



Agenda Item Details

Meeting	Jun 08, 2021 - REGULAR SCHOOL BOARD MEETING
Category	Y. Adjournment
Subject	1. Request for Acceptance of the Energy Conservation Program Quarterly Status Report June 2021
Access	Public
Type	Action (Consent)
Recommended Action	Acceptance of the Energy Conservation Program Quarterly Status Report June 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 June 2021 Energy Conservation Program Quarterly Status Report summarizes the performance results of the Energy Conservation Program for the quarterly period of January 2021 – March 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 January 2021 - March 2021 the Energy Conservation Program has resulted in additional energy cost avoidance for the School District of \$1,082,731. 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 \$60,362,973.

Recommendation:

Acceptance of the Energy Conservation Program Quarterly Status Report for June 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 June 2021.pdf \(786 KB\)](#)

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

May 25, 2021 2:29 PM :: Submitted by Cara Pacetti. Routed to Cara Pacetti for approval.

May 26, 2021 9:41 AM :: Approved by Cara Pacetti. Routed to Paul Rose for approval.

May 26, 2021 9:42 AM :: Approved by Paul Rose. Routed to Vicki Davenport for approval.

May 26, 2021 11:46 AM :: Approved by Vicki Davenport. Routed to Mike Degutis for approval.

May 27, 2021 11:47 AM :: Approved by Mike Degutis. Routed to Gina Fallica for approval.

May 27, 2021 4:17 PM :: Approved by Gina Fallica. Routed to Tim Forson for approval.

Jun 2, 2021 2:32 PM :: Final approval by Tim Forson

Last Modified by Tim Forson on June 2, 2021

**ENERGY CONSERVATION PROGRAM
QUARTERLY STATUS REPORT
January 2021 – March 2021**

EXECUTIVE SUMMARY

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

- Electric Cost Avoidance Summary by Building (1st Quarter 2021): The District realized a total electric cost avoidance for this quarterly period of \$1,082,731 (or a 42.2% cost avoidance from the baseline period).
- 1st Quarter Electric Cost Savings Summary (1st Quarter 2021): This reflects the monthly summary of total electric cost avoidance for the period January 2021 – March 2021.
- Greenhouse Gas Reduction: Greenhouse Gas Emissions Equivalent for this quarterly period reduced CO² by 5,058 metric tons.
- YTD Monthly Utilities Cost Avoidance (through 1st Quarter 2021): This reflects the monthly summary of water, sewer and electric cost avoidance for the period January 2021 – March 2021.
- Energy/Utilities Consumption YTD Summary: Summary breakdown for electricity, water and sewer for January 2021 – March 2021 period. For all tracked utilities, the District realized a total cost avoidance for this year of \$1,119,959
- Total Cost Avoidance Summary by Commodity (July 2008 – March 2021): This reflects the total cost avoidance since the implementation of the program. Total cumulative cost avoidance of \$60,362,973.

During the period of January 2021 – March 2021 there were over 120 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 first quarter of 2021.

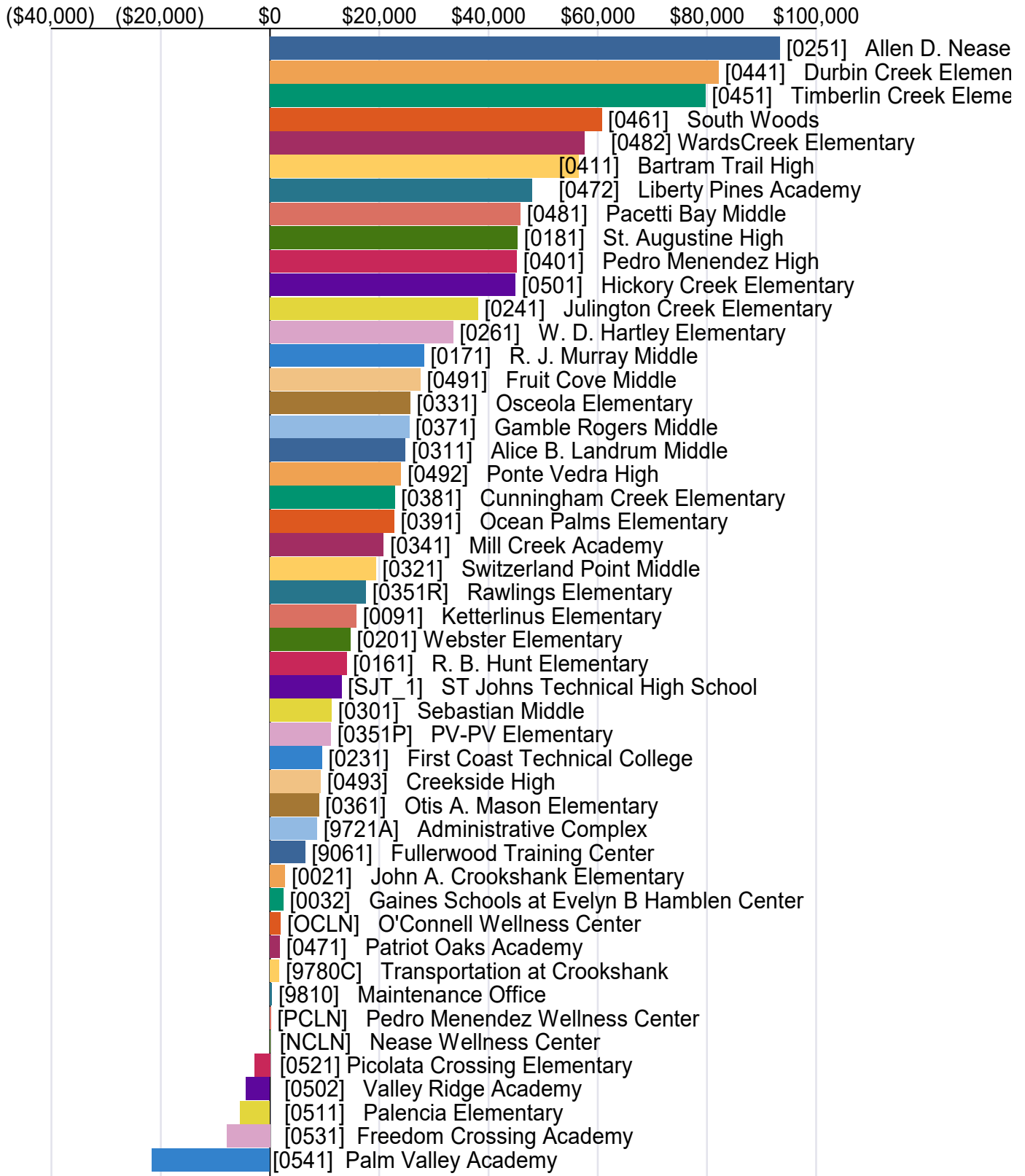
Electric Cost Avoidance Summary By Building

St. Johns County School Board

January 2021 - March 2021

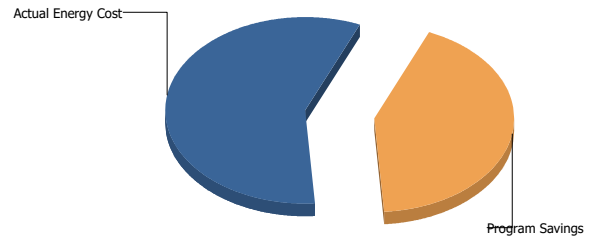
Place	BATCC Cost	Actual Cost	Cost Avoidance	Cost Avoidance %
[0021] John A. Crookshank Elementary	\$19,486	\$16,705	\$2,782	14.3%
[0032] Gaines Schools at Evelyn B Hamblen Center	\$11,720	\$9,279	\$2,441	20.8%
[0091] Ketterlinus Elementary School	\$32,106	\$16,301	\$15,805	49.2%
[0161] R. B. Hunt Elementary	\$27,485	\$13,402	\$14,083	51.2%
[0171] R. J. Murray Middle	\$48,780	\$20,520	\$28,260	57.9%
[0181] St. Augustine High	\$86,375	\$41,011	\$45,363	52.5%
[0201] Webster Elementary	\$28,748	\$14,012	\$14,736	51.3%
[0231] First Coast Technical College	\$57,292	\$47,780	\$9,513	16.6%
[0241] Julington Creek Elementary	\$80,813	\$42,722	\$38,091	47.1%
[0251] Allen D. Nease High	\$150,399	\$57,023	\$93,376	62.1%
[0261] W. D. Hartley Elementary	\$55,560	\$22,001	\$33,559	60.4%
[0301] Sebastian Middle	\$31,173	\$19,855	\$11,318	36.3%
[0311] Alice B. Landrum Middle	\$63,907	\$39,086	\$24,821	38.8%
[0321] Switzerland Point Middle	\$46,478	\$27,069	\$19,409	41.8%
[0331] Osceola Elementary	\$41,592	\$15,858	\$25,734	61.9%
[0341] Mill Creek Academy	\$53,553	\$32,721	\$20,832	38.9%
[0351P] PV-PV Elementary	\$23,271	\$12,093	\$11,178	48.0%
[0351R] Rawlings Elementary	\$34,132	\$16,553	\$17,579	51.5%
[0361] Otis A. Mason Elementary	\$22,990	\$14,017	\$8,973	39.0%
[0371] Gamble Rogers Middle	\$47,613	\$22,134	\$25,479	53.5%
[0381] Cunningham Creek Elementary	\$40,251	\$17,386	\$22,866	56.8%
[0391] Ocean Palms Elementary	\$48,347	\$25,582	\$22,765	47.1%
[0401] Pedro Menendez High	\$104,093	\$58,850	\$45,243	43.5%
[0411] Bartram Trail High	\$154,980	\$98,508	\$56,472	36.4%
[0441] Durbin Creek Elementary	\$120,636	\$38,521	\$82,115	68.1%
[0451] Timberlin Creek Elementary	\$131,965	\$52,230	\$79,735	60.4%
[0461] South Woods Elementary	\$95,996	\$35,264	\$60,733	63.3%
[0471] Patriot Oaks Academy	\$45,018	\$43,206	\$1,811	4.0%
[0472] Liberty Pines Academy	\$97,300	\$49,299	\$48,000	49.3%
[0481] Pacetti Bay Middle	\$97,961	\$52,080	\$45,882	46.8%
[0482] Wards Creek Elementary	\$103,923	\$46,376	\$57,547	55.4%
[0491] Fruit Cove Middle	\$54,438	\$26,860	\$27,578	50.7%
[0492] Ponte Vedra High	\$91,842	\$67,784	\$24,058	26.2%
[0493] Creekside High	\$96,954	\$87,663	\$9,291	9.6%
[0501] Hickory Creek Elementary	\$99,164	\$54,160	\$45,004	45.4%
[0502] Valley Ridge Academy	\$40,695	\$45,113	(\$4,418)	-10.9%
[0511] Palencia Elementary	\$14,528	\$20,007	(\$5,478)	-37.7%
[0521] Picolata Crossing Elementary	\$16,098	\$18,910	(\$2,813)	-17.5%
[0531] Freedom Crossing Academy	\$30,669	\$38,552	(\$7,883)	-25.7%
[0541] Palm Valley Academy	\$22,420	\$44,030	(\$21,610)	-96.4%
[9061] Fullerwood Training Center	\$11,357	\$4,889	\$6,467	56.9%
[9721A] Administrative Complex	\$27,042	\$18,363	\$8,679	32.1%
[9780C] Transportation at Crookshank	\$5,267	\$3,548	\$1,719	32.6%
[9810] Maintenance Office	\$2,729	\$2,332	\$396	14.5%
[NCLN] Nease Wellness Center	\$1,200	\$1,248	(\$48)	-4.0%
[OCLN] O'Connell Wellness Center	\$3,524	\$1,533	\$1,991	56.5%
[PCLN] Pedro Menendez Wellness Center	\$1,432	\$1,247	\$185	12.9%
[SJT_1] ST Johns Technical High School	\$27,596	\$14,485	\$13,111	47.5%
Totals:	\$2,550,898	\$1,468,167	\$1,082,731	42.4%

Avoided Cost



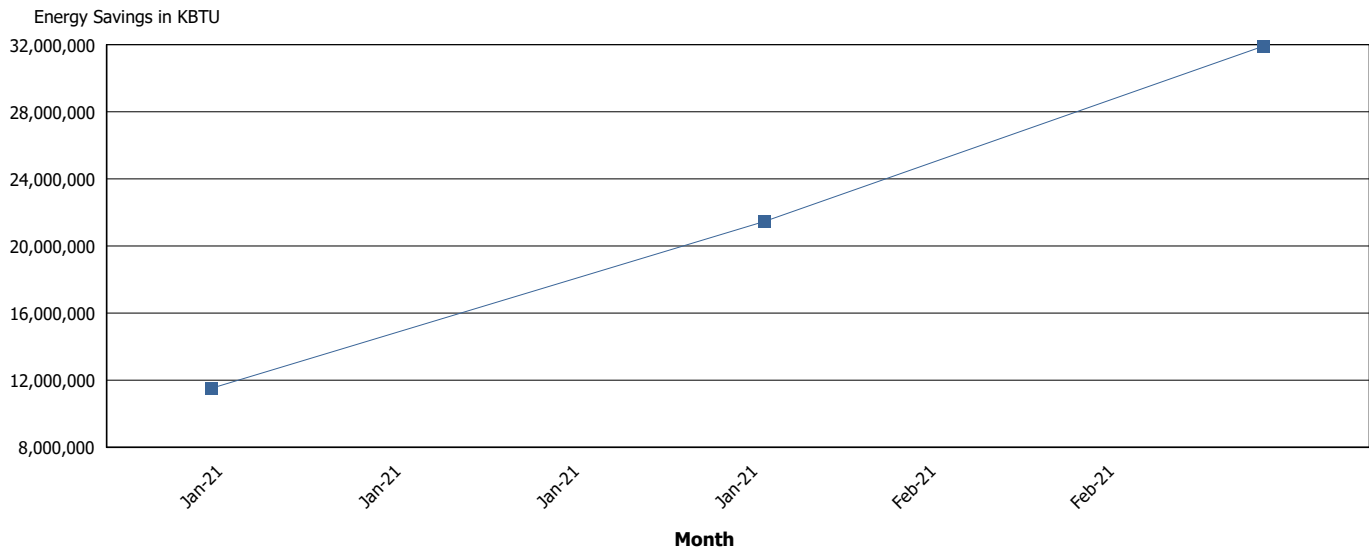
1st Quarter 2021 Electric Cost Savings

Expected Energy Cost	\$2,550,898
Actual Energy Cost	\$1,468,167
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Program Savings	\$1,082,731
Percent Savings	42.4%
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Other Savings	\$0
Total Savings	\$1,082,731



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

1st Quarter 2021 Energy Savings



1st Quarter 2021 Greenhouse Gas Reduction

Energy Reduction Impact:	31,920,089 KBTU	5,058 equiv. metric tons of CO2
This is equivalent to the following:		
Passenger cars not driven for one year:	1,054	
Tree seedlings grown for 10 years:	129,680	

YTD Monthly Cost Avoidance Summary

	2021		
	Cost Avoid \$	Cost Avoid %	* Total \$
Jan	432,997	42.3	432,997
Feb	346,847	37.4	346,847
Mar	340,115	37.1	340,115
Total	1,119,959	39.1	1,119,959

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

Energy/Utilities Consumption Summary YTD (through 1st Quarter 2021)

	Use				Cost				
	BATCC	Actual	Avoid	Avoid %	BATCC	Actual	Avoid	Avoid %	Total Savings \$
Electric (KWH)	22,314,057	12,958,814	9,355,243	41.9	2,550,898	1,468,167	1,082,731	42.4	1,082,731
Water (KGAL)	416	133	282	67.9	3,977	1,339	2,638	66.3	2,638
Water & Sewer (KGAL)	18,238	15,753	2,485	13.6	303,411	250,615	52,796	17.4	52,796
Irrigation (KGAL)	2,278	5,653	-3,375	-148.1	8,788	26,994	-18,206	-207.2	-18,206
Total (KBTU)	76,135,562	44,215,473	31,920,089	41.9	2,867,074	1,747,115	1,119,959	39.1	1,119,959

Cost Avoidance Summary by Commodity

July 2008 - March 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	\$124,604,954	1,099,955,889	\$67,488,217	606,485,358	\$57,116,737	45.8%	493,470,531	44.9%
Water	Kgal	\$125,108	14,822	\$101,238	12,775	\$23,871	19.1%	2,047	13.8%
Water & Sewer	Kgal	\$11,252,788	775,650	\$8,030,459	569,705	\$3,222,329	28.6%	205,945	26.6%
Totals:		\$135,982,850		\$75,619,913		\$60,362,937	44.4%		

Cost Avoidance Summary by Commodity

July 2008 - March 2021

St Johns County School Board

