



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: February 14, 2012

Background Information: The School District entered into an agreement with 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 EEI and has included onsite training and assessments, EEI 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 February 2012 Energy Program Status Report summarizes the performance results of the Energy Conservation Program for the period August 2011 – October 2011. 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.

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 period August 2011 – October 2011 the Energy Savings Program has resulted in cost avoidance for the School District of \$1,279,233.85. 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

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

Respectfully Submitted,



Tim Forson, Deputy Superintendent for Operations

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

QUARTERLY ENERGY REPORT August 2011 – October 2011

EXECUTIVE SUMMARY

The October 2011 Energy Program Status Report summarizes the performance results of the Energy Conservation Program during the period August 2011 – October 2011 and is comprised of the following:

- Cost Avoidance Summary by Site - August 2011 – October 2011: The District realized cost avoidance for this period of \$1,279,233.85 or 42.58%.
- Greenhouse Gas Reduction: Greenhouse Gas Reduction for this period reduced CO² by 6,478 metric tons.
- Monthly Summary for cost avoidance (year to date) for January 2011 – October 2011: This reflects the monthly summary of cost avoidance for the period January 2011 – October 2011.
- Energy Consumption Summary (year to date): Summary for electricity, water & sewer, and irrigation for January 2011 - October 2011.
- Cost avoidance for the district - July 2008 - October 2011: This reflects the total cost avoidance since the implementation of the program in the amount of \$13,197,388.03.

During the period of August 2011 - October 2011 there were 46 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. 100% of our schools have qualified to receive the Energy Star Award for 2011.

St Johns County School District

Energy CAP

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	\$28,589.95	\$17,036.61	\$11,553.34	40.41%
BTH - Bartram High School	\$295,481.36	\$106,882.02	\$188,599.34	63.83%
CBS - CROOKSHANK BUS GARAGE	\$6,243.18	\$5,125.08	\$1,118.10	17.91%
CCS - Cunningham Creek Elementary School	\$70,237.76	\$46,792.92	\$23,444.84	33.38%
CES - Crookshank Elementary School	\$37,877.37	\$25,234.03	\$12,643.34	33.38%
CHS - Creekside High School	\$165,875.87	\$98,405.80	\$67,470.07	40.68%
CRR - CLINIC - RAY ROAD	\$380.89	\$384.36	(\$3.47)	(0.91%)
CSR - CLINIC-SR206	\$558.29	\$659.67	(\$101.38)	(18.16%)
DCE - Durbin Creek Elementary	\$157,438.62	\$76,367.65	\$81,070.97	51.49%
FCS - Fruit Cove Middle School	\$71,899.92	\$60,163.99	\$11,735.93	16.32%
GAS - Gaines Alternative School	\$18,268.17	\$9,078.92	\$9,189.25	50.30%
GRM - Gamble Rogers Middle School	\$59,055.62	\$36,716.42	\$22,339.20	37.83%
HCE - Hickory Creek Elementary School	\$102,303.76	\$41,055.84	\$61,247.92	59.87%
JCE - Julington Creek Elementary School	\$80,053.97	\$58,774.48	\$21,279.49	26.58%
KES - Ketterlinus Elementary School	\$34,040.01	\$19,839.47	\$14,200.54	41.72%
LMS - Alice B. Landrum Middle School	\$108,486.04	\$62,485.43	\$46,000.61	42.40%
LPA - Liberty Pines Academy k-8	\$107,605.24	\$78,825.40	\$28,779.84	26.75%
MCE - Mill Creek Elementary School	\$71,463.91	\$51,005.21	\$20,458.70	28.63%
MES - Otis Mason Elementary School	\$33,042.78	\$24,935.27	\$8,107.51	24.54%
MIT - FULLERWOOD	\$10,293.18	\$8,496.28	\$1,796.90	17.46%
MMS - RJ Murray Middle School	\$67,886.25	\$38,442.46	\$29,443.79	43.37%
MNT - Maintenance-Purchasing	\$4,737.23	\$2,573.20	\$2,164.03	45.68%
NHS - Allen D. Nease High School	\$124,518.19	\$74,701.93	\$49,816.26	40.01%
OCC - OCONNELL CENTER	\$2,756.16	\$1,853.91	\$902.25	32.74%
OES - Osceola Elementary School	\$72,775.81	\$34,206.47	\$38,569.34	53.00%
OPE - Ocean Palms Elementary School	\$81,159.64	\$39,944.41	\$41,215.23	50.78%
PBM - Pacetti Bay Middle School	\$93,028.18	\$48,346.28	\$44,681.90	48.03%
PMH - Pedro Menendez High School	\$160,243.41	\$90,658.51	\$69,584.90	43.42%
PVH - Ponte Vedra High School	\$150,266.27	\$114,608.40	\$35,657.87	23.73%
PVP - PV-PV Elementary School	\$50,928.64	\$29,396.29	\$21,532.35	42.28%
RBH - RB Hunt Elementary School	\$52,278.02	\$21,817.21	\$30,460.81	58.27%
RES - Rawlings Elementary School	\$50,041.31	\$35,978.82	\$14,062.49	28.10%
SAH - ST Augustine High School	\$111,721.40	\$76,163.36	\$35,558.04	31.83%
SJT - ST Johns Technical High School	\$19,682.69	\$11,963.04	\$7,719.65	39.22%
SMS - Sebastian Middle School	\$66,997.10	\$36,588.20	\$30,408.90	45.39%
SPM - Switzerland Point Middle School	\$63,293.70	\$44,846.51	\$18,447.19	29.15%
SWE - South Woods Elementary School	\$81,758.86	\$37,102.07	\$44,656.79	54.62%
TCE - Timberlin Creek Elementary School	\$110,860.13	\$55,131.77	\$55,728.36	50.27%
WCE - Wards Creek Elementary School	\$88,682.22	\$47,151.31	\$41,530.91	46.83%
WDH - WD Hartley Elementary School	\$41,201.90	\$27,504.41	\$13,697.49	33.24%
WSE - Webster School Elementary	\$50,320.39	\$27,856.11	\$22,464.28	44.64%

Filters: Billing Periods In Range From 201108 To 201110

St Johns County School District

Energy CAP

Cost Avoidance Program

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:	\$3,004,333.37	\$1,725,099.52	\$1,279,233.85	42.58%

Filters: Billing Periods In Range From 201108 To 201110

St Johns County School District

Energy CAP

Cost Avoidance Program

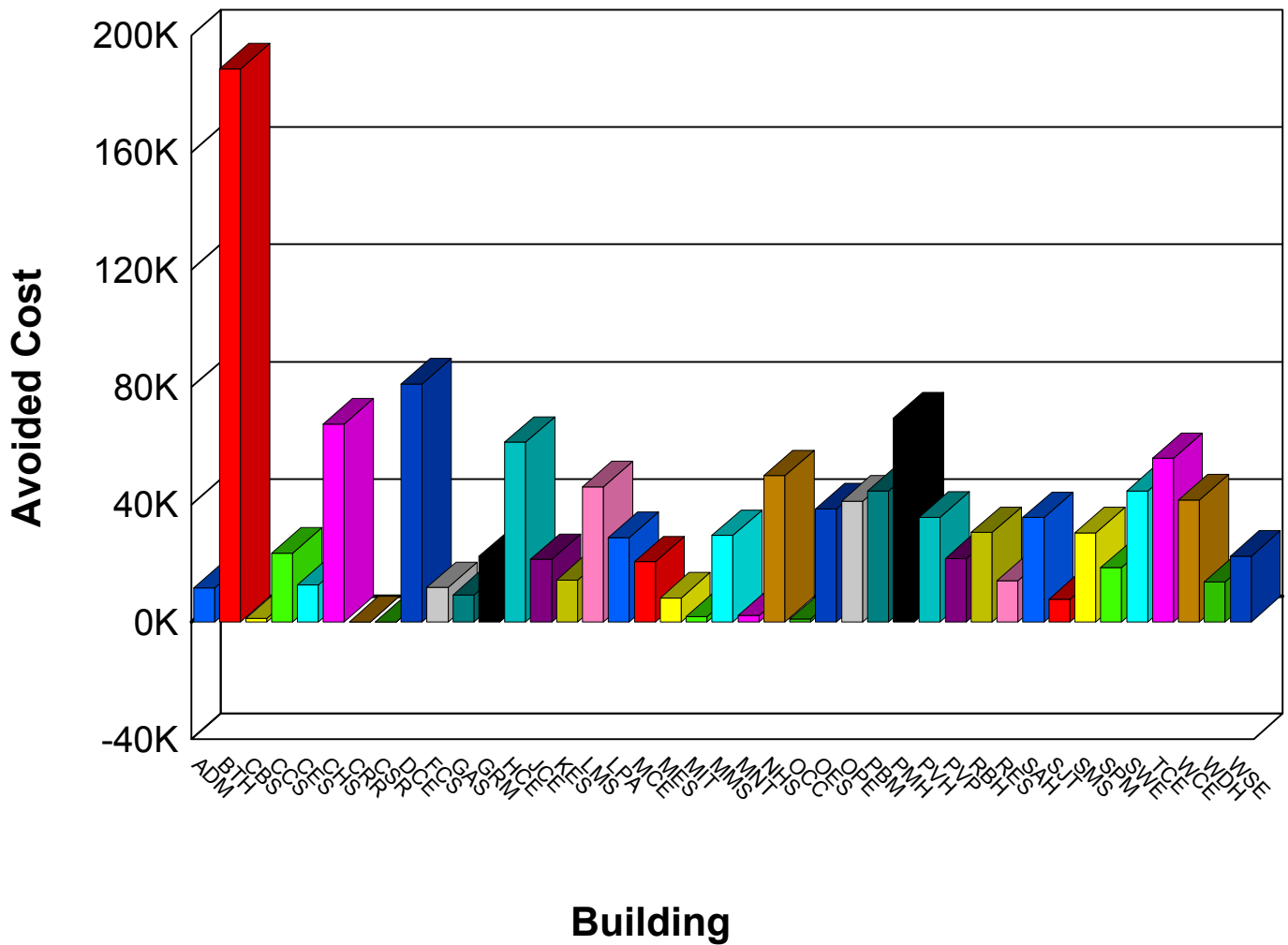
Cost Avoidance Summary - Buildings

Sorted by Building

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Sorted by Building

Building Code & Name	Cost Without CAP	Actual Cost	Cost Avoidance \$	Cost Avoidance %
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St Johns County School District

Energy CAP

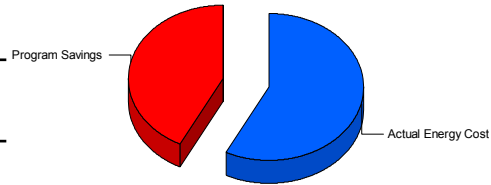
Cost Avoidance Program

Energy Conservation Program

October 2011

Cumulative Cost Savings

Expected Energy Costs	\$3,004,334
Actual Energy Cost	\$1,725,099
Program Savings	\$1,279,235
Savings Percent	42.58%
Special Savings	\$307
Total Savings	\$1,279,542



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%.

Special Savings

Additional documented savings attributable to Program activities but not the direct result of usage reductions, such as rebates, refunds, tariff changes, etc.

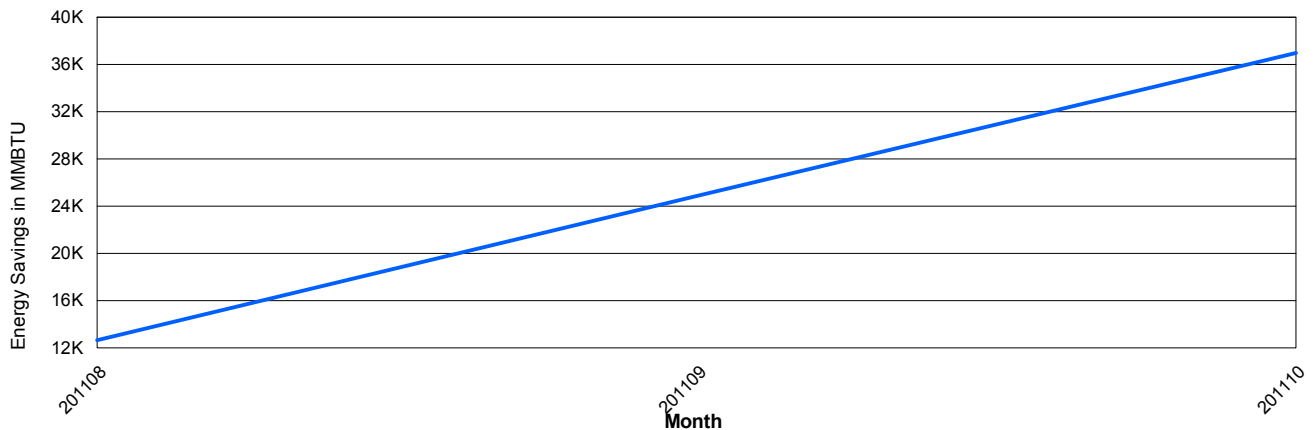
Cumulative Greenhouse Gas Reduction

Energy Reduction Impact: 36,962 MMBTU 6,478 equiv. metric tons of CO2

This is equivalent to the following:

Passenger cars not driven for one year:	1,163
Tree seedlings grown for 10 years:	165,699

Cumulative Energy Savings



St Johns County School District

Energy CAP

Cost Avoidance Program

Overall Program Summary

Monthly Summary

	2011			
	Cost Avoid \$	Cost Avoid %	Spl Savings \$	Total \$
Jan	430,241	46.1	4,584	434,825
Feb	351,898	42.9	304	352,202
Mar	394,410	46.6	0	394,410
Apr	270,523	34.0	3,785	274,308
May	268,546	33.7	23	268,569
Jun	422,656	50.6	1,363	424,019
Jul	517,071	56.4	288	517,359
Aug	415,254	39.8	23	415,277
Sep	422,506	41.7	23	422,529
Oct	441,475	46.6	260	441,735
Total	3,934,580	44.0	10,654	3,945,234

Filters: Savings Periods In Range From 201101 To 201110

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	71,031,904	39,115,168	31,916,736	44.9	8,293,567	4,520,064	3,773,503	45.5	5,504	3,779,007
Water & Sewe	49,729	35,616	14,113	28.4	611,838	443,635	168,203	27.5	5,150	173,353
Irrigation	13,210	14,811	-1,601	-12.1	43,545	50,671	-7,126	-16.4	0	-7,126
Total					8,948,950	5,014,370	3,934,580	44.0	10,654	3,945,234

Filters: Savings Periods In Range From 201101 To 201110

St Johns County School District

Energy CAP

Cost Avoidance Program

Cost Avoidance Summary - Energy Types

Sorted by Energy Type

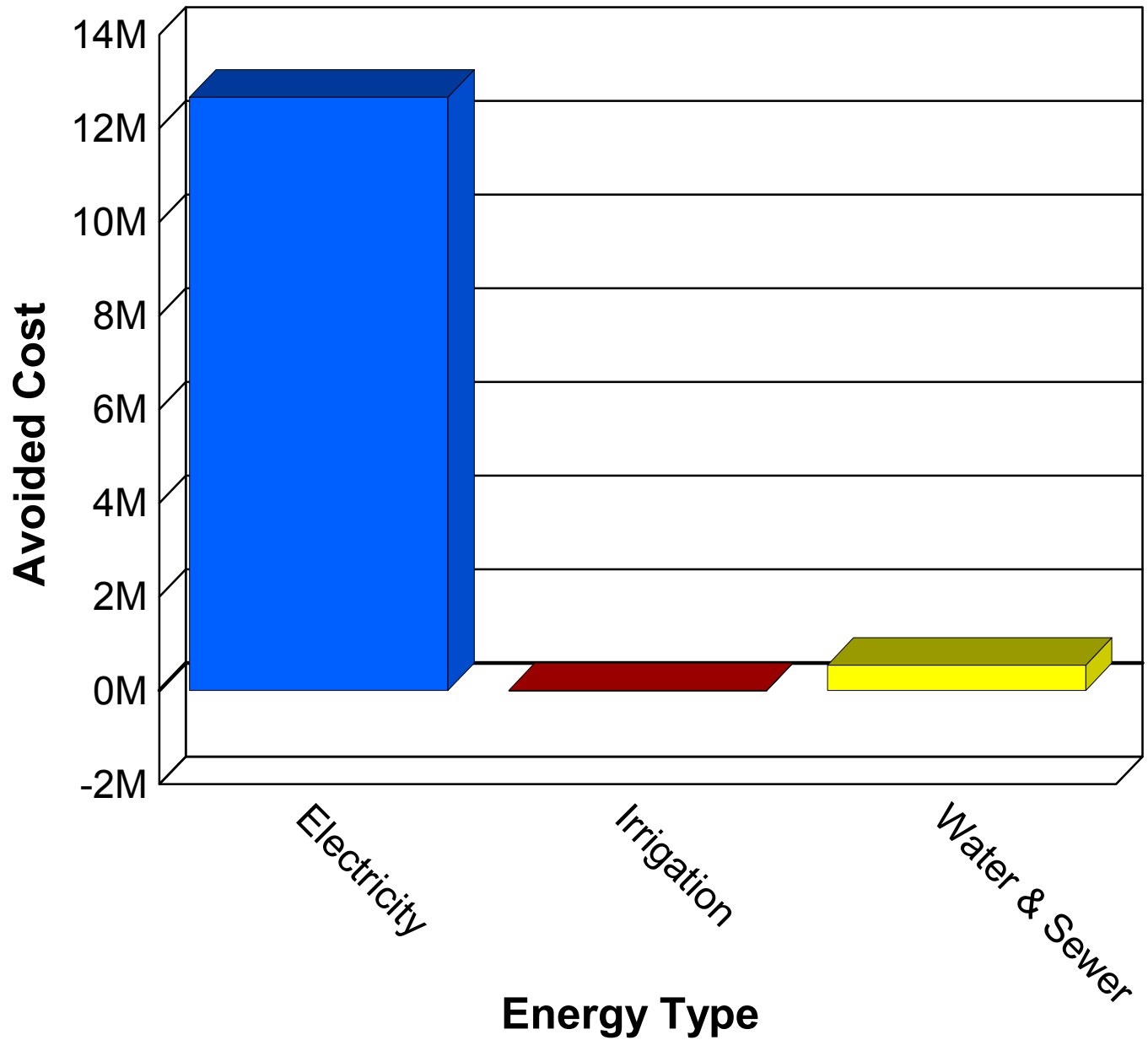
Energy Type	Cost Without CAP	Actual Cost	Cost Avoidance \$	Cost Avoidance %
Electricity	\$30,405,957.10	\$17,738,801.73	\$12,667,155.37	41.66%
Irrigation	\$105,724.75	\$113,890.38	(\$8,165.63)	(7.72%)
Water & Sewer	\$2,027,991.18	\$1,489,592.89	\$538,398.29	26.55%
Totals:	\$32,539,673.03	\$19,342,285.00	\$13,197,388.03	40.56%

Filters: Billing Periods In Range From 200807 To 201110

Cost Avoidance Summary - Energy Types

Sorted by Energy Type

Energy Type	Cost Without CAP	Actual Cost	Cost Avoidance \$	Cost Avoidance %
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Filters: Billing Periods In Range From 200807 To 201110