



Agenda Item Details

Meeting	Sep 14, 2021 - REGULAR SCHOOL BOARD MEETING
Category	S. Operational Services - Consent
Subject	3. Request for Acceptance of the Energy Conservation Program Quarterly Status Report September 2021
Access	Public
Type	Action (Consent)
Recommended Action	Acceptance of the Energy Conservation Program Quarterly Status Report September 2021
Goals	GM-1 Mission Statement GO-3 Energy Consumption Strategies

Public Content

Background Information:

The School District, through an agreement with Cenergistic - The Energy Conservation Company, implemented an Energy Conservation Program in 2008. Principals, Maintenance Coordinators, and the District Energy Manager work together to monitor and conserve energy consumption at each school site and facility. Quarterly Energy Conservation Program Status Reports have been presented to the School Board since April 2009.

The September 2021 Energy Conservation Program Quarterly Status Report summarizes the performance results of the Energy Conservation Program for the quarterly period of April 2021 – June 2021. The report reveals data on energy consumption by the District during this period. Also provided is cost avoidance 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 implementation of energy conservation strategies.

Educational Impact:

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

Strategic Plan Impact:

Supports the District's Mission by providing appropriate facilities to help inspire good character and a passion for lifelong learning in all students, creating educated and caring contributors to the world.

Fiscal Impact:

During the quarterly period April 2021 - June 2021 the Energy Conservation Program has resulted in additional energy cost avoidance for the School District of \$843,649. The current rate of energy savings significantly exceeds the projected performance of the program. Since inception, the District has realized a total cumulative cost avoidance of \$61,240,178.

Recommendation:

Acceptance of the Energy Conservation Program Quarterly Status Report for September 2021.

Action Required:

Approval of Superintendent's recommendation.

Drafted, reviewed and submitted by:

Val Kovalenko, Energy Manager

Paul Rose, Executive Director for Facilities and Operations

Michael Degutis, Chief of Staff

Sincerely,

Tim Forson

Superintendent of Schools

[Energy Conservation Program Quarterly Status Report September 2021.pdf \(594 KB\)](#)

Administrative Content

Our adopted rules of Parliamentary Procedure, Robert's Rules, provide for a consent agenda listing several items for approval of the Board by a single motion. Most of the items listed under the consent agenda have gone through Board subcommittee review and recommendation. Documentation concerning these items has been provided to all Board members and the public in advance to assure an extensive and thorough review. Items may be removed from the consent agenda at the request of any board member.

Workflow

Workflow

Aug 20, 2021 10:30 AM :: Submitted by Cara Pacetti. Routed to Cara Pacetti for approval.
Aug 20, 2021 10:42 AM :: Approved by Cara Pacetti. Routed to Paul Rose for approval.
Aug 26, 2021 2:18 PM :: Approved by Paul Rose. Routed to Miriam Testasecca for approval.
Aug 26, 2021 2:20 PM :: Approved by Miriam Testasecca. Routed to Mike Degutis for approval.
Aug 27, 2021 11:42 AM :: Approved by Mike Degutis. Routed to Gina Fallica for approval.
Aug 31, 2021 3:18 PM :: Approved by Gina Fallica. Routed to Tim Forson for approval.
Sep 7, 2021 4:10 PM :: Final approval by Tim Forson

Last Modified by Tim Forson on September 7, 2021

**ENERGY CONSERVATION PROGRAM
QUARTERLY STATUS REPORT
April 2021 – June 2021**

EXECUTIVE SUMMARY

The June 2021 Energy Conservation Program Quarterly Status Report summarizes the performance results for the quarterly period of April 2021 – June 2021 and is comprised of the following:

- Electric Cost Avoidance Summary by Building (2nd Quarter 2021): The District realized a total electric cost avoidance for this quarterly period of \$843,649 (or a 36.7% cost avoidance from the baseline period).
- 2nd Quarter Electric Cost Savings Summary (2nd Quarter 2021): This reflects the monthly summary of total electric cost avoidance for the period April 2021 – June 2021.
- Greenhouse Gas Reduction: Greenhouse Gas Emissions Equivalent for this quarterly period reduced CO² by 4,413 metric tons.
- YTD Monthly Utilities Cost Avoidance (1st and 2nd Quarter 2021): This reflects the monthly summary of water, sewer and electric cost avoidance for the period January 2021 – June 2021.
- Energy/Utilities Consumption YTD Summary: Summary breakdown for electricity, water and sewer for January 2021 – June 2021 period. Between all tracked utilities, the District realized a total cost avoidance for this year of \$2,006,565
- Total Cost Avoidance Summary by Commodity (July 2008 – June 2021): This reflects the total cost avoidance since the implementation of the program. Total cumulative cost avoidance of \$61,240,178.

During the period of April 2021 – June 2021 there were over 150 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 for good stewardship and reducing the overall energy consumption. Many thanks to principals, school site managers and our facilities staff district-wide for a very successful second quarter of 2021.

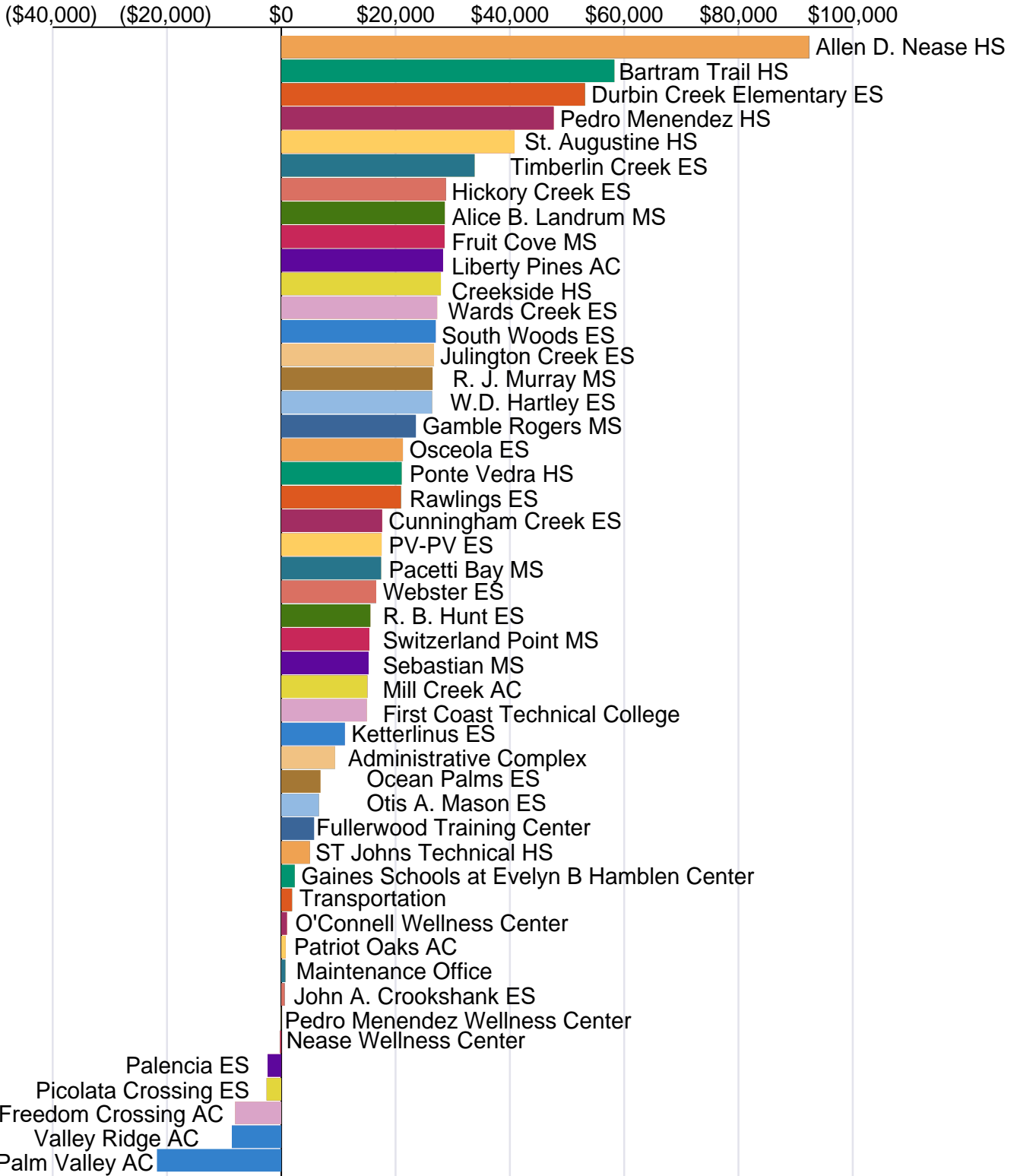
Electric Cost Avoidance Summary By Building

St. Johns County School Board

April 2021 - June 2021

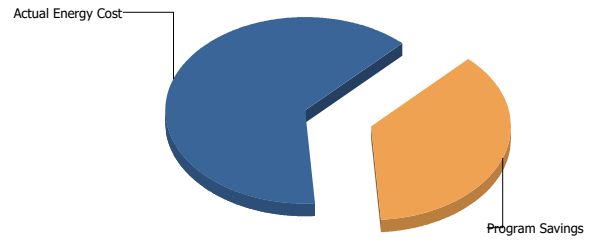
Place	BATCC Cost	Actual Cost	Cost Avoidance	Cost Avoidance %
Administrative Complex	\$27,123	\$17,685	\$9,438	34.8%
Alice B. Landrum Middle	\$70,757	\$42,131	\$28,627	40.5%
Allen D. Nease High	\$145,622	\$53,225	\$92,398	63.5%
Bartram Trail High	\$143,843	\$85,535	\$58,308	40.5%
Creekside High	\$102,236	\$74,304	\$27,931	27.3%
Cunningham Creek Elementary	\$40,706	\$23,058	\$17,648	43.4%
Durbin Creek Elementary	\$89,960	\$36,785	\$53,175	59.1%
First Coast Technical College	\$72,364	\$57,382	\$14,983	20.7%
Freedom Crossing Academy	\$32,620	\$40,716	(\$8,095)	-24.8%
Fruit Cove Middle	\$60,379	\$31,795	\$28,584	47.3%
Fullerwood Training Center	\$10,768	\$5,038	\$5,730	53.2%
Gaines Schools at Evelyn B Hamblen Center	\$12,220	\$9,862	\$2,358	19.3%
Gamble Rogers Middle	\$46,266	\$22,684	\$23,582	51.0%
Hickory Creek Elementary	\$68,654	\$39,818	\$28,836	42.0%
John A. Crookshank Elementary	\$19,438	\$18,818	\$619	3.2%
Julington Creek Elementary	\$64,661	\$37,944	\$26,717	41.3%
Ketterlinus Elementary School	\$26,192	\$15,038	\$11,154	42.6%
Liberty Pines Academy	\$89,888	\$61,547	\$28,341	31.5%
Maintenance Office	\$3,397	\$2,643	\$754	22.2%
Mill Creek Academy	\$52,906	\$37,822	\$15,084	28.5%
Nease Wellness Center	\$918	\$1,118	(\$200)	-21.7%
Ocean Palms Elementary	\$41,947	\$35,079	\$6,868	16.4%
O'Connell Wellness Center	\$2,503	\$1,519	\$984	39.3%
Osceola Elementary	\$40,049	\$18,744	\$21,305	53.2%
Otis A. Mason Elementary	\$25,485	\$18,871	\$6,614	26.0%
Pacetti Bay Middle	\$73,904	\$56,429	\$17,475	23.6%
Palencia Elementary	\$14,608	\$16,983	(\$2,375)	-16.3%
Palm Valley Academy	\$28,291	\$50,025	(\$21,734)	-76.8%
Patriot Oaks Academy	\$46,052	\$45,289	\$763	1.7%
Pedro Menendez High	\$91,668	\$43,982	\$47,686	52.0%
Pedro Menendez Wellness Center	\$862	\$892	(\$30)	-3.5%
Picolata Crossing Elementary	\$11,298	\$13,873	(\$2,576)	-22.8%
Ponte Vedra High	\$85,442	\$64,340	\$21,102	24.7%
PV-PV Elementary	\$31,090	\$13,526	\$17,564	56.5%
R. B. Hunt Elementary	\$30,543	\$14,942	\$15,602	51.1%
R. J. Murray Middle	\$47,810	\$21,313	\$26,497	55.4%
Rawlings Elementary	\$35,018	\$14,055	\$20,963	59.9%
Sebastian Middle	\$36,315	\$21,001	\$15,314	42.2%
South Woods Elementary	\$68,248	\$41,226	\$27,022	39.6%
ST Johns Technical High School	\$19,539	\$14,520	\$5,019	25.7%
St. Augustine High	\$87,034	\$46,203	\$40,831	46.9%
Switzerland Point Middle	\$44,242	\$28,827	\$15,415	34.8%
Timberlin Creek Elementary	\$72,041	\$38,200	\$33,842	47.0%
Transportation at Crookshank	\$6,233	\$4,352	\$1,881	30.2%
Valley Ridge Academy	\$27,662	\$36,324	(\$8,662)	-31.3%
W. D. Hartley Elementary	\$49,954	\$23,576	\$26,379	52.8%
Wards Creek Elementary	\$66,797	\$39,499	\$27,297	40.9%
Webster Elementary	\$31,442	\$14,809	\$16,633	52.9%
Totals:	\$2,296,994	\$1,453,346	\$843,649	36.7%

Avoided Cost



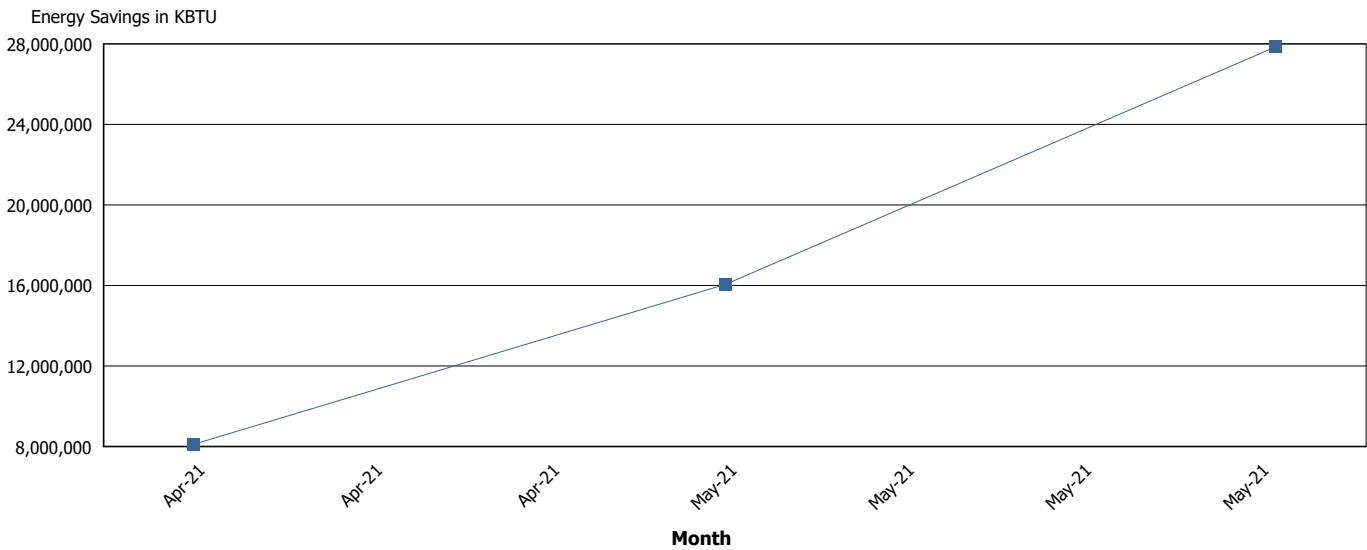
2nd Quarter 2021 Electric Cost Savings

Expected Energy Cost	\$2,296,994
Actual Energy Cost	\$1,453,346
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Program Savings	\$843,649
Percent Savings	36.7%
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Other Savings	\$0
Total Savings	\$843,649



Expected Energy Cost	Actual Energy Cost	Program Savings
Anticipated expense without energy management.	Actual utility costs for electricity, gas, water, sewer, etc. obtained directly from bills.	The difference between Expected and Actual Cost, 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%.
Base year usage after adjustments for such variables as changes in weather, equipment, schedules, occupancy and prices.	Additional documented savings attributable to Program activities but not the direct result of usage reductions, such as rebates, refunds, tariff changes, etc.	
	Other Savings	

2nd Quarter 2021 Energy Savings



2nd Quarter 2021 Greenhouse Gas Reduction

Energy Reduction Impact:	27,850,924 KBTU	4,413 equiv. metric tons of CO2
This is equivalent to the following:		
Passenger cars not driven for one year:	919	
Tree seedlings grown for 10 years:	113,148	

YTD Monthly Cost Avoidance Summary

	2021		
	Cost Avoid \$	Cost Avoid %	* Total \$
Jan	432,997	42.3	432,997
Feb	351,017	37.9	351,017
Mar	340,115	37.1	340,115
Apr	267,381	30.2	267,381
May	247,557	28.6	247,557
Jun	367,498	43.6	367,498
Total	2,006,565	36.7	2,006,565

* The Total \$ column is the sum of Cost Avoidance Savings and Other Savings.

Energy/Utilities Consumption Summary YTD (through 2nd Quarter 2021)

	Use				Cost				
	BATCC	Actual	Avoid	Avoid %	BATCC	Actual	Avoid	Avoid %	Total Savings \$
Electric (KWH)	44,713,528	27,195,646	17,517,882	39.2	4,847,892	2,921,513	1,926,379	39.7	1,926,379
Water (KGAL)	609	381	228	37.5	5,724	3,579	2,145	37.5	2,145
Water & Sewer (KGAL)	35,145	30,699	4,446	12.6	572,320	485,824	86,495	15.1	86,495
Irrigation (KGAL)	10,838	12,933	-2,095	-19.3	35,078	43,532	-8,455	-24.1	-8,455
Total (KBTU)	152,562,558	92,791,544	59,771,013	39.2	5,461,013	3,454,448	2,006,565	36.7	2,006,565

Cost Avoidance Summary By Commodity

July 2008 - June 2021

St. Johns County School Board

Commodity		BATCC Cost	BATCC Use	Actual Cost	Actual Use	Cost Avoidance	Cost Avoidance	Use Avoidance	Use Avoidance %
Electric	kWh	\$126,901,341	1,122,355,360	\$68,941,562	620,750,702	\$57,959,779	45.7%	501,604,658	44.7%
Water	Kgal	\$126,855	15,015	\$103,477	13,023	\$23,378	18.4%	1,993	13.3%
Water & Sewer	Kgal	\$11,522,689	792,386	\$8,265,668	584,592	\$3,257,021	28.3%	207,794	26.2%
Totals:		\$138,550,885		\$77,310,707		\$61,240,178	44.2%		

Cost Avoidance Summary By Commodity July 2008 - June 2021

