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 Quarterly Report on Status of Energy Program
DATE:	June 11, 2013

Background Information: The School District entered into an agreement with Cenergistic -The Energy Conservation Company (previously known as Energy Education, Inc. (EEI)) on July 1, 2008. The Facilities 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 Cenergistic and has included onsite training and assessments, Cenergistic specialists training, and monitoring of energy consumption by each site's Maintenance Manager. 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 June 2013 Energy Program Status Report summarizes the performance results of the Energy Conservation Program for the quarterly period January 2013 – March 2013. The report shows data on energy consumption of the District during this period. 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 by providing appropriate facilities to help inspire in all students good character and a passion for lifelong learning, creating educated and caring contributors to the world.

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

Fiscal Impact: During the quarterly period January 2013 – March 2013 the Energy Savings Program has resulted in additional cost avoidance for the School District of \$1,404,547.28. The current rate of energy savings significantly exceeds the projected performance of the program.

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

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

Action Required: Approval of the Superintendent's recommendation.

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

Reviewed and submitted for approval by: Paul Rose, Executive Director for Facilities & New Construction.

Respectfully Submitted,

Sui

Tim Forson, Deputy Superintendent for Operations

ph G. Joyner, Ed.D., Superintendent of Schools

QUARTERLY ENERGY REPORT January 2013 – March 2013

EXECUTIVE SUMMARY

The June 2013 Energy Program Status Report summarizes the performance results of the Energy Conservation Program during the quarterly period January 2013 – March 2013 and is comprised of the following:

- Cost Avoidance Summary by Site (January 2013 March 2013): The District realized a total cost avoidance for this quarterly period of \$1,404,547.28 (or a 52.1% cost avoidance from the baseline period).
- Greenhouse Gas Reduction: Greenhouse Gas Reduction for this quarterly period reduced CO^2 by 6,219 metric tons.
- Year to Date Monthly Cost Avoidance Summary (January 2013 March 2013): This reflects the monthly summary of total cost avoidance for the period January 2013 March 2013.
- Energy Consumption Summary (Cumulative Year to date): Summary breakdown for electricity, water & sewer, and irrigation for January 2013 March 2013.
- Total cost avoidance for the district from program inception (July 2008 March 2013): This reflects the total cost avoidance since the implementation of the program. Total cumulative cost avoidance of \$21,094,178.72.

During the period of January 2013 – March 2013 there were 45 energy audits performed at District facilities. The results of these audits demonstrate continued efforts by employees to reduce energy use.

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. <u>96% of our schools have qualified to receive the Energy Star Award for 2012.</u>

Cost Avoidance Program

Cost Avoidance Summary - Buildings

Sorted by Building

Building Code & Name	Cost Without CAP	Actual Cost	Cost Avoidance \$	Cost Avoidance %
ADM - Administrative Complex	\$23,102.65	\$13,368.65	\$9,734.00	42.13%
BTH - Bartram High School	\$205,880.08	\$73,848.92	\$132,031.16	64.13%
CBS - CROOKSHANK BUS GARAGE	\$6,009.78	\$4,496.22	\$1,513.56	25.18%
CCS - Cunningham Creek Elementary School	\$47,660.78	\$25,456.74	\$22,204.04	46.59%
CES - Crookshank Elementary School	\$30,008.95	\$21,309.90	\$8,699.05	28.99%
CHS - Creekside High School	\$113,386.07	\$92,352.42	\$21,033.65	18.55%
CRR - CLINIC - RAY ROAD	\$1,575.55	\$1,245.07	\$330.48	20.98%
CSR - CLINIC-SR206	\$1,095.79	\$1,029.51	\$66.28	6.05%
DCE - Durbin Creek Elementary	\$193,937.88	\$50,329.16	\$143,608.72	74.05%
FCS - Fruit Cove Middle School	\$56,542.63	\$34,616.26	\$21,926.37	38.78%
GAS - Gaines Alternative School	\$14,561.55	\$8,059.01	\$6,502.54	44.66%
GRM - Gamble Rogers Middle School	\$57,999.91	\$27,174.07	\$30,825.84	53.15%
HCE - Hickory Creek Elementary School	\$112,271.73	\$39,933.41	\$72,338.32	64.43%
JCE - Julington Creek Elementary School	\$92,078.34	\$44,297.00	\$47,781.34	51.89%
KES - Ketterlinus Elementary School	\$24,732.44	\$13,725.24	\$11,007.20	44.51%
LMS - Alice B. Landrum Middle School	\$80,081.58	\$39,845.77	\$40,235.81	50.24%
LPA - Liberty Pines Academy k-8	\$108,933.29	\$55,730.03	\$53,203.26	48.84%
MCE - Mill Creek Elementary School	\$49,603.08	\$31,736.42	\$17,866.66	36.02%
MES - Otis Mason Elementary School	\$28,376.98	\$17,586.49	\$10,790.49	38.03%
MIT - FULLERWOOD	\$11,289.01	\$6,614.26	\$4,674.75	41.41%
MMS - RJ Murray Middle School	\$60,812.02	\$24,828.41	\$35,983.61	59.17%
MNT - Maintenance-Purchasing	\$3,018.48	\$2,002.82	\$1,015.66	33.65%
NHS - Allen D. Nease High School	\$120,537.16	\$45,409.74	\$75,127.42	62.33%
OCC - OCONNELL CENTER	\$2,206.44	\$1,862.75	\$343.69	15.58%
OES - Osceola Elementary School	\$57,910.68	\$24,345.85	\$33,564.83	57.96%
OPE - Ocean Palms Elementary School	\$65,615.86	\$29,573.32	\$36,042.54	54.93%
PBM - Pacetti Bay Middle School	\$98,425.89	\$41,090.29	\$57,335.60	58.25%
PMH - Pedro Menendez High School	\$145,811.53	\$80,880.72	\$64,930.81	44.53%
PVH - Ponte Vedra High School	\$124,768.85	\$84,035.02	\$40,733.83	32.65%
PVP - PV-PV Elementary School	\$32,680.37	\$21,410.05	\$11,270.32	34.49%
RBH - RB Hunt Elementary School	\$35,636.89	\$18,926.97	\$16,709.92	46.89%
RES - Rawlings Elementary School	\$37,558.33	\$18,629.31	\$18,929.02	50.40%
SAH - ST Augustine High School	\$93,684.62	\$53,086.52	\$40,598.10	43.33%
SJT - ST Johns Technical High School	\$20,679.47	\$7,988.44	\$12,691.03	61.37%
SMS - Sebastian Middle School	\$35,130.64	\$24,485.15	\$10,645.49	30.30%
SPM - Switzerland Point Middle School	\$60,312.86	\$31,572.62	\$28,740.24	47.65%
SWE - South Woods Elementary School	\$98,718.20	\$31,970.85	\$66,747.35	67.61%
TCE - Timberlin Creek Elementary School	\$132,769.05	\$51,474.36	\$81,294.69	61.23%
WCE - Wards Creek Elementary School	\$121,330.58	\$46,918.61	\$74,411.97	61.33%
WDH - WD Hartley Elementary School	\$47,866.65	\$23,916.44	\$23,950.21	50.04%
WSE - Webster School Elementary	\$38,401.84	\$21,294.42	\$17,107.42	44.55%

Filters: Billing Periods In Range From 201301 To 201303

Cost Avoidance Summary - Buildings

Sorted by Building

Cost Avoidance Summary - Buildings

Sorted by Building	

Building Code & Name		Cost Without CAP Actual Cost		Cost Avoidance \$	Cost Avoidance %	
	Totals:	\$2,693,004.49	\$1,288,457.21	\$1,404,547.28	52.16%	

Filters: Billing Periods In Range From 201301 To 201303

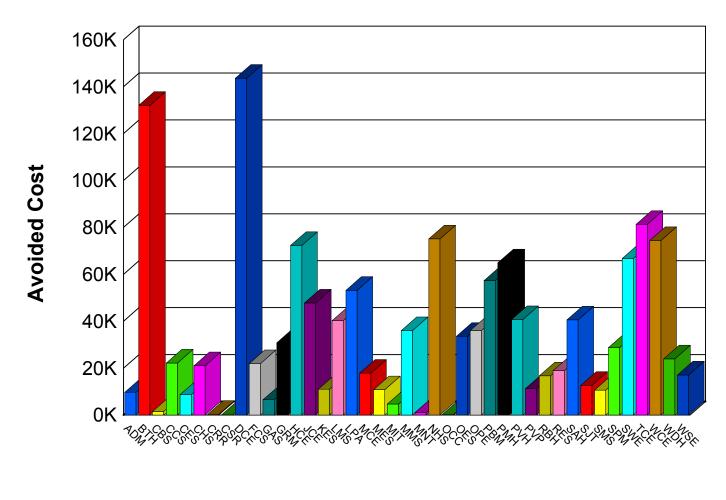
Cost Avoidance Program

Cost Avoidance Summary - Buildings

Sorted by Building

Cost Avoidance Summary - Buildings

Sorted by Building				
	Cost		Cost	Cost
Building Code & Name	Without CAP	Actual Cost	Avoidance \$	Avoidance %



Building

Filters: Billing Periods In Range From 201301 To 201303

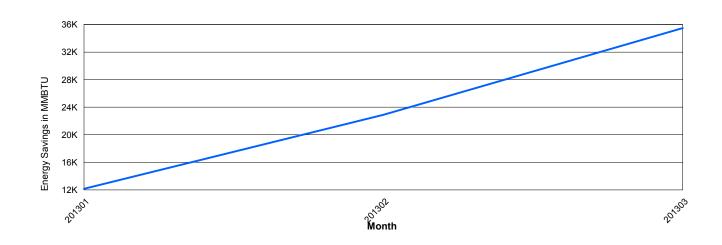
Cost Avoidance Summary - Buildings CAP 01B

Energy Conservation Program

March 2013

	Cumulative Co	st Savings		
Expected Energy Costs Actual Energy Cost	\$2,693,005 \$1,288,457			
Program Savings Savings Percent	\$1,404,548 52.16%	Program	Actual Energy Cost	
Special Savings Total Savings	\$13,891 \$1,418,439			
Expected Energy Costs	Actual Energ	y Costs	Program Savings	
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 utility costs for electricit sewer, etc obtained directly from the sewer of	om bills. Costs, calculated in accordance with the International Performance Measurement & Verification Protocol. Does not include savin attributable to reduced equipment maintenance and replacement costs and oth		
Sp Additional documented savings attributable to F usage reductions, such as rebates, refunds, ta	5		collateral benefits. These savings can increase the program savings up to 20%.	
Energy Reduction Impact:	35,481 MMBTU		6,219 equiv. metric tons of CO2	
This is equivalent to the following:				
Passenger cars not driven for one	year: 1,116			

Cumulative Energy Savings



St Johns County School District Energy CAP

Cost Avoidance Program

Overall Program Summary

Monthly Summary

	2013			
	Cost Avoid \$	Cost Avoid %	Spl Savings \$	Total \$
Jan	478,723	51.7	4,274	482,997
Feb	445,758	49.7	5,994	451,752
Mar	480,067	55.1	3,624	483,691
Total	1,404,548	52.2	13,891	1,418,439

Filters: Savings Periods In Range From 201301 To 201303

St Johns County School District Energy CAP

Cost Avoidance Program

Overall Program Summary

Energy Summary

	Use				Cost					
	w/o CAP	Actual	Avoid	Avoid %	w/o CAP	Actual	Avoid	Avoid %	Spl Savings	Total Savings
Electricity	19,482,390	9,086,584	10,395,806	53.4	2,464,426	1,142,784	1,321,642	53.6	9,641	1,331,283
Water	0	0	0	0.0	0	0	0	0.0	0	0
Water & Sewe	15,197	9,816	5,381	35.4	216,519	133,672	82,847	38.3	4,250	87,097
Irrigation	2,325	2,336	-11	-0.5	12,060	12,001	59	0.5	0	59
Total					2,693,005	1,288,457	1,404,548	52.2	13,891	1,418,439

Filters: Savings Periods In Range From 201301 To 201303

Cost Avoidance Program

Cost Avoidance Summary - Energy Types

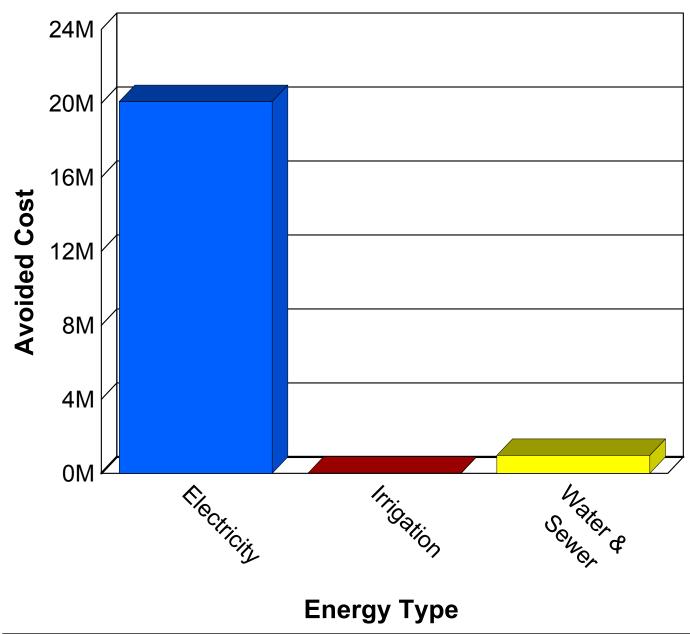
Sorted by Energy Type

Energy Type		Cost Without CAP	Actual Cost	Cost Avoidance \$	Cost Avoidance %
Electricity		\$44,752,223.84	\$24,645,228.59	\$20,106,995.25	44.93%
Irrigation		\$202,977.63	\$187,210.80	\$15,766.83	7.77%
Water & Sewer		\$3,210,787.83	\$2,239,371.20	\$971,416.63	30.25%
	Totals:	\$48,165,989.31	\$27,071,810.59	\$21,094,178.72	43.79%

Filters: Billing Periods In Range From 200807 To 201303

Cost Avoidance Summary - Energy Types

Sorted by Energy Type				
	Cost		Cost	Cost
Energy Type	Without CAP	Actual Cost	Avoidance \$	Avoidance %



Filters: Billing Periods In Range From 200807 To 201303