



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: December 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 December 2010 Energy Program Status Report summarizes the performance results of the Energy Conservation Program for the period August-October, 2010. 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 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 August-October, 2010, the Energy Savings Program has resulted in cost avoidance for the School District of \$1,265,850.76. 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

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	\$27,584.15	\$15,989.89	\$11,594.26	42.03%
BTH - BARTRAM TRAIL HIGH	\$274,937.85	\$100,791.23	\$174,146.62	63.34%
CBS - CROOKSHANK BUS GARAGE	\$6,073.97	\$5,222.05	\$851.92	14.03%
CCS - CUNNINGHAM CREEK ELEMENTARY	\$59,919.89	\$41,687.76	\$18,232.13	30.43%
CES - CROOKSHANK ELEMENTARY	\$36,761.61	\$24,865.05	\$11,896.56	32.36%
CHS - CREEKSIDE HIGH	\$158,386.50	\$95,638.26	\$62,748.24	39.62%
DCE - DURBIN CREEK ELEMENTARY	\$120,050.88	\$58,413.82	\$61,637.06	51.34%
FCS - FRUIT COVE MIDDLE	\$66,332.86	\$55,127.16	\$11,205.70	16.89%
GAS - GAINES ALTERNATIVE SCHOOL	\$17,237.62	\$8,851.35	\$8,386.27	48.65%
GRM - GAMBLE ROGERS MIDDLE	\$58,846.66	\$38,532.62	\$20,314.04	34.52%
HCE - HICKORY CREEK ELEMENTARY	\$84,301.34	\$41,528.89	\$42,772.45	50.74%
JCE - JULINGTON CREEK ELEMENTARY	\$134,257.82	\$53,202.28	\$81,055.54	60.37%
KES - KETTERLINUS ELEMENTARY	\$32,178.77	\$18,776.19	\$13,402.58	41.65%
LMS - ALICE B LANDRUM MIDDLE	\$114,640.64	\$66,427.41	\$48,213.23	42.06%
LPA - LIBERTY PINES ACADEMY	\$91,720.67	\$68,790.90	\$22,929.77	25.00%
MCE - MILL CREEK ELEMENTARY	\$65,357.12	\$21,653.10	\$43,704.02	66.87%
MES - OTIS A MASON ELEMENTARY	\$32,661.71	\$23,059.37	\$9,602.34	29.40%
MIT - FULLERWOOD	\$10,254.01	\$7,765.48	\$2,488.53	24.27%
MMS - RJ MURRAY MIDDLE	\$63,488.05	\$37,658.72	\$25,829.33	40.68%
MNT - MAINTENANCE-PURCHASING	\$5,226.36	\$2,908.64	\$2,317.72	44.35%
NHS - ALLEN D NEASE HIGH	\$130,384.73	\$81,254.05	\$49,130.68	37.68%
OCC - OCONNELL CENTER	\$2,769.23	\$1,778.36	\$990.87	35.78%
OES - OSCEOLA ELEMENTARY	\$56,208.39	\$27,311.50	\$28,896.89	51.41%
OPE - OCEAN PALMS ELEMENTARY	\$86,214.81	\$39,717.28	\$46,497.53	53.93%
PBM - PACETTI BAY MIDDLE	\$89,571.25	\$44,620.11	\$44,951.14	50.18%
PMH - PEDRO MENENDEZ HIGH	\$157,102.37	\$97,128.33	\$59,974.04	38.18%
PVH - PONTE VEDRA HIGH	\$148,406.23	\$102,821.55	\$45,584.68	30.72%
PVP - PV-PV ELEMENTARY	\$50,731.91	\$28,727.29	\$22,004.62	43.37%
RBH - RB HUNT ELEMENTARY	\$44,861.91	\$24,175.51	\$20,686.40	46.11%
RES - RAWLINGS ELEMENTARY	\$55,142.16	\$38,725.27	\$16,416.89	29.77%
SAH - ST AUGUSTINE HIGH	\$114,259.50	\$78,189.03	\$36,070.47	31.57%
SJT - ST JOHNS TECHNICAL HIGH	\$17,463.83	\$12,313.04	\$5,150.79	29.49%
SMS - SEBASTIAN MIDDLE	\$69,822.63	\$40,430.46	\$29,392.17	42.10%
SPM - SWITZERLAND POINT MIDDLE	\$72,768.32	\$43,472.69	\$29,295.63	40.26%
SWE - SOUTH WOODS ELEMENTARY	\$76,873.94	\$42,662.18	\$34,211.76	44.50%
TCE - TIMBERLIN CREEK ELEMENTARY	\$108,280.00	\$49,991.33	\$58,288.67	53.83%
WCE - WARDS CREEK ELEMENTARY	\$67,276.42	\$39,076.65	\$28,199.77	41.92%
WDH - WD HARTLEY ELEMENTARY	\$44,056.61	\$29,704.90	\$14,351.71	32.58%
WSE - WEBSTER SCHOOL ELEMENTARY	\$49,671.40	\$27,243.64	\$22,427.76	45.15%
Totals:	\$2,902,084.10	\$1,636,233.34	\$1,265,850.76	43.62%

Filters: Billing Periods In Range From 201008 To 201010

St Johns County School District

Energy CAP

Cost Avoidance Program

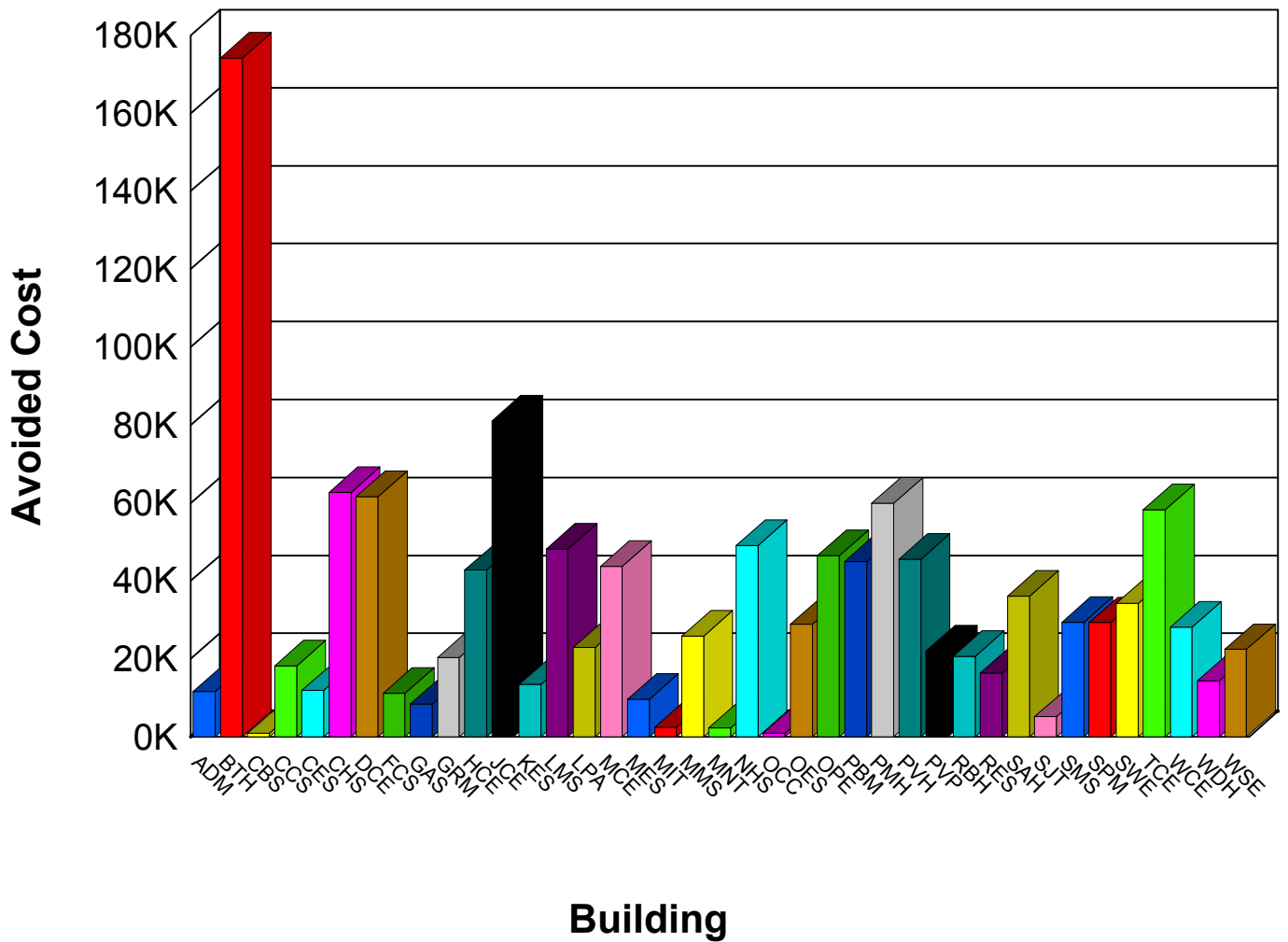
Cost Avoidance Summary - Buildings

Sorted by Building

Cost Avoidance Summary - Buildings

Sorted by Building

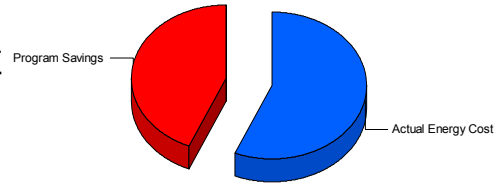
Building Code & Name	Cost Without CAP	Actual Cost	Cost Avoidance \$	Cost Avoidance %
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Filters: Billing Periods In Range From 201008 To 201010

Cumulative Cost Savings

Expected Energy Costs	\$2,902,084
Actual Energy Cost	\$1,636,234
Program Savings	\$1,265,850
Savings Percent	43.62%



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%.

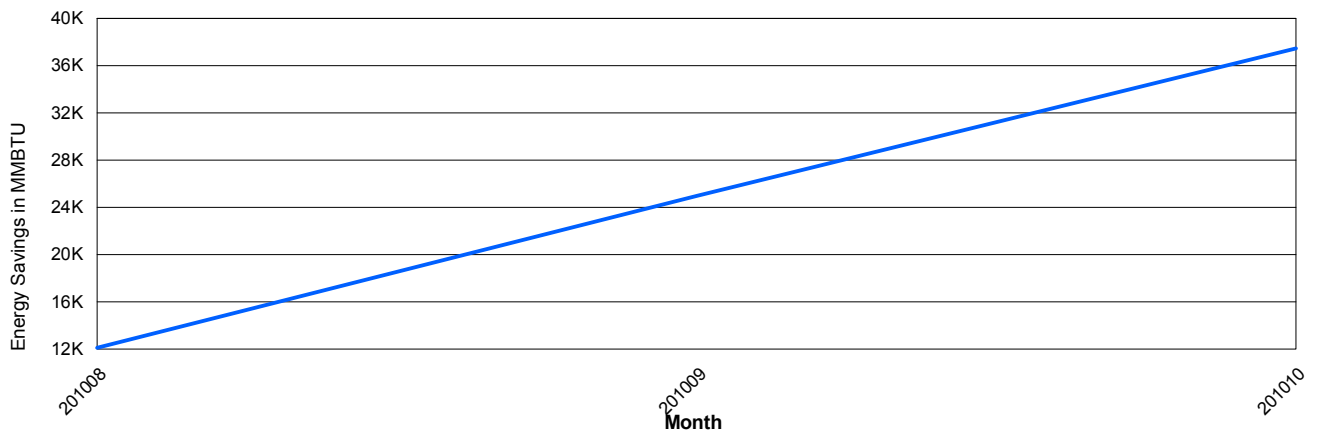
Cumulative Greenhouse Gas Reduction

Energy Reduction Impact: 37,482 MMBTU 6,569 equiv. metric tons of CO2

This is equivalent to the following:

Passenger cars not driven for one year:	1,179
Tree seedlings grown for 10 years:	168,028

Cumulative Energy Savings



St Johns County School District

Energy CAP

Cost Avoidance Program

Overall Program Summary

Monthly Summary

	2010			
	Cost Avoid \$	Cost Avoid %	Spl Savings \$	Total \$
Aug	396,261	40.7	789	397,050
Sep	419,917	42.5	0	419,917
Oct	449,672	47.8	0	449,672
Total	1,265,850	43.6	789	1,266,639

Filters: Savings Periods In Range From 201008 To 201010

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	24,427,527	13,445,566	10,981,961	45.0	2,714,443	1,489,722	1,224,721	45.1	0	1,224,721
Water & Sewe	15,326	11,202	4,124	26.9	174,238	129,694	44,544	25.6	789	45,333
Irrigation	4,573	5,897	-1,324	-29.0	13,403	16,818	-3,415	-25.5	0	-3,415
Total					2,902,084	1,636,234	1,265,850	43.6	789	1,266,639

Filters: Savings Periods In Range From 201008 To 201010

St Johns County School District

Energy CAP

Cost Avoidance Program

Overall Program Summary

Monthly Summary

	2010			
	Cost Avoid \$	Cost Avoid %	Spl Savings \$	Total \$
Jan	288,234	36.3	0	288,234
Feb	285,651	36.8	1,349	287,000
Mar	346,095	46.1	0	346,095
Apr	230,265	32.1	7,233	237,498
May	230,796	30.8	0	230,796
Jun	361,295	45.6	3,266	364,561
Jul	452,110	52.4	9,258	461,368
Aug	396,261	40.7	789	397,050
Sep	419,917	42.5	0	419,917
Oct	449,672	47.8	0	449,672
Total	3,460,296	41.5	21,895	3,482,191

Filters: Savings Periods In Range From 201001 To 201010

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	68,883,613	39,635,806	29,247,807	42.5	7,770,820	4,441,748	3,329,072	42.8	0	3,329,072
Water & Sewe	46,759	34,629	12,130	25.9	538,153	399,165	138,988	25.8	21,895	160,883
Irrigation	13,101	16,215	-3,114	-23.8	36,046	43,810	-7,764	-21.5	0	-7,764
Total					8,345,019	4,884,723	3,460,296	41.5	21,895	3,482,191

Filters: Savings Periods In Range From 201001 To 201010

St Johns County School District

Energy CAP

Cost Avoidance Program

Cost Avoidance Summary - Energy Types

Sorted by Energy Type

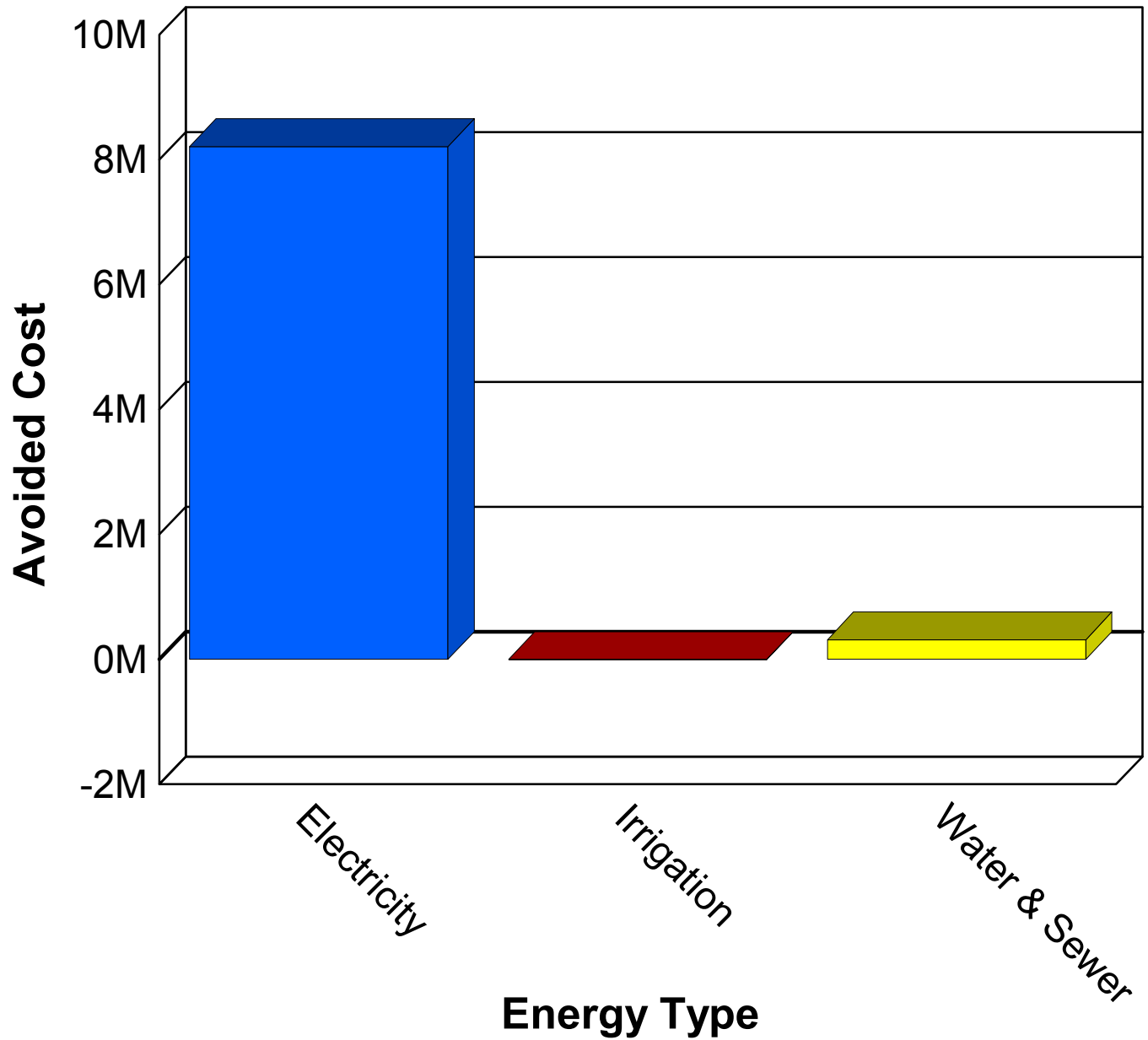
Energy Type	Cost Without CAP	Actual Cost	Cost Avoidance \$	Cost Avoidance %
Electricity	\$20,668,743.26	\$12,457,075.73	\$8,211,667.53	39.73%
Irrigation	\$54,850.02	\$57,106.18	(\$2,256.16)	(4.11%)
Water & Sewer	\$1,279,807.27	\$963,194.67	\$316,612.60	24.74%
Totals:	\$22,003,400.55	\$13,477,376.58	\$8,526,023.97	38.75%

Filters: Billing Periods In Range From 200807 To 201010

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 201010