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: September 14, 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 September 2010 Energy Program Status Report summarizes the performance results of the Energy Conservation Program for the period April- July, 2010. The report shows data on energy consumption of the District during this period to include the Summer Operation Program. 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 period April-July, 2010, the Energy Savings Program has resulted in cost avoidance for the School District of \$1,265,965.26. 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.

Beverly Slough District 1

Bill Mignon District 3 Bill Fehling District 4

QUARTERLY ENERGY REPORT April-July, 2010

EXECUTIVE SUMMARY

The September 2010 Energy Program Status Report summarizes the performance results of the Energy Conservation Program during the period April-July, 2010 and is comprised of the following:

- Cost Avoidance Summary by Site April July, 2010: The District realized cost avoidance for this period of \$1,265,965.26 or 40.8%.
- Cost Avoidance Summary by Site June-July 2010: This represents a cost avoidance of \$804,904.55 or 49.2% for the Summer Operations Program.
- Cumulative Cost Savings: Our cost avoidance for this period reduced CO² by 6,546 metric tons.
- Overall Program Summary: April-July, 2010
- Energy Summary: Summary for electricity, water & sewer, and irrigation for April-July, 2010
- Energy Summary: Summary for electricity, water & sewer, and irrigation for January-July 2010
- Monthly Summary January July 2010: This reflects the monthly summary of cost avoidance for the period January – July 2010.
- Cost avoidance for the district July 2008 July 2010: This reflects the total cost avoidance since the implementation of the program in the amount of \$7,236,996.16.

During the period of April-July, 2010 there were 126 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 Environmental Protection has recognized the St. Johns County School District as a Top Performing Partner for 2010, one of only three school districts in the State of Florida to ever achieve this recognition.

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		\$39,260.33	\$23,060.81	\$16,199.52	41.26%
BTH - BARTRAM TRAIL HIGH		\$287,376.49	\$102,446.31	\$184,930.18	64.35%
CBS - CROOKSHANK BUS GARAGE		\$9,369.48	\$6,684.17	\$2,685.31	28.66%
CCS - CUNNINGHAM CREEK ELEMENTAR	RY	\$68,734.58	\$41,629.23	\$27,105.35	39.43%
CES - CROOKSHANK ELEMENTARY		\$48,476.82	\$25,544.80	\$22,932.02	47.31%
CHS - CREEKSIDE HIGH		\$147,569.24	\$106,689.40	\$40,879.84	27.70%
DCE - DURBIN CREEK ELEMENTARY		\$141,600.28	\$64,111.53	\$77,488.75	54.72%
FCS - FRUIT COVE MIDDLE		\$70,819.65	\$67,166.91	\$3,652.74	5.16%
GAS - GAINES ALTERNATIVE SCHOOL		\$20,710.32	\$11,872.84	\$8,837.48	42.67%
GRM - GAMBLE ROGERS MIDDLE		\$83,610.32	\$43,846.37	\$39,763.95	47.56%
HCE - HICKORY CREEK ELEMENTARY		\$78,495.63	\$40,755.56	\$37,740.07	48.08%
JCE - JULINGTON CREEK ELEMENTARY		\$117,255.04	\$59,316.01	\$57,939.03	49.41%
KES - KETTERLINUS ELEMENTARY		\$35,713.51	\$18,428.53	\$17,284.98	48.40%
LMS - ALICE B LANDRUM MIDDLE		\$129,635.85	\$72,548.98	\$57,086.87	44.04%
LPA - LIBERTY PINES ACADEMY		\$87,290.17	\$85,566.48	\$1,723.69	1.97%
MCE - MILL CREEK ELEMENTARY		\$74,969.35	\$28,981.13	\$45,988.22	61.34%
MES - OTIS A MASON ELEMENTARY		\$43,788.76	\$27,722.39	\$16,066.37	36.69%
MIT - FULLERWOOD		\$14,827.09	\$11,394.73	\$3,432.36	23.15%
MMS - RJ MURRAY MIDDLE		\$82,443.46	\$59,227.75	\$23,215.71	28.16%
MNT - MAINTENANCE-PURCHASING		\$5,355.83	\$3,746.89	\$1,608.94	30.04%
NHS - ALAN D NEESE HIGH		\$122,941.08	\$85,410.28	\$37,530.80	30.53%
OCC - OCONNELL CENTER		\$3,728.95	\$2,662.20	\$1,066.75	28.61%
OES - OSCEOLA ELEMENTARY		\$72,014.16	\$29,545.62	\$42,468.54	58.97%
OPE - OCEAN PALMS ELEMENTARY		\$90,855.07	\$43,940.17	\$46,914.90	51.64%
PBM - PACETTI BAY MIDDLE		\$92,815.19	\$44,114.40	\$48,700.79	52.47%
PMH - PEDRO MENENDEZ HIGH		\$188,266.25	\$110,453.07	\$77,813.18	41.33%
PVH - PONTE VEDRA HIGH		\$124,385.19	\$120,855.15	\$3,530.04	2.84%
PVP - PV-PV ELEMENTARY		\$54,805.97	\$36,150.49	\$18,655.48	34.04%
RBH - RB HUNT ELEMENTARY		\$51,603.37	\$24,155.90	\$27,447.47	53.19%
RES - RAWLINGS ELEMENTARY		\$60,178.30	\$44,877.97	\$15,300.33	25.42%
SAH - ST AUGUSTINE HIGH		\$115,320.21	\$78,532.04	\$36,788.17	31.90%
SJT - ST JOHNS TECHNICAL HIGH		\$15,602.53	\$12,164.71	\$3,437.82	22.03%
SMS - SEBASTIAN MIDDLE		\$59,015.20	\$41,782.09	\$17,233.11	29.20%
SPM - SWITZERLAND POINT MIDDLE		\$76,659.48	\$49,692.62	\$26,966.86	35.18%
SWE - SOUTH WOODS ELEMENTARY		\$80,915.64	\$46,618.44	\$34,297.20	42.39%
TCE - TIMBERLIN CREEK ELEMENTARY		\$98,569.37	\$47,347.02	\$51,222.35	51.97%
WCE - WARDS CREEK ELEMENTARY		\$81,086.12	\$46,193.20	\$34,892.92	43.03%
WDH - WD HARTLEY ELEMENTARY		\$64,909.98	\$38,879.16	\$26,030.82	40.10%
WSE - WEBSTER SCHOOL ELEMENTARY		\$61,591.23	\$32,484.88	\$29,106.35	47.26%
	Totals:	\$3,102,565.49	\$1,836,600.23	\$1,265,965.26	40.80%

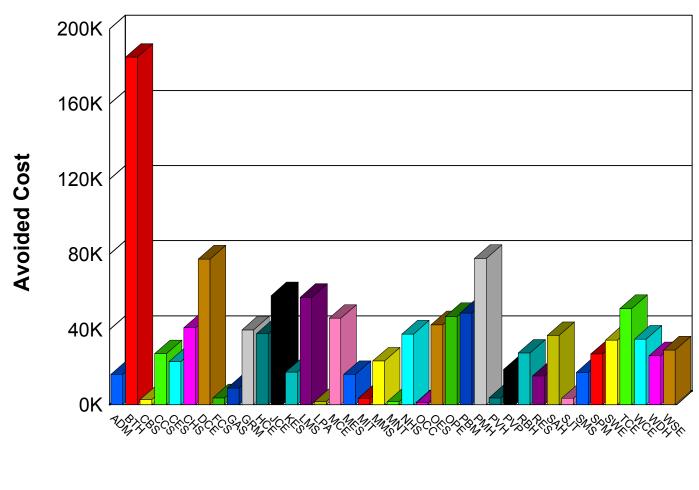
Filters: Billing Periods In Range From 201004 To 201007

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 201004 To 201007

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	\$23,230.20	\$11,978.91	\$11,251.29	48.43%
BTH - BARTRAM TRAIL HIGH	\$162,832.08	\$48,132.96	\$114,699.12	70.44%
CBS - CROOKSHANK BUS GARAGE	\$5,300.38	\$3,368.90	\$1,931.48	36.44%
CCS - CUNNINGHAM CREEK ELEMENTARY	\$36,390.35	\$15,958.00	\$20,432.35	56.15%
CES - CROOKSHANK ELEMENTARY	\$29,545.40	\$8,666.68	\$20,878.72	70.67%
CHS - CREEKSIDE HIGH	\$76,463.39	\$51,464.66	\$24,998.73	32.69%
DCE - DURBIN CREEK ELEMENTARY	\$78,396.12	\$22,088.08	\$56,308.04	71.83%
FCS - FRUIT COVE MIDDLE	\$35,461.57	\$32,929.19	\$2,532.38	7.14%
GAS - GAINES ALTERNATIVE SCHOOL	\$11,854.71	\$6,509.50	\$5,345.21	45.09%
GRM - GAMBLE ROGERS MIDDLE	\$45,009.56	\$19,346.54	\$25,663.02	57.02%
HCE - HICKORY CREEK ELEMENTARY	\$47,032.61	\$16,695.50	\$30,337.11	64.50%
JCE - JULINGTON CREEK ELEMENTARY	\$55,060.85	\$22,302.14	\$32,758.71	59.50%
KES - KETTERLINUS ELEMENTARY	\$19,658.87	\$6,746.23	\$12,912.64	65.68%
LMS - ALICE B LANDRUM MIDDLE	\$70,543.96	\$34,975.05	\$35,568.91	50.42%
LPA - LIBERTY PINES ACADEMY	\$36,680.29	\$40,017.81	(\$3,337.52)	(9.10%)
MCE - MILL CREEK ELEMENTARY	\$43,694.06	\$6,128.32	\$37,565.74	85.97%
MES - OTIS A MASON ELEMENTARY	\$24,135.43	\$12,120.46	\$12,014.97	49.78%
MIT - FULLERWOOD	\$7,420.51	\$5,995.52	\$1,424.99	19.20%
MMS - RJ MURRAY MIDDLE	\$42,904.04	\$33,424.78	\$9,479.26	22.09%
MNT - MAINTENANCE-PURCHASING	\$3,376.94	\$2,106.31	\$1,270.63	37.63%
NHS - ALAN D NEESE HIGH	\$63,510.95	\$43,140.53	\$20,370.42	32.07%
OCC - OCONNELL CENTER	\$2,207.51	\$1,497.99	\$709.52	32.14%
OES - OSCEOLA ELEMENTARY	\$37,120.41	\$11,437.24	\$25,683.17	69.19%
OPE - OCEAN PALMS ELEMENTARY	\$47,311.03	\$19,091.82	\$28,219.21	59.65%
PBM - PACETTI BAY MIDDLE	\$52,365.75	\$20,691.32	\$31,674.43	60.49%
PMH - PEDRO MENENDEZ HIGH	\$94,923.56	\$51,784.08	\$43,139.48	45.45%
PVH - PONTE VEDRA HIGH	\$58,708.52	\$57,623.43	\$1,085.09	1.85%
PVP - PV-PV ELEMENTARY	\$26,816.00	\$16,155.71	\$10,660.29	39.75%
RBH - RB HUNT ELEMENTARY	\$31,240.37	\$11,124.46	\$20,115.91	64.39%
RES - RAWLINGS ELEMENTARY	\$30,584.66	\$18,219.86	\$12,364.80	40.43%
SAH - ST AUGUSTINE HIGH	\$59,279.96	\$33,590.02	\$25,689.94	43.34%
SJT - ST JOHNS TECHNICAL HIGH	\$7,567.29	\$6,168.54	\$1,398.75	18.48%
SMS - SEBASTIAN MIDDLE	\$36,299.63	\$21,316.13	\$14,983.50	41.28%
SPM - SWITZERLAND POINT MIDDLE	\$37,905.21	\$23,277.06	\$14,628.15	38.59%
SWE - SOUTH WOODS ELEMENTARY	\$37,935.37	\$19,659.28	\$18,276.09	48.18%
TCE - TIMBERLIN CREEK ELEMENTARY	\$41,257.49	\$21,002.33	\$20,255.16	49.09%
WCE - WARDS CREEK ELEMENTARY	\$43,674.11	\$23,383.57	\$20,290.54	46.46%
WDH - WD HARTLEY ELEMENTARY	\$36,674.71	\$17,864.24	\$18,810.47	51.29%
WSE - WEBSTER SCHOOL ELEMENTARY	\$35,494.23	\$12,980.37	\$22,513.86	63.43%
Т	otals: \$1,635,868.07	\$830,963.52	\$804,904.55	49.20%

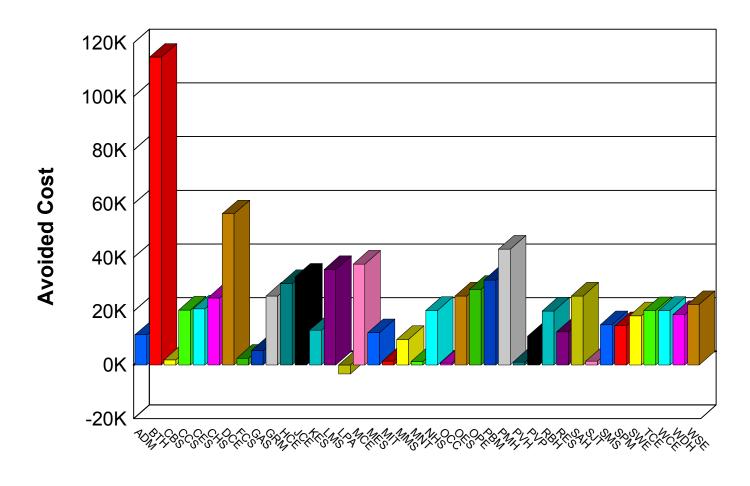
Filters: Billing Periods In Range From 201006 To 201007

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 201006 To 201007

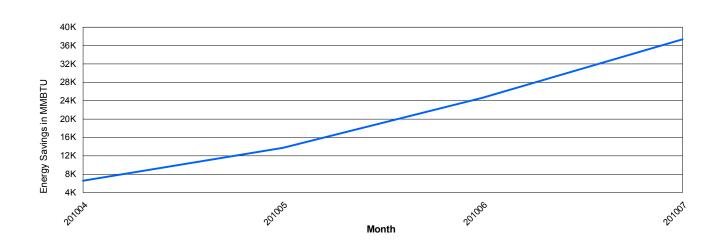
Energy Conservation Program

July 2010

Cumulative Cost Savings						
Expected Energy Costs	\$3,102,565					
Actual Energy Cost	\$1,836,599 Program Savings —					
Program Savings	\$1,265,966					
Savings Percent	40.80%	Actual Energy Cost				
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				

Cumulative Greenhouse Gas Reduction

Energy Reduction Impact:	37,352 MMBTU	6,546 equiv. metric tons of CO2
This is equivalent to the following:		
Passenger cars not driven for one y	ear: 1,175	
Tree seedlings grown for 10 ye	ars: 167,445	
	Cumulative Er	nergy Savings



Cost Avoidance Program

Overall Program Summary

Monthly Summary

	2010							
	Cost Avoid \$	Cost Avoid %	Spl Savings \$	Total \$				
Apr	230,265	32.1	7,233	237,498				
Мау	230,796	30.8	0	230,796				
Jun	361,302	45.6	3,266	364,568				
Jul	443,603	52.6	7,197	450,800				
Total	1,265,966	40.8	17,696	1,283,662				

Filters: Savings Periods In Range From 201004 To 201007

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	26,240,361	15,296,521	10,943,840	41.7	2,912,439	1,674,438	1,238,001	42.5	0	1,238,001
Water & Sewe	15,533	12,211	3,322	21.4	174,223	139,256	34,967	20.1	17,696	52,663
Irrigation	6,419	9,236	-2,817	-43.9	15,903	22,905	-7,002	-44.0	0	-7,002
Total					3,102,565	1,836,599	1,265,966	40.8	17,696	1,283,662

Filters: Savings Periods In Range From 201004 To 201007

Cost Avoidance Program

Overall Program Summary

Monthly Summary

	2010							
	Cost Avoid \$	Cost Avoid %	Spl Savings \$	Total \$				
Jan	286,881	36.2	0	286,881				
Feb	287,137	36.9	1,349	288,486				
Mar	346,040	46.1	0	346,040				
Apr	230,265	32.1	7,233	237,498				
Мау	230,796	30.8	0	230,796				
Jun	361,302	45.6	3,266	364,568				
Jul	443,603	52.6	7,197	450,800				
Total	2,186,024	40.3	19,045	2,205,069				

Filters: Savings Periods In Range From 201001 To 201007

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	44,455,649	26,190,240	18,265,409	41.1	5,056,529	2,952,026	2,104,503	41.6	0	2,104,503
Water & Sewe	29,708	22,393	7,315	24.6	344,958	259,088	85,870	24.9	19,045	104,915
Irrigation	8,528	10,318	-1,790	-21.0	22,643	26,992	-4,349	-19.2	0	-4,349
Total					5,424,130	3,238,106	2,186,024	40.3	19,045	2,205,069

Filters: Savings Periods In Range From 201001 To 201007

Cost Avoidance Summary - Energy Types

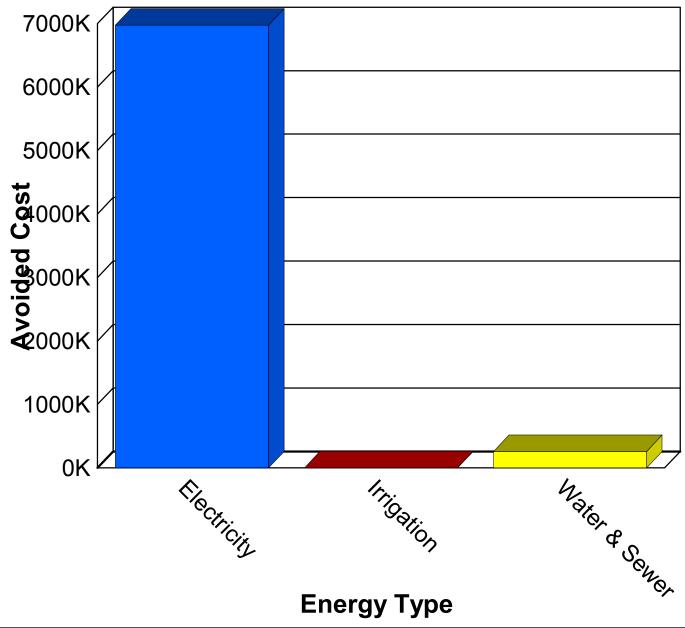
Sorted by Energy Type

Energy Type		Cost Without CAP		Cost Avoidance \$	Cost Avoidance %	
Electricity		\$17,924,775.34	\$10,947,418.98	\$6,977,356.36	38.93%	
Irrigation		\$41,446.94	\$40,287.97	\$1,158.97	2.80%	
Water & Sewer		\$1,081,599.97	\$823,119.14	\$258,480.83	23.90%	
	Totals:	\$19,047,822.25	\$11,810,826.09	\$7,236,996.16	37.99%	

Filters: Billing Periods In Range From 200807 To 201007

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 201007