009, to \$1 million annually.

60 of the 125 school districts on Long Island to reduce energy use by 20 to 40 percent annually.

Nationally, more than two dozen states, including California, Idaho, Kentucky, Montana, New Hampshire and Virginia, have used millions in federal stimulus money since 2009 to pay for energy programs and upgrades in school buildings, said Judy Marks, director of the National Clearinghouse for Educational Facilities in Washington. These efforts include replacing light fixtures, adding solar panels and building geothermal heating and cooling systems.

Some states have also started programs to finance school conservation efforts and to create local contracting jobs. Most recently, Oregon passed legislation in June to provide school districts with lowinterest loans and grants for school efficiency improvements; Washington State started a similar grant-based program in 2009.

In some instances, districts like Mount Sinai have appointed an official energy manager — in its case, Chris Heil, an assistant high school principal — to police hallways and classrooms to root out energy waste. Armed with yellow notes, he inspects 100 classrooms a day and "tickets" violators. Teachers have been known to run back to their classrooms when they see him coming. When one instructor refused to shut down his classroom computers at night, Mr. Heil sent him an e-mail calculating how much money was being wasted, and promised to share the next message with the superintendent.

"I'm kind of like the cop who walks around and makes sure people are doing what they're supposed to be doing," Mr. Heil said. "As soon as you take me away, people will start their bad habits again."

Mr. Heil sometimes shows up at schools at 4 a.m. to make sure the custodial staff remembered to turn off the lights. He has rummaged through storage closets to locate switches to shut down rooftop exhaust fans that ran nonstop. Such vigilance has reduced the district's utility costs by 30 percent since 2007, Mr. Heil said.

As part of the Bloomberg administration's campaign to reduce the municipal government's energy consumption and carbon emissions by 30 percent by 2017, the city awarded \$100,000 in May to schools that voluntarily decreased their energy use in a month-long competition. Martin Luther King Jr. Educational Campus in Manhattan won top honors with a 35 percent reduction. And this fall, rooftop solar panels are being installed on three school buildings.

"We're focused on energy reduction like crazy," said Dennis M. Walcott, the city's schools chancellor, who regularly checks on schools that he sees lighted up at night.

Many districts across the country have financed conservation efforts through so-called energy performance contracts with companies that advise them on how to be more energy-efficient and guarantee them specific savings, either in dollars or kilowatts. If the

district's actual savings fall short, the company writes a check to make up the difference.

With contracts involving equipment investments — which can be \$50,000 to tens of millions of dollars, depending on the scope of the projects — districts typically use existing utility budgets or borrow money through third-party lenders, and then pay it back out of their immediate energy savings so that no budget increase is needed.

In Yonkers, the improvements included replacing Lincoln High School's 60-year-old boilers, which guzzled 137,500 gallons of heating oil a year — "so much fuel that it seemed like we had oil trucks parked out front," said John Carr, the executive director of school facilities in Yonkers. The new boilers burn only 80,000 gallons.

Three consultants — Johnson Controls, Trane and Energy Education (now Cenergistic) — have reported that their school business has grown by at least a third since 2006. The companies send in engineers and specialists to conduct extensive audits of each district — Energy Education uses a checklist of 1,200 items — and then custom-design conservation programs. "Anything that consumes energy, natural gas or water is going to get evaluated," said Larry Wash, Trane's president of global services.

In New Jersey, the schools in Holmdel Township have lowered their electric and gas bills by about half since 2009, to \$1 million annually. In environmental terms, that breaks down to 3.5 million fewer kilowatts of power and 240,000 fewer therms of heat a year.

William Balicki, Holmdel's energy manager, said he kept a tight check on thermostats, and installed automatic timers on outdoor lights in bus yards and parking lots that once stayed on long after the drivers left.

Mr. Balicki also considered placing motion sensors on classroom lights, but instead settled for \$75 worth of stickers to post above light switches as a reminder to flip them off.

"Anytime we can ask people to physically do it, we do," he said. "This is pretty much a people-based program. It's changing behavior."

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**ABOUT EPA** 

Newsroom

**United States of America** 

February 22, 2012

# **ENERGY STAR Leaders Achieve President Obama's Energy Efficiency Goal for Buildings**

EPA's ENERGY STAR provides model for superior building energy performance and savings

By Molly Hooven

**WASHINGTON** — The Environmental Protection Agency (EPA) announced that nearly half of the organizations recognized as ENERGY STAR Leaders have improved the energy efficiency of their building portfolios by 20 percent or more. Last year, President Obama announced a nationwide call to action to improve the energy performance in buildings across the nation by 20 percent by 2020. EPA's ENERGY STAR program has helped these 90 leading organizations achieve the President's goal by providing them with a proven energy management strategy, which includes a focus on ongoing performance measurement and whole-building improvement. ENERGY STAR Leaders have cumulatively saved more than \$150 million on utility bills and prevented greenhouse gas emissions equal to the electricity use of nearly 95,000 homes.

"Making our buildings more energy efficient is one of the most effective ways for American businesses, government and other organizations to save money and reduce the pollution going into the air we breathe," said EPA Administrator Lisa P. Jackson. "With help from EPA's ENERGY STAR program, these leaders are benefitting their bottom lines while protecting our health and the environment."

ENERGY STAR Leaders must meet one of two energy efficiency improvement milestones. The first milestone requires a 10 percent improvement in energy performance across their entire building portfolio, and subsequent recognition is given for

each 10 percent improvement thereafter. The second milestone, known as "top performer," requires the buildings in an organization's portfolio, to perform on average in the top 25 percent of similar buildings nationwide. To be eligible for ENERGY STAR Leaders recognition, organizations are required to track and submit energy performance data for all buildings and fuel sources through EPA's ENERGY STAR Portfolio Manager tool.

In the past year, EPA also recognized Decatur County Community Schools in Indiana as the first ENERGY STAR Leader to improve energy efficiency across their building portfolio by 60 percent.

The complete list of ENERGY STAR Leaders has grown to more than 200 organizations, including school districts, national retailers, commercial real estate companies, healthcare systems, supermarket operators and hotel managers that have achieved energy efficiency improvements across more than 11,400 buildings covering nearly 730 million square feet of the United States.

With help from EPA's ENERGY STAR program, thousands of businesses and organizations are improving the energy efficiency of the places where we work, play and learn and are saving billions of dollars while preventing millions of tons of greenhouse gas emissions from entering the atmosphere each year.



Marion County Public Schools began its energy conservation program with Cenergistic in 2005.

Florida, Long-Term Success

June 21, 2012

## School district's utility bills continue to shrink

By Joe Callahan

Marion County Public Schools used less electricity in 2011 than it did seven years ago, despite the fact that the district has added 1 million more square-feet of space during that time.

In 2011, the district used 61.6 million kilowatt hours of electricity, down from 65.8 million in 2010 and 70.4

million in 2005. The district has cut its annual electricity usage by 12.5 percent in seven years.

Since December 2005, the district's energy usage per square foot has declined by 29.8 percent, according to an annual energy report released Thursday by James Newkirk of the district's energy management team.

The management team, created by the district to control energy costs, has saved taxpayers about \$15 million — \$176,500 per month — since it was created in December 2005.

The program began with concerted efforts to shut down computers overnight and flip off lights to cut electric costs at the

district's 51 schools and dozens of district offices.

During the last seven years, Newkirk has traveled to area schools looking for ways to cut energy costs. Since the management team was created, the district has transformed 20 schools into Energy Star-rated facilities.

One of the latest energy-saving projects was replacing all the fluorescent light fixtures at Maplewood

Elementary with LED lights, which provide 30 percent brighter classrooms and cut energy costs.

Newkirk reported that based on the first six months of data after those lights were installed in December, the projected annual savings at Maplewood will be at least \$30,000, though could likely exceed \$35,000.

**Facts** 

#### Utility costs

The School District's overall 2011 utility bill — including water, sewer, electricity, natural gas, propane and heating oil — was the lowest it has been in four years. That's despite the fact the district has added 1 million square-feet of space and electric rates have risen by 44 percent.

YEAR: COST\*

**2008**: \$8.2 **2009**: \$8.8 **2010**: \$9.1 **2011**: \$8.1

\*In millions

Since the energy management team was created, electricity rates have risen by 44 percent. During the same period, metered water and sewer rates have increased by 39 percent.

Despite those rising unit costs, overall utility bills — including water and sewer — are still falling. The district spent \$8.1 million dollars on utilities in 2011 — \$1 million less than in 2010 and the lowest in five years.

The Energy Use Index (EUI) — which is the kilowatt BTU usage per square-foot for electricity, heating oil, natural gas and propane combined — was also at an all-time low of 36.9 per square foot in 2011,

down from 52.6 in 2005.

Newkirk reported that the management team will now begin a recycling initiative in hopes of reducing solidwaste costs. He said the team will also move forward with retrofitting old lighting systems with more efficient solutions.

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#### We Are Local News & Events

Virginia, Decision to Hire Cenergistic

December 9, 2012

# Walts: Not Hype, Green Energy Equals \$19 Million Savings for Schools

By Dr. Steven L. Walts, Prince William County Public Schools Superintendent

When the issue of School Division energy conservation came up at a recent Prince William County School Board meeting, the ensuing discussion caught some in the audience by surprise. To be honest, I was surprised too. After all, what could make more sense than cutting unnecessary energy spending to redirect money to student education?

The discussion quickly provided an answer. Energy conservation can be viewed as less desirable when people feel their personal quality of life may be directly affected. School Board Members asked for assurance that PWCS is not seeking big sacrifices merely to produce a feel-good green aura around minimal returns.

Let me assure everyone, the return for taxpayers is anything but minimal.

Analysis by the School Division's energy conservation partner/consultant, Cenergistic (formerly Energy Education, Inc.), suggest that carefully planned and executed conservation will let PWCS realize as much as \$19 million in net savings over five years. Rather than \$19 million going to our energy providers, our conscious efforts will allow the money to remain in our budget to help classroom teachers, to save jobs and quality programs, and to invest in Providing a World-Class Education.

This is not hype. Cenergistic has generated similar levels of conservation savings for school divisions across the nation. They are paid only a percentage of actual savings, without which, they do not get paid. With the predicted energy savings PWCS still expects to come out \$19 million ahead during Cenergistic's five-year contract.



Dr. Steven L. Walts, Prince William County Public Schools Superintendent

After that, the company stops getting paid, but conservation changes keep paying off for us. After ten years, our total energy spending reduction could add up to nearly \$70 million.

Clearly, this is not just about turning off lights. Cenergistic has identified more than a thousand ways in which energy consumption can be reduced. They include

changing automated device schedules to more accurately reflect when facilities are actually used; reassessing maintenance and operation programs; and division-wide educational efforts highlighting conservation and sustainability in every PWCS building.

Just one approach focuses on maintaining the optimal combination of temperature and humidity that can ensure comfortable classrooms, while cutting energy use. It will require behavioral changes — after all, commonly used fans and space heaters in classrooms can undermine school-wide savings when there are better alternatives for ensuring comfort. But these are the lessons the PWCS program and its energy coordinators (also paid with energy savings) will share with PWCS employees.

School Board Members asked lots of questions for the right reasons, and sought clear assurances that savings will not compromise the comfort and needs of teachers and students. They adopted a revised energy policy with a Board-inserted provision requiring that regulations drafted to implement the conservation effort focus on "common sense" changes and expectations.

We will work together to follow that guidance. That means determining whether common sense dictates compact refrigerators for convenience in every classroom, or whether larger, more centralized units will suffice. We will look at issues from opening windows for natural ventilation to ways of ensuring the efficiency of small equipment purchases. Multiplied by 93 schools, these decisions add up.

As our School Board made clear, we must apply common sense to expectations that affect the daily lives of students and employees. That includes the recognition that comfortable conditions are vital for effective teaching and learning.

Board support for the PWCS energy conservation reflects additional common sense too — in tough financial times, it makes no sense to spend tens of millions on unnecessary energy costs when that same money can be invested in our classrooms, in quality programs, in saving jobs, and in improving the education of our students.

We know this is common sense our community can embrace. It is a present the School Division can give itself this holiday season that will keep on giving. We will keep you posted as this effort pays off.

## The Washington Post

Virginia, Creating a Culture of Conservation Results in Sustained Savings

June 21, 2013

# Loudoun schools flipping the switches for summer energy savings

By Susan Svrluga

The sliver of light leaked out underneath a closed door on the other side of the dark, empty classroom at Cedar Lane Elementary School in Ashburn: a light in a closet left on.

John Lord bounded over. Click.

Extra lights on in the nearby gym. Click, click, click.

"That's 3.8 cents an hour we just saved," he said, half laughing at himself, half serious: Loudoun County has 82 public schools (and counting). And even when all the students and teachers have gone home, the electrical meters are still spinning.

"It's a nickel-and-dime thing," said his partner Mike Barancewicz, the other energy education specialist for Loudoun's public school system. "But nickels and dimes add up over [nearly] 10 million square feet of space."

Many D.C. area school systems have environmental initiatives, including the hiring of energy managers, "green" school design and, in Montgomery County, a U.S. Department of Education <u>award-winning environmental program</u>. In Loudoun, the emphasis is on changing the culture to reduce energy use.

Loudoun was one of only three school districts in the nation singled out by the Environmental Protection Agency for "sustained excellence" in energy conservation. Forty-seven of the district's buildings have earned an EPA Energy Star, meaning they operate more efficiently than at least three-quarters of similar buildings nationally. Over the past 20 years, the school system's energy-conservation program, launched by longtime superintendent Edgar B. Hatrick III with a consulting company, has saved the district more than \$51 million, according to school officials.



After a particularly acrimonious budget year, the savings feel all the more critical.

"Money we don't spend on utilities is money we can use to help students," said Robert L. Marple, principal of Cedar Lane.

That's why Lord and Barancewicz obsess about saving energy, cajoling teachers and students alike to keep the lights off and the shades down.

People joke that in schools, you need a purchasing order to get a box of pencils, Barancewicz said. "But anyone can walk into a room and turn on a switch," even if it's not needed.

He cast a baleful look at an electrical meter. "This is the cash register," he said, one with charges most people never see. There can be a \$19,000 to \$20,000 bill "before you've done something to correct it," he said, "unless you're vigilant."

So they're vigilant.

Every outlet is suspect. Any window could be open a crack. They look for doors propped open, hole punchers

left plugged in, ice machines running, air conditioning bumped up a notch or two.

The work goes on all year — auditing buildings, evaluating equipment, speaking to classes. But once pupils leave, the pair can really squeeze out more savings.

Long before the last teachers left their classrooms, taking notebooks and pet frogs home for the summer, Lord and Barancewicz had planned the summer shutdown. They had sent out detailed checklists to each school. Some systems have automated shutdowns. But automated systems can fail, so the pair walk hallways, on weekends, sometimes at 2 a.m.

The program was developed by the company Cenergistic, which also began working with public schools in Prince William County last year. Lord and Barancewicz, who have worked for the schools for almost nine years, cost the district about \$237,000 a year.

Barancewicz, who came from the energy industry, has an earnest, measured delivery and ready analogies to explain the science behind their work. Lord, a 6-foot-2 former teacher, seems always on the tips of his toes, just about to crack a joke, or giggle. At home, they have the same blankets-around-the-water-heater fervor they bring to the schools; Lord thinks the power company replaced his meter because his family uses so little energy that it seemed to be broken. He put a thermometer in his Energy Star-rated refrigerator to ensure that it never gets colder than 40 degrees.

Barancewicz said that his wife is so used to his "idiosyncrasies" at home that she's now the one who will show him how much they're saving on their monthly electric bill. And Lord's 5-year-old daughter, Emily, lectures people about conservation.

Together, the men are trying to coax a school system, with about 10,000 employees and nearly 70,000 students, into saving energy. They're not just mandating lights out — they're trying to change the culture.

So they tease the custodians and chat with them in Spanish.

They show a photo they snapped of an energy executive's Lamborghini and ask employees to please

not help buy his private jet. They show a video Lord shot of his daughter when she was a toddler, snorting in her high chair, and ask them not to be energy hogs. They convince the head repair guy for a soda company that they never want anyone to "fix" the dimmed lights on the vending machines. Ever.

They show kids how a voltmeter still registers "vampire loads," drawing energy even after a lamp or TV is turned off.

By now, longtime custodian Helen Fitts knows to schedule custodians' cleaning by zone, limiting air conditioning and bright lighting to the areas where they're working. Sometimes, new teachers find the list of things they need to do — close blinds, unplug printers — a little overwhelming, Brandon Gauthier said in his second-grade classroom at Newton-Lee Elementary School last week.

But for most of the staff, it's second nature by now. One zealous teacher — they call him Nature Boy — polices the halls, snapping lights off, leaving Starburst candies for the teachers who remembered their regular shutdowns.

At Cedar Lane last week, Lord and Barancewicz scaled a narrow metal ladder to the roof. Barancewicz crouched by a photo sensor and slid a metal band up a hair, a tiny adjustment that will make the lights in the parking lot turn off earlier in the morning and on later in the evening.

He stopped suddenly at a heat-recovery unit, sticking his hand in to feel the temperature, face stern. "There's no reason for this to be on right now."

"That's air-conditioned air leaving the school. That's air we've paid to cool."

Lord already had his cell phone out. The answer came back quickly: They thought it was off. Some type of automated command hadn't worked. From a central office, someone turned a switch, shutting off the two massive units.

"Some people go fishing," Barancewicz said, quietly elated. "We just caught a big one."

Lord smiled. "We just made a huge savings right there."



Texas, Turnkey Contract

December 13, 2013

## LISD Set to Save Half a Million a Year in Energy Costs

By Laurel L. Scott

The Lubbock Independent School District school board approved a contract on Thursday that could save the district as much as \$14.5 million in energy costs over the next decade — and won't cost the district a dime.

The five-year contract with Cenergistic, a Dallasbased company, splits energy savings identified by the company's energy specialists 50-50 with the district, LISD Chief Administrative Officer Berhl Robertson said.

The district annually spends about \$4.5 million a year on energy for LISD's 5 million square feet of facilities across 50 campuses.

"What I appreciate about Cenergistic is their approach is very analytical with our data and their approach is more behavior based," Robertson said.

The company was founded by William S. Spears, a former Wichita Falls ISD school board member who designed a utility savings program that "transforms district personnel and students from energy consumers to energy savers," according to the company's website.

Superintendent Karen Garza said the contract is about "managing our systems."

"This effort will not create conditions where people are uncomfortable," she said. "This is not to affect, at all, teachers and their level of comfort in our classrooms."

"If they have space heaters in the room, we're not going to make them take them out," Robertson said.

He said the company has already used data the district provided to estimate it can identify savings of \$500,000 a year for the first five years and potentially more than \$1 million a year the next five years.

"We get a true 50 percent of the gross savings," he said. "Out of their 50 percent of the savings, they have to pay three energy specialists, travel costs and associated expenses."

He also told the board that programs the district is already investing in, such as building more energy efficient buildings or upgrading to more efficient heating and air conditioning systems, would not be included in the energy savings Cenergistic identifies.

"They don't realize any benefit from savings we're already doing," Robertson said.

He also said administrators had talked with other school districts who were Cenergistic clients, such as the Abilene Independent School District.

Mark Blankenship, District 3 representative, praised the effort.

"Saving money without having to put money out, you can't do any better than that," he said.



Florida: Long-term savings, program sustainability

June 3, 2014

## **Energy program credited for saving schools \$2.4M**

By Joe Callahan

The Marion County School District has saved \$21 million in nine years, including about \$2.4 million in the most recent year, as a result of its Energy Management Program, officials recently announced.

The district uses 8.5 million fewer kilowatt hours of electricity annually today than it did in 2005 — even though it has added 1 million more square feet of space during that time. Electricity rates have increased by 22 percent since 2005.

The monetary savings comes mostly from reducing the usage of electricity, though gas, water and sewage reductions are factored in as well. Each year at this time the district announces its energy savings statistics, all measured relative to 2005.

Besides turning off lights and computers at night and unplugging appliances over breaks, officials have found unique ways to cut costs. Louis Hickman, who heads up the energy department, gave an example.

Just a few years ago most high school gymnasiums did not have air conditioning. In recent years, most of those facilities have had AC units installed.

To keep costs down, the district has asked coaches not to use air conditioning during basketball and volleyball practices. Those units are primarily used only during official games and matches.

"Some of the biggest savings comes when we replace our older equipment with those that are more energy efficient," Hickman noted.

Computerized timers linked to most all of the campuses ensure that heating and air conditioning systems, as well as outdoor lighting, are regulated. Marion spends only 94 cents per square foot on energy, 18 percent less than the state school district combined average of \$1.15.

The average savings per school since 2005 has been nearly 33 percent, with Vanguard High (56 percent savings) leading the way and Lake Weir High (45 percent) in second. Both schools have been renovated during the past nine years, which means many more efficient air conditioners and other devices helped tremendously.

Other top schools are Dunnellon Middle and Maplewood Elementary, both with 45 percent savings since 2005; and Belleview-Santos Elementary, North Marion Middle and Howard Middle, all at 43 percent.

"Students and employees significantly contribute to these savings because they change behaviors and now take more conscious steps to conserve energy, save dollars, and keep things as 'green' as possible," district spokesman Kevin Christian wrote in a news release.

The district has captured state and national attention for its energy-saving efforts. In addition to steps already listed, the district also piloted an LED lighting project to replace fluorescent lighting at Maplewood Elementary.

All the saved energy dollars help maintain and improve schools and facilities around the district, Christian noted.

He added the program is self-funded, "meaning savings pay for the program and outreach efforts."

To date, the district has 25 ENERGY STAR certified schools. ENERGY STAR was developed in 1992 by the U.S. Environmental Protection Agency to identify efficient buildings.



#### **Editorial:**

## Two Ways Government Can Save

By Editorial Board

When it comes to reducing expenses, local government isn't all that different from household budget balancing. Sure, city and county officials can eliminate public services and lay off employees, which the average family can't do. But cities and counties can also rein in their energy costs and occasionally benefit from free stuff — which average folks do all the time.

The goal is to reduce waste and make the best use of the facilities you already have.

In Walton County, school officials have been working with a company called Cenergistic to find ways to cut utility bills. They're turning off lights in classrooms, using more efficient light bulbs, powering down computers at the end of the day and taking other energy conservation steps.

"We have increased square footage but dropped costs," Michelle Doggett, the school district's energy education specialist, told the Daily News' Katie Tammen. In the program's first 17 months, the district saved more than \$1.3 million.

In Okaloosa County, the Health Department has big plans for a 3,300-square-foot modular building that will enlarge clinic space at its offices on Hospital Drive in Fort Walton Beach. The building will have a procedure room and seven exam rooms.

The best thing about it: The modular building comes from an anonymous donor.

"This is an amazing gift," said Dr. Karen Chapman, Health Department director. "We could never have afforded this building new."

Truth be told, government can't afford a lot of what it buys. Most families, when facing a similar dilemma, cut back their purchases, work to pay off their debts and stop spending beyond their income.

We commend Walton County schools on their energy efficiency and we thank the Okaloosa County health clinic's unnamed benefactor. And we hope local governments will double their efforts to save taxpayers' money.

## Orlando Sentinel

Florida, Savings Milestone

January 24, 2013

## Osceola schools tout \$10 million in energy-cost savings

By David Breen

Osceola County schools say they've saved more than \$10 million in energy costs since starting a districtwide conservation effort three years ago.

Osceola County schools say they've saved more than \$10 million in energy costs since starting a districtwide conservation effort three years ago.

Brian Richard, an energy education specialist with the district, said the savings come from a concerted effort at education, behavior modification and near constant monitoring to make sure only the power that's necessary is being used. The district has a contract with Cenergistic Inc., a company that consults with school districts around the country on energy conservation. The district pays the equivalent of 35% of its savings to the company, Richard said.

"This substantial savings will allow us to continue redirecting the dollars that we would have been spending on electricity to instead support instructional programs in our schools," Superintendent Melba Luciano said in statement announcing the savings.



Florida, Sustained Success

**February 2, 2013** 

# School District Saves \$16M in Energy Costs Over Five Years

SARASOTA COUNTY -- Since 2007, when the Sarasota County school district began partnering with a consulting firm that specializes in helping public organizations find ways to reduce energy costs, the district has saved more than \$16 million.

The amount represents the difference between what the district projected it would have spent on utilities compared to what it actually spent. The difference is based on the benchmark school year of 2006-07 and projections of energy costs in subsequent years if energy consumption continued at a similar rate.

The district's partnership with Cenergistic (formerly Energy Education Inc.) resulted in an energy management program that trained district staff to implement behavioral and organizational change that substantially reduced energy consumption without the purchase of new equipment. The consulting firm also helped the district make the most of state-of-the-art energy-saving technologies. The program was funded solely by the savings it generated, allowing the district to reserve much of the energy costs it saved for other priorities.

'The energy management program has been a great success,' said Jon Hampton, one of the school district's two energy managers. 'In 2007, when the program began, our kilowatt-per-hour usage was almost 100 million. By 2011 that usage was reduced by 13 million, to 87 million kilowatts per hour, even though we added three new schools during that period.'

To ensure that energy is being used efficiently at schools and offices, district energy specialists perform energy audits at each site to evaluate consumption and make recommendations for changes that will result in savings.

Energy specialists evaluate the use of heating and air-conditioning equipment, such as chillers, air handlers, exhausts and pumps to determine whether changes in the usage times and frequency could affect the district's power bills. The expensive task of air conditioning 43 schools and a number of district facilities has been made less costly and more efficient by making ice at night during low-demand energy hours, then storing the ice in thermal energy storage tanks. Water is circulated over the ice during the day to create the chilled water needed for air conditioning.

The district's custodial staff also helps identify potential savings and avoid potential loss at each site. Resources are well-maintained to ensure optimum performance. Teachers and staff are coached to make sure lights are out when a room is not in use, windows and doors remain closed while air conditioning is on, and electronic equipment is turned off at night.

While the school district has completed the paid contract term of its program, Cenergistic's service to the district will continue on an as-needed basis to help ensure the program continues to achieve energy savings. The company's consultants will continue to work with the district on conservation techniques and

data analysis as requested, providing ongoing training and support free of charge.

In a report to the School Board, Hampton and Burris cited these highlights of the school district's energy management program:

- Three district schools recently earned the ENERGY STAR from the U.S. Environmental Protection Agency: Atwater Elementary in North Port, Pine View School and Riverview High. Earning the award means these schools operate in the top 25 percent of schools across the U.S. in responsible energy use.
- The bus garage at the district's Transportation Department now uses energy-saving induction lighting in its service bays.
- Demand-controlled ventilation, a method of ensuring cost-effective air ventilation while maximizing indoor

- air quality, has been installed districtwide where appropriate.
- Efficient, cost-saving light-emitting diode lighting has been installed at Gulf Gate Elementary and McIntosh Middle schools.
- The district continuously researches alternative energy technologies, such as solar and wind. Solar-panel arrays are in place at Atwater Elementary, Bay Haven School of Basics Plus and Pine View, and as the initial cost of implementing this cost-saving technology continues to decrease, the district hopes to add more solar arrays.
- In addition to the energy savings of operating new technologies, the district has received more than \$2.2 million in rebates for investments in these technologies from FPL since 2007.



Florida August 2, 2010

## Polk School District Among State's Best in Energy Efficiency

BARTOW — The most recent statistics from the Florida Department of Education (FDOE) show that Polk County Public Schools is among Florida's best school districts for energy efficiency.

The report was issued by the FDOE deputy commissioner of finance and operations.

Of all 67 school districts, Polk was listed in the report as the state's top district for lowest cost based on its number of students. Polk was listed in the same report as second lowest in the state for cost per square foot.

The school district's Office of Support Services recently submitted a report to the School Board highlighting district energy consumption statistics. Support Services oversees the school district's energy consumption efforts in school district buildings.

The report noted the following:

- The school district began an energy education program in 1992 and since that time the district has saved more than \$71 million in energy costs. The energy education program works to educate staff and students on ways to reduce energy costs. More than \$9 million was saved in the 2008-09 school year alone.
- For every dollar spent on energy education programs in 2008-09, \$27 was returned to the district in the form of a cost savings.
- Polk's energy costs are 80 cents per square foot, compared to the state average of \$1.37 per square foot.
- · Polk uses 42 percent less energy per square foot compared to the state average.
- Polk's average cost per square foot went down 1 cent while the state's average went up 2 cents.

In the state's formula measuring energy cost per number of students, the state's average went up 4.5 percent while Polk's decreased by 0.4 percent.

If all 67 school district's consumed energy at a comparable rate as Polk, the state would have saved more than \$250 million in energy costs in 2008-09.

Through water conservation measures and devices, the school district uses 25 percent less water currently than it did in 1991. Square footage of school district buildings has increased by 66.8 percent since 1991.

The school district has recovered approximately \$105,000 in refunds from utility companies that made billing errors to the school district in 2008-09. Special software implemented by the school district is able to detect potential billing errors.



## 117 schools earn ENERGY STAR rating

By Kara Phelps News Chief Staff

BARTOW — The Polk County School District is the most energy-efficient school district in the state of Florida, officials announced on Tuesday.

Since a review process began last fall, 117 Polk schools have also been approved by the federal government for the ENERGY STAR rating.

About 10 schools were not approved, some because they were new and couldn't qualify yet, said Fred Murphy, assistant superintendent of facilities and operations for the school system. Only 177 schools in Florida are ENERGY STAR-approved.

The district also received a Top Performer award, which recognizes that all Polk schools scored an average of 95 percent in the ENERGY STAR rating system.

The ENERGY STAR program, run by the U.S. Environmental Protection Agency and the U.S. Department of Energy, rates buildings and products for their efforts at environmental conservation. An engineer visited every Polk County school between November 2008 and this month, rating schools in different categories, such as utility bill costs and energy-efficient equipment use.

Through a partnership with Energy Education, Murphy said the district completed the process for free. Otherwise, the rating process would have cost about \$1,000 per school.

"It was probably a lot easier for us to make that leap," he said.

Murphy compared Polk County's high number of ENERGY STAR-approved schools with other districts in the state.

Among school districts in Florida, Polk spends the least on energy. Last year, it used about 81 cents per square foot of building space. The state average for school districts was considerably higher, at \$1.35 per square foot.

In the 2007-08 school year, the district avoided spending \$7.1 million on energy costs, Murphy said.

Nationally, 1,900 schools have the ENERGY STAR rating.

#### **Polk County Facts**

Polk County Schools report saving more than \$70 million with Energy Education since August 1992.

The district earned ENERGY STAR Top Performer Leader recognition with a rating of 95.

The system's energy costs per square foot of building space have been the lowest in Florida for four years.

#### **Key References**

We encourage you to contact any of our clients, particularly those in your area. They are best qualified to describe the experience of working with us and the benefits of implementing a Cenergistic energy management program.

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Additional references and clients can be found in the National Client Reference List.





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#### **National Client Reference List**

References are listed in alphabetical order by state.

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AR	Bentonville Public Schools- AR	Dr.	Sterling Ming	Executive Director of Finance	479.254.5025
AZ	Phoenix Elementary District-AZ	Dr.	Myriam Roa	Superintendent	602.257.4002
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#### Cenergistic

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MO Raytow	n C-2-MO	Dr.	Allan Markley	Superintendent	816.268.7000
MS Covingt District-	on County School MS	Mr.	Clay Anglin	Superintendent	601.765.8247
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NJ New Bru	unswick BOE-NJ	Mr.	Richard M. Kaplan	Superintendent	732.745.5300 x5414

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NY Orchard Park Central School District-NY Mr. Jeff Petrus Asst. Supt. for Business & 716.209.62  NY Port Jefferson School District-NY Mr. Fred Koelbel Plant Facilities Administrator 631.476.44  NY Spackenkill Union Free School District-NY Ms. Michele Moloney Business Manager 845.463.78  OH Aurora-OH Mr. Russell Bennett Superintendent 330.954.21  OH Fairborn City Schools-OH Mr. Ed Gibbons Director of Business Affairs and Classified Personnel x116  OH Kent City Schools-OH Dr. Joseph Giancola Superintendent 330.676.76  OH Riverside Local School District-OH Mr. Michael Rock Treasurer/CFO 440.358.82  OK Noble Public Schools-OK Mr. Greg Kasbaum Associate. Supt. 405.872.348  OK University-OK Mr. Burns Hargis President 405.744.638  OK Tulsa Public Schools-OK Mr. Pete Worley Energy Specialist 918.746.680  PA Central Dauphin SD-PA Mr. Gilbert Tunney Director of Buildings & 717.545.470  Accepted Accepted Accepted Mr. Burns Hargis Business Manager 412.344.208  PA Lewisburg Area SD-PA Dr. Mark DiRocco Superintendent 724.861.300  PA Mt. Lebanon School Ms. Jan Klein Business Manager 412.344.208  RI Cranston Public Schools- Mr. Joe Balducci Chief Financial Officer 401.270.818  RI Cranston Public School Dr. Billy Strickland Superintendent 864.984.356	NM		Mr.	Stan Rounds	Superintendent	575.527.5807
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School District-NY  Mr. Russell Bennett  Superintendent  330.954.21  OH Aurora-OH  Mr. Russell Bennett  Superintendent  330.954.21  OH Fairborn City Schools-OH  Mr. Ed Gibbons  Director of Business Affairs and Classified Personnel  x116  OH Kent City Schools-OH  Dr. Joseph Giancola  Superintendent  330.676.76  OH  Riverside Local School  District-OH  Mr. Michael Rock  Treasurer/CFO  440.358.820  OK  Noble Public Schools-OK  Mr. Greg Kasbaum  Associate. Supt.  405.872.348  OK  OSU-Oklahoma State  University-OK  Mr. Burns Hargis  President  405.744.638  OK  Tulsa Public Schools-OK  Mr. Pete Worley  Energy Specialist  918.746.680  PA Central Dauphin SD-PA  Mr. Gilbert Tunney  Director of Buildings & 717.545.470  x225  PA Lewisburg Area SD-PA  Dr. Mark DiRocco  Superintendent  570.522.320  PA Mt. Lebanon School  District-PA  Mr. Jan Klein  Business Manager  412.344.208  PA Norwin SD-PA  Dr. William H. Kerr  Superintendent  724.861.300  RI  South Kingstown School  Department-RI  Mr. David Carey  Energy Specialist  401.360.134  Sc. Laurens County School  District 55-SC  Billy Strickland  Superintendent  Superintendent  864.984.356	NY		Mr.	Fred Koelbel		631.476.4443
OH Fairborn City Schools-OH Mr. Ed Gibbons Director of Business Affairs and Classified Personnel x116  OH Kent City Schools-OH Dr. Joseph Giancola Superintendent 330.676.76  OH Riverside Local School District-OH Mr. Michael Rock Treasurer/CFO 440.358.820  OK Noble Public Schools-OK Mr. Greg Kasbaum Associate. Supt. 405.872.348  OK OSU-Oklahoma State University-OK Mr. Burns Hargis President 405.744.638  OK Tulsa Public Schools-OK Mr. Pete Worley Energy Specialist 918.746.680  PA Central Dauphin SD-PA Mr. Gilbert Tunney Director of Buildings & 717.545.470  RI Lebanon School District-PA Ms. Jan Klein Business Manager 412.344.203  PA Norwin SD-PA Dr. William H. Kerr Superintendent 724.861.300  RI Cranston Public Schools-RI Mr. David Carey Energy Specialist 401.360.134  SC Laurens County School District School District S-SC Superintendent School Dr. Billy Strickland Superintendent Sequence 401.360.134	NY	Spackenkill Union Free School District-NY	Ms.	Michele Moloney	Business Manager	845.463.7800
Acentral Dauphin SD-PA  Central Dauphin SD-PA  Mr. Gilbert Tunney  Mr. Michael Rock  District-PA  Mr. Michael Rock  District-PA  Mr. Gilbert Tunney  Mr. Mark DiRocco  Mr. Mark DiRocco  District-PA  Mr. Morwin SD-PA  Mr. Joe Balducci  RI Cranston Public Schools- RI Cranston Public Schools- RI Cranston Public Schools  Mr. David Carey  Energy Specialist  Associate. Supt. 405.872.348  Associate. S	ОН	Aurora-OH	Mr.	Russell Bennett	Superintendent	330.954.2119
OHKent City Schools-OHDr.Joseph GiancolaSuperintendent330.676.76OHRiverside Local School District-OHMr.Michael RockTreasurer/CFO440.358.826OKNoble Public Schools-OKMr.Greg KasbaumAssociate. Supt.405.872.348OKOSU-Oklahoma State University-OKMr.Burns HargisPresident405.744.638OKTulsa Public Schools-OKMr.Pete WorleyEnergy Specialist918.746.680PACentral Dauphin SD-PAMr.Gilbert TunneyDirector of Buildings & 717.545.470 Grounds717.545.470 X225PALewisburg Area SD-PADr.Mark DiRoccoSuperintendent570.522.320PAMt. Lebanon School District-PAMs.Jan KleinBusiness Manager412.344.208PANorwin SD-PADr.William H. KerrSuperintendent724.861.300RICranston Public Schools-RIMr.Joe BalducciChief Financial Officer401.270.818RISouth Kingstown School Department-RIMr.David CareyEnergy Specialist401.360.134SCLaurens County School District 55-SCDr.Billy StricklandSuperintendent864.984.356	ОН	Fairborn City Schools-OH	Mr.	Ed Gibbons		937.878.3961 x116
OK Noble Public Schools-OK Mr. Greg Kasbaum Associate. Supt. 405.872.348 OK OSU-Oklahoma State University-OK Mr. Burns Hargis President 405.744.638 OK Tulsa Public Schools-OK Mr. Pete Worley Energy Specialist 918.746.680 PA Central Dauphin SD-PA Mr. Gilbert Tunney Director of Buildings & 717.545.470 Grounds 717.545.470 X225 PA Lewisburg Area SD-PA Dr. Mark DiRocco Superintendent 570.522.320 PA Mt. Lebanon School District-PA Dr. William H. Kerr Superintendent 724.861.300 RI Cranston Public Schools-RI South Kingstown School Department-RI South Kingstown School Department-RI South Kingstown School District 55-SC Dr. Billy Strickland Superintendent September 1864.984.3560  Bichland County School Dr. Billy Strickland Superintendent 864.984.3560	ОН	Kent City Schools-OH	Dr.	Joseph Giancola	Superintendent	330.676.7610
OK OSU-Oklahoma State University-OK Mr. Burns Hargis President 405.744.638  OK Tulsa Public Schools-OK Mr. Pete Worley Energy Specialist 918.746.686  PA Central Dauphin SD-PA Mr. Gilbert Tunney Director of Buildings & 717.545.476  PA Lewisburg Area SD-PA Dr. Mark DiRocco Superintendent 570.522.326  PA Mt. Lebanon School District-PA Ms. Jan Klein Business Manager 412.344.208  PA Norwin SD-PA Dr. William H. Kerr Superintendent 724.861.306  RI Cranston Public Schools-RI Mr. Joe Balducci Chief Financial Officer 401.270.818  RI South Kingstown School Department-RI Mr. David Carey Energy Specialist 401.360.134  SC Laurens County School Dr. Billy Strickland Superintendent Sept.	ОН		Mr.	Michael Rock	Treasurer/CFO	440.358.8209
University-OK  Wir. Burns Hargis  President  405.744.638  OK Tulsa Public Schools-OK  Mr. Pete Worley  Energy Specialist  918.746.686  PA Central Dauphin SD-PA  Mr. Gilbert Tunney  Director of Buildings & 717.545.470  Kark DiRocco  Superintendent  570.522.320  PA Lewisburg Area SD-PA  Dr. Mark DiRocco  Superintendent  570.522.320  PA Norwin SD-PA  Ms. Jan Klein  Business Manager  412.344.205  PA Norwin SD-PA  Dr. William H. Kerr  Superintendent  724.861.300  RI Cranston Public Schools- RI  South Kingstown School  Department-RI  Mr. David Carey  Energy Specialist  401.360.134  SC Laurens County School  District 55-SC  Dr. Billy Strickland  Superintendent  Superin	OK	Noble Public Schools-OK	Mr.	Greg Kasbaum	Associate. Supt.	405.872.3452
PA Central Dauphin SD-PA Mr. Gilbert Tunney Director of Buildings & 717.545.470   PA Lewisburg Area SD-PA Dr. Mark DiRocco Superintendent 570.522.320   PA Mt. Lebanon School District-PA Ms. Jan Klein Business Manager 412.344.208   PA Norwin SD-PA Dr. William H. Kerr Superintendent 724.861.300   RI Cranston Public Schools-RI Mr. Joe Balducci Chief Financial Officer 401.270.818   RI South Kingstown School Department-RI Mr. David Carey Energy Specialist 401.360.134   SC Laurens County School District 55-SC Dr. Billy Strickland Superintendent Superintendent 864.984.356	OK		Mr.	Burns Hargis	President	405.744.6384
PA Lewisburg Area SD-PA Dr. Mark DiRocco Superintendent 570.522.320  PA Mt. Lebanon School District-PA Ms. Jan Klein Business Manager 412.344.209  PA Norwin SD-PA Dr. William H. Kerr Superintendent 724.861.300  RI Cranston Public Schools-RI Mr. Joe Balducci Chief Financial Officer 401.270.819  RI South Kingstown School Department-RI Mr. David Carey Energy Specialist 401.360.134  SC Laurens County School District 55-SC Dr. Billy Strickland Superintendent Superintendent 864.984.356	OK	Tulsa Public Schools-OK	Mr.	Pete Worley	Energy Specialist	918.746.6800
PA Mt. Lebanon School District-PA Ms. Jan Klein Business Manager 412.344.209  PA Norwin SD-PA Dr. William H. Kerr Superintendent 724.861.300  RI Cranston Public Schools- RI South Kingstown School Department-RI Mr. David Carey Energy Specialist 401.360.134  SC Laurens County School District 55-SC Dr. Billy Strickland Superintendent 864.984.356	PA	Central Dauphin SD-PA	Mr.	Gilbert Tunney		717.545.4703 x225
PA Norwin SD-PA Dr. William H. Kerr Superintendent 724.861.300  RI Cranston Public Schools- RI South Kingstown School Department-RI David Carey Energy Specialist 401.360.134  SC Laurens County School District 55-SC Dr. Billy Strickland Superintendent 864.984.356	PA	Lewisburg Area SD-PA	Dr.	Mark DiRocco	Superintendent	570.522.3204
RI Cranston Public Schools- RI South Kingstown School Department-RI Mr. David Carey Energy Specialist 401.360.134  SC Laurens County School District 55-SC Dr. Billy Strickland Superintendent 864.984.356	PA		Ms.	Jan Klein	Business Manager	412.344.2098
RI South Kingstown School Department-RI Mr. David Carey Energy Specialist 401.360.134  SC Laurens County School District 55-SC Dr. Billy Strickland Superintendent 864.984.356	PA	Norwin SD-PA	Dr.	William H. Kerr	Superintendent	724.861.3000
Department-RI  SC Laurens County School District 55-SC  Dr. Billy Strickland  Superintendent  Superintendent  Superintendent  Superintendent  Superintendent  Superintendent  Superintendent  Superintendent  Superintendent	RI		Mr.	Joe Balducci	Chief Financial Officer	401.270.8196
District 55-SC Dr. Billy Strickland Superintendent 864.984.356	RI		Mr.	David Carey	Energy Specialist	401.360.1345
Richland County School Energy Educator	SC		Dr.	Billy Strickland	Superintendent	864.984.3568
SC District-SC Mr. Enoch Smith Specialist 803.231.704	SC	Richland County School District-SC	Mr.	Enoch Smith	Energy Educaton Specialist	803.231.7048
TN Cleveland City Schools-TN Dr. Martin Ringstaff Director of Schools 423.472.957	TN	Cleveland City Schools-TN	Dr.	Martin Ringstaff	Director of Schools	423.472.9571
Franklin Special School	TN					615.794.6624

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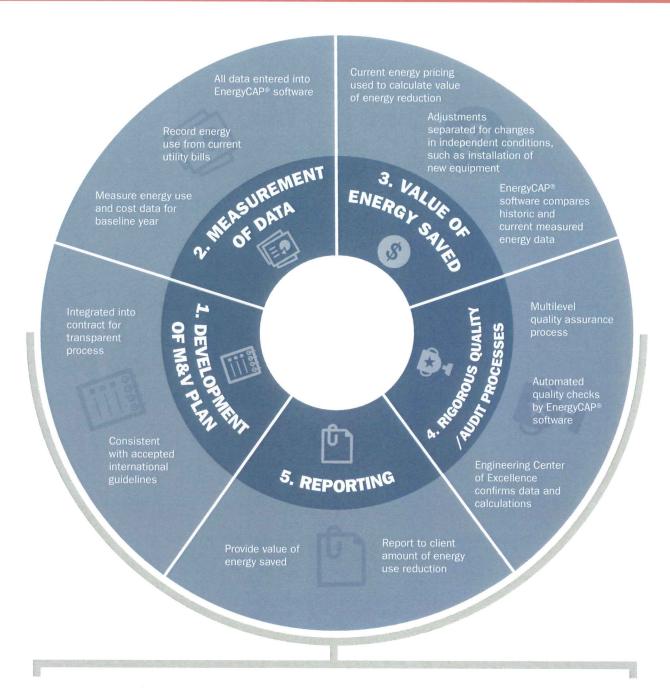


#### Cenergistic

ST	Organization Name		Full Name	Job Title	Phone
TN	Lawrence County School District-TN	Dr.	Bill Heath	Director of Schools	931.762.3581
TX	Abilene ISD-TX	Mr.	Benny Turney	Plant Environmental Services Coordinator	325.692.7234 x1683
TX	Dickinson ISD-TX	Mr.	Ryan Boone	Asst. Supt. of Operations & Facilities	281.229.7270
TX	Duncanville ISD-TX	Dr.	Alfred Ray	Superintendent	972.708.2000
TX	Friendswood ISD-TX	Mrs.	Trish Hanks	Superintendent	281.482.1267
TX	Mansfield ISD-TX	Mr.	Jeff Brogden	Asst. Supt. Construction Services	817.299.4343
TX	Rockwall ISD-TX	Mr.	Jeff Bailey	Superintendent	972.771.0605
UT	Washington County School District-UT	Mr.	Craig Hammer	Executive Director of Secondary Schools	435.673.3553 x5166
UT	Weber School District-UT	Mr.	W. Drew Wilson	Administrative Director of Facilities	801.476.3903 x3901
VA	Fairfax County Public Schools-VA	Mr.	Jeff Platenberg	Assistant Superintendent	571.252.1385
VA	Loudoun County Public Schools-VA	Mr.	John Lord	Energy Education Specialist	703.771.6462
VA	Prince William County Public Schools-VA	Mr.	Brian Gorham	Administrative Coordinator for Energy Management	703.791.7398
VA	Washington and Lee University-VA	Dr.	Kenneth Ruscio	President	540.458.8700
WA	Bethel School District-WA	Dr.	Robert Van Slyke	Executive Director of Operations	253.683.6080
WA	Lake Stevens Sch Dist 4- WA	Mr.	Robb Stanton	Director of Operations	425.335.1506
WI	Ashwaubenon School District-WI	Mr.	Keith Lucius	Assistant Superintendent	920.492.2905 x1005
WI	Holmen, School District of- WI	Dr.	Dale Carlson	District Administrator	608.526.6610 x1301
WI	La Crosse School District- WI	Ms.	Janet Rosseter	Executive Director of Business Services	608.789.7651
WI	Onalaska, School District of-WI	Mr.	Lawrence Dalton	Director of Finance	608.781.9703
WI	Sheboygan Area School District-WI	Dr.	Joe Sheehan	Superintendent	920.459.3511
WI	Western Technical College-WI	Dr.	Lee Rasch	President/District Director	608.785.9100



## Measurement and Verification Process (Turnkey Clients)



#### Invoicing

- First invoice issued 90-days after first performance month
- Any late adjustments received after invoice included in following month's bill

#### **Budgeting future energy expense**

- · Cenergistic experts work with clients
- Anticipate adjustments for weather, energy commodity prices, building expansion, etc.
- Advise how to approach value of energy saved in budgeting

## Cenergistic Measurement & Verification (M&V)

We offer our clients an energy conservation management system that will give them more control over their energy use, provide verifiable energy reductions, and allow them to return value to their organizations.

#### A Proven Approach

Our system is a proven approach that both optimizes clients' current infrastructure and applies organizational-behavior theories to change patterns of unnecessary energy use.

#### Internationally Accepted, Fully Transparent

We provide each client with a measurement and verification (M&V) plan, which is an internationally accepted, fully transparent process that measures, calculates and reports savings from an energy conservation program with consistent, reliable results that are easy to understand.

#### **MEASUREMENT & VERIFICATION (M&V) PLAN**



An internationally accepted, fully transparent process to identify changes in energy use



Provides consistent, accurate, reliable results that separate adjustments for changes in conditions that are independent of the program, including the installation of new equipment



Tracked by EnergyCAP®, the industry leading, best-in-class software



A rigorous audit process and dedicated team of experts

#### **Accurate Measurement of Energy Use**

Each client M&V Plan compares the measured energy use before and after Cenergistic's energy conservation program has been implemented. A key focus is to identify changes in energy consumption, separating adjustments for changes in conditions that are independent of the program, including the installation of new equipment.

#### **Industry-Leading**

This measured energy data is tracked by EnergyCAP®, the industry leading, best-in-class software independently owned by EnergyCAP, Inc., the only energy analytics software company to receive the U.S. Environmental Protection Agency's ENERGY STAR Partner of the Year Award. The software uses current energy pricing information to calculate a dollar value for the energy saved.

#### **Proven Value**

Clients may experience this "value of energy saved" in one or both of the following ways:

- A reduction in utility bills, which will allow funds budgeted for energy costs to be redirected to other important programs; and/or
- An offset to rising energy costs (an increase in utility prices, expansion of facilities or other energy-related events) that will protect funding for important programs.

#### **Rigorous Quality Assurance**

Cenergistic has a rigorous audit process to identify issues that could possibly affect data accuracy. The process is supported by a team of engineers, technicians and analysts deployed across the country. Their work is reviewed by Cenergistic's Engineering Center of Excellence and checked by Cenergistic's quality control program. As part of this process, Cenergistic does periodic quality assurance reviews to ensure client M&V plans remain consistent with international guidelines and Cenergistic's standards.

#### **Giving You Greater Control**

It all means greater control over energy costs and complex energy trends, verifiable energy reductions, and greater value being returned to organizations.

