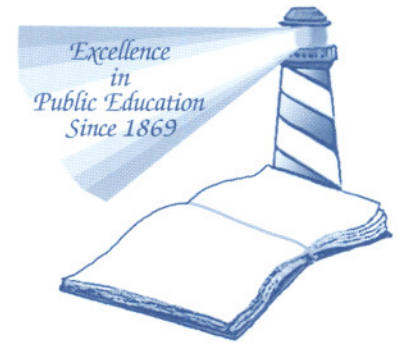


**St. Johns County School District**  
40 Orange Street  
St. Augustine, Florida 32084  
(904) 547-7500  
www.stjohns.k12.fl.us

Joseph G. Joyner, Ed.D.  
Superintendent



**MEMORANDUM**

**TO:** Members of the School Board  
**FROM:** Joseph G. Joyner, Ed.D., Superintendent of Schools  
**SUBJECT:** Request for Acceptance of Report on Status of Energy Program  
**DATE:** May 11, 2010

**Background Information:** The School District entered into an agreement with Energy Education, Inc. (EEI) on July 1, 2008. The Facilities and Operations Department then began the development of the Energy Conservation Program (ECP) for the District. The ECP was established following the hiring of an energy manager and initial training by EEI and has included onsite training and assessments, EEI specialists training, and monitoring of energy consumption by the Maintenance Manager at each of the sites. The training period ended December 2008 with performance evaluations beginning in January 2009. Quarterly Energy Program Status Reports have been presented to the School Board since April 2009.

The May 2010 Energy Program Status Report summarizes the performance results of the Energy Conservation Program during the first quarter of 2010. The report shows data on energy consumption of the District during January-March. Also provided is data for each district facility. The information is presented to show actual energy consumed and cost avoidance to the District as a result of the energy conservation strategies.

**Strategic Plan Impact:** Supports the District's Mission Statement by providing appropriate facilities to inspire in all students a passion for lifelong learning.

**Educational Impact:** The program is intended to reduce operational costs related to utilities therefore increasing dollars available for other school related expenses.

**Fiscal Impact:** During the first quarter of 2010, the Energy Savings Program has resulted in cost avoidance for the School District of \$822,532.77. The current rate of energy savings significantly exceeds the projected performance of the program.

**Recommendation:** Acceptance of the Energy Conservation Program Status Report.

**Action Required:** Approval of the Superintendent's recommendation.

**Drafted and submitted for approval by:** Al Crutchfield, Energy Manager

Respectfully Submitted,

  
\_\_\_\_\_  
Tim Forson, Associate Superintendent  
For Facilities & Operations

\_\_\_\_\_  
Joseph G. Joyner, Ed.D.,  
Superintendent of Schools

*The St. Johns County School District will inspire in all students a passion for lifelong learning, creating educated and caring contributors to the world.*

School Board

Beverly Slough  
District 1

Tommy Allen  
District 2

Bill Mignon  
District 3

Bill Fehling  
District 4

Carla Wright  
District 5

**QUARTERLY ENERGY REPORT**  
**January-March, 2010**

**EXECUTIVE SUMMARY**

The May 2010 Energy Program Status Report summarizes the performance results of the Energy Conservation Program during the first quarter of 2010 and is comprised of the following:

- Cost Avoidance Summary by Site January – March 2010: The District realized cost avoidance for this period of \$853,730.62 or 37.80%.
- Cumulative Cost Savings: Our cost avoidance for this period reduced CO<sup>2</sup> by 4,100 metric tons.
- Overall Program Summary: January-March 2010
- Energy Summary: Summary for electricity, water & sewer, and irrigation for January-March 2010
- Overall Program Summary: A comparison of the January - December 2009 monthly cost avoidance summary
- Energy Summary: Summary for electricity, water & sewer, and irrigation for January-December 2009
- Cost avoidance for the district July 2008 – March 2010: This reflects the total cost avoidance since the implementation of the program.

During the period of January-March 2010 there were 108 energy audits performed at District facilities. These audits demonstrate continued efforts by employees to reduce energy use. There were also twice monthly visits by EEI Consultants to the District during this same period focusing on facility visits, verifying the ECAP data, including the monthly utility bills, and adjusting it as necessary.

Our district continues to show a high regard in reducing the overall energy consumption. This is evident in the everyday strategies being used at our sites. As a result of these efforts, the Department of the Environment Protection Agency is honoring the St. Johns County School District as a Top Performing Partner for 2010.

# St Johns County School District

Energy CAP

Cost Avoidance Program

## Cost Avoidance Summary - Sites

Sorted by Cost Without CAP

Site Code & Name	Cost Without CAP	Actual Cost	Cost Avoidance \$	Cost Avoidance %
BTH - BARTRAM TRAIL HIGH	\$160,287.59	\$96,553.63	\$63,733.96	39.76%
PBM - PACETTI BAY MIDDLE	\$121,564.84	\$46,506.33	\$75,058.51	61.74%
DCE - DURBIN CREEK ELEMENTARY	\$118,070.38	\$56,857.18	\$61,213.20	51.84%
CHS - CREEKSIDE HIGH	\$114,289.50	\$91,456.15	\$22,833.35	19.98%
TCE - TIMBERLIN CREEK ELEMENTARY	\$111,286.66	\$53,322.61	\$57,964.05	52.09%
PMH - PEDRO MENENDEZ HIGH	\$108,903.92	\$76,870.67	\$32,033.25	29.41%
PVH - PONTE VEDRA HIGH	\$106,216.84	\$63,963.88	\$42,252.96	39.78%
NHS - ALLEN D NEASE HIGH	\$104,999.74	\$66,824.05	\$38,175.69	36.36%
LPA - LIBERTY PINES ACADEMY	\$98,831.57	\$65,972.02	\$32,859.55	33.25%
WCE - WARDS CREEK ELEMENTARY	\$95,496.57	\$52,130.32	\$43,366.25	45.41%
JCE - JULINGTON CREEK ELEMENTARY	\$87,549.31	\$63,289.67	\$24,259.64	27.71%
SWE - SOUTH WOODS ELEMENTARY	\$86,600.78	\$39,259.65	\$47,341.13	54.67%
SAH - ST AUGUSTINE HIGH	\$80,978.80	\$51,544.31	\$29,434.49	36.35%
HCE - HICKORY CREEK ELEMENTARY	\$79,231.56	\$39,396.72	\$39,834.84	50.28%
LMS - ALICE B LANDRUM MIDDLE	\$73,964.47	\$52,212.57	\$21,751.90	29.41%
SPM - SWITZERLAND POINT MIDDLE	\$61,163.30	\$29,515.27	\$31,648.03	51.74%
OPE - OCEAN PALMS ELEMENTARY	\$56,316.33	\$42,472.30	\$13,844.03	24.58%
GRM - GAMBLE ROGERS MIDDLE	\$48,053.90	\$27,070.54	\$20,983.36	43.67%
MMS - RJ MURRAY MIDDLE	\$47,985.54	\$25,915.58	\$22,069.96	45.99%
FCS - FRUIT COVE MIDDLE	\$46,308.23	\$33,217.61	\$13,090.62	28.27%
MCE - MILL CREEK ELEMENTARY	\$45,010.30	\$28,471.08	\$16,539.22	36.75%
CCS - CUNNINGHAM CREEK ELEMENTARY	\$44,828.06	\$29,686.29	\$15,141.77	33.78%
WDH - WD HARTLEY ELEMENTARY	\$36,825.73	\$20,077.71	\$16,748.02	45.48%
OES - OSCEOLA ELEMENTARY	\$35,128.01	\$19,653.71	\$15,474.30	44.05%
SMS - SEBASTIAN MIDDLE	\$34,224.05	\$27,160.49	\$7,063.56	20.64%
RES - RAWLINGS ELEMENTARY	\$34,116.00	\$32,054.01	\$2,061.99	6.04%
WSE - WEBSTER SCHOOL ELEMENTARY	\$28,987.35	\$23,226.59	\$5,760.76	19.87%
PVP - PV- PV ELEMENTARY	\$26,838.47	\$28,318.62	(\$1,480.15)	(5.52%)
MES - OTIS A MASON ELEMENTARY	\$24,927.40	\$16,848.14	\$8,079.26	32.41%
RBH - RB HUNT ELEMENTARY	\$24,211.55	\$24,056.14	\$155.41	0.64%
CES - CROOKSHANK ELEMENTARY	\$23,638.63	\$19,236.19	\$4,402.44	18.62%
KES - KETTERLINUS ELEMENTARY	\$21,949.54	\$13,158.67	\$8,790.87	40.05%
ADM - ADMINISTRATIVE COMPLEX	\$17,950.27	\$16,615.47	\$1,334.80	7.44%
SJT - ST JOHNS TECHNICAL HIGH	\$17,616.32	\$7,690.68	\$9,925.64	56.34%
GAS - GAINES ALTERNATIVE SCHOOL	\$12,629.34	\$8,106.38	\$4,522.96	35.81%
MIT - FULLERWOOD	\$10,164.13	\$7,324.69	\$2,839.44	27.94%
CBS - CROOKSHANK BUS GARAGE	\$5,554.97	\$4,544.54	\$1,010.43	18.19%
MNT - MAINTENANCE-PURCHASING	\$3,522.25	\$2,768.60	\$753.65	21.40%
OCC - O'CONNELL CENTER	\$2,578.95	\$1,721.45	\$857.50	33.25%
<b>Totals:</b>	<b>\$2,258,801.13</b>	<b>\$1,405,070.51</b>	<b>\$853,730.62</b>	<b>37.80%</b>

Filters: Billing Periods In Range From 201001 To 201003

# St Johns County School District

Energy CAP

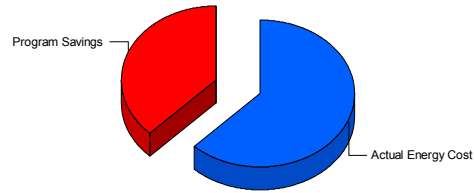
Cost Avoidance Program

## Energy Conservation Program

March 2010

### Cumulative Cost Savings

Expected Energy Costs	\$2,258,801
Actual Energy Cost	\$1,405,071
Program Savings	\$853,730
Savings Percent	37.80%



#### Expected Energy Costs

Amount you would have spent on energy without energy management program.

This is the base year usage adjusted for changes in weather, equipment, schedules, occupancy and prices

#### Actual Energy Costs

Actual utility costs for electricity, gas, water, sewer, etc obtained directly from bills.

#### Program Savings

The difference between Expected and Actual Costs, calculated in accordance with the International Performance Measurement & Verification Protocol. Does not include savings attributable to reduced equipment maintenance and replacement costs and other collateral benefits. These savings can increase the program savings up to 20%.

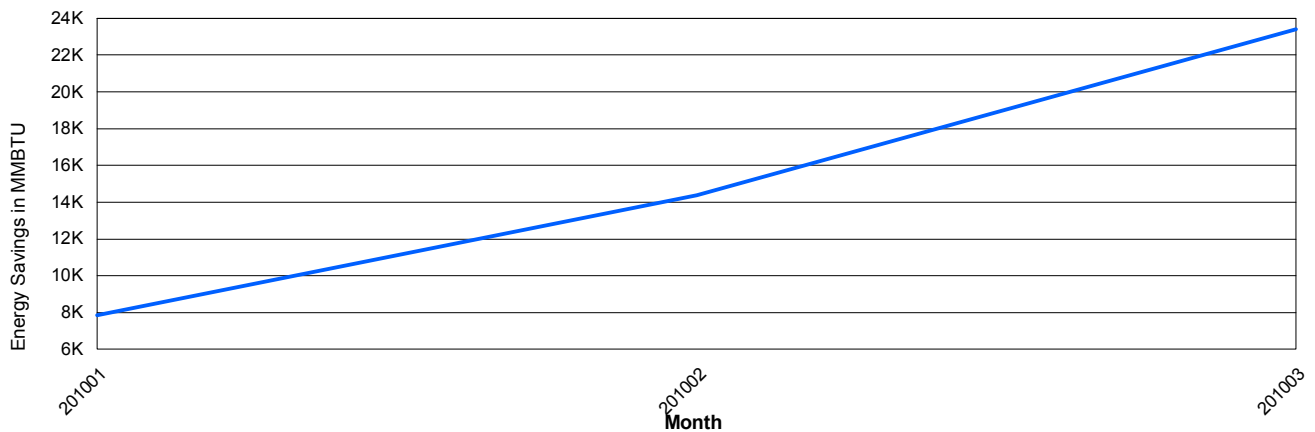
### Cumulative Greenhouse Gas Reduction

**Energy Reduction Impact:** 23,390 MMBTU 4,100 equiv. metric tons of CO2

This is equivalent to the following:

Passenger cars not driven for one year:	736
Tree seedlings grown for 10 years:	104,859

### Cumulative Energy Savings



# St Johns County School District

Energy CAP

Cost Avoidance Program

## Overall Program Summary

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### Monthly Summary

---

	2010		
	Cost Avoid \$	Cost Avoid %	Total \$
Jan	274,685	35.1	274,685
Feb	239,375	32.6	239,375
Mar	339,670	45.7	339,670
Total	853,730	37.8	853,730

*Filters: Savings Periods In Range From 201001 To 201003*

# St Johns County School District

Energy CAP

Cost Avoidance Program

## Overall Program Summary

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### Energy Summary

---

	Use				Cost				
	w/o CAP	Actual	Avoid	Avoid %	w/o CAP	Actual	Avoid	Avoid %	Total Savings
Electricity	17,812,008	10,958,677	6,853,331	38.5	2,088,979	1,284,596	804,383	38.5	804,383
Water & Sewe	13,557	9,859	3,698	27.3	163,082	116,388	46,694	28.6	46,694
Irrigation	2,109	1,082	1,027	48.7	6,740	4,087	2,653	39.4	2,653
Total					2,258,801	1,405,071	853,730	37.8	853,730

*Filters: Savings Periods In Range From 201001 To 201003*

# St Johns County School District

Energy CAP

Cost Avoidance Program

## Overall Program Summary

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### Monthly Summary

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	2009		
	Cost Avoid \$	Cost Avoid %	Total \$
Jan	261,138	36.7	261,138
Feb	244,222	36.6	244,222
Mar	272,989	41.2	272,989
Apr	190,303	31.1	190,303
May	181,293	28.7	181,293
Jun	333,931	47.7	333,931
Jul	415,070	54.9	415,070
Aug	375,866	40.6	375,866
Sep	335,492	35.1	335,492
Oct	337,931	37.3	337,931
Nov	391,912	44.1	391,912
Dec	332,545	42.3	332,545
Total	3,672,692	39.9	3,672,692

*Filters: Savings Periods In Range From 200901 To 200912*

# St Johns County School District

Energy CAP

Cost Avoidance Program

## Overall Program Summary

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### Energy Summary

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	Use				Cost				
	w/o CAP	Actual	Avoid	Avoid %	w/o CAP	Actual	Avoid	Avoid %	Total Savings
Electricity	72,546,827	43,150,438	29,396,389	40.5	8,676,963	5,142,032	3,534,931	40.7	3,534,931
Water & Sewe	46,501	34,588	11,913	25.6	510,068	377,814	132,254	25.9	132,254
Irrigation	6,907	5,292	1,615	23.4	18,803	13,296	5,507	29.3	5,507
Total					9,205,834	5,533,142	3,672,692	39.9	3,672,692

*Filters: Savings Periods In Range From 200901 To 200912*



# St Johns County School District

Energy CAP

Cost Avoidance Program

## Cost Avoidance Summary - Energy Types

Sorted by Energy Type

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Energy Type	Cost Without CAP	Actual Cost	Cost Avoidance \$	Cost Avoidance %
Electricity	\$14,873,531.02	\$9,273,359.55	\$5,600,171.47	37.65%
Irrigation	\$25,543.58	\$17,382.29	\$8,161.29	31.95%
Water & Sewer	\$900,674.70	\$680,906.15	\$219,768.55	24.40%
<b>Totals:</b>	<b>\$15,799,749.30</b>	<b>\$9,971,647.99</b>	<b>\$5,828,101.31</b>	<b>36.89%</b>

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*Filters: Billing Periods In Range From 200807 To 201003*