

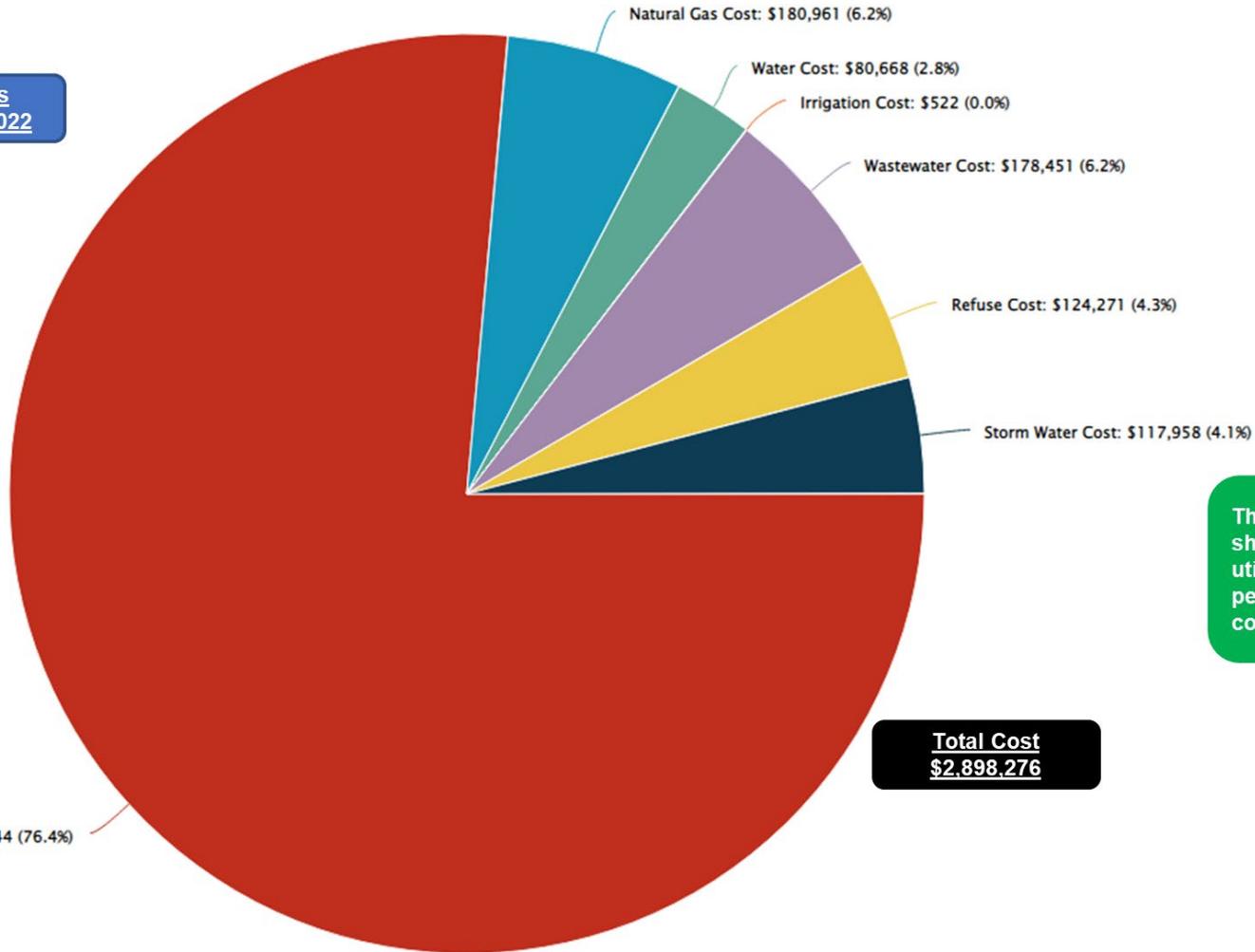
SY 2021-2022, 1/2 Year Energy Report

July 2021 – February 2022

By Kim Melander, Energy Manager

3/28/2022

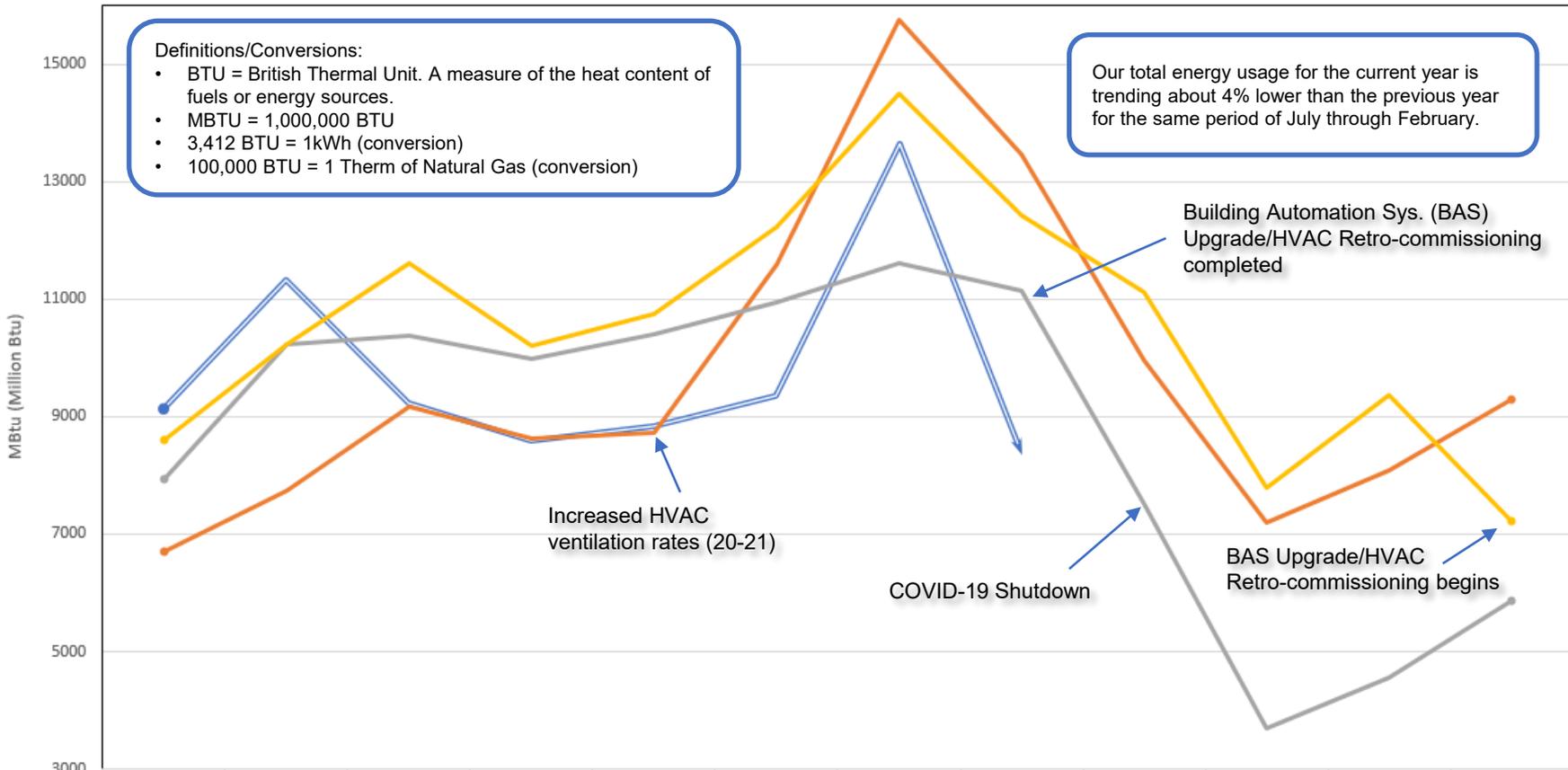
All Utilities
7/2021 – 2/2022



Total Cost
\$2,898,276

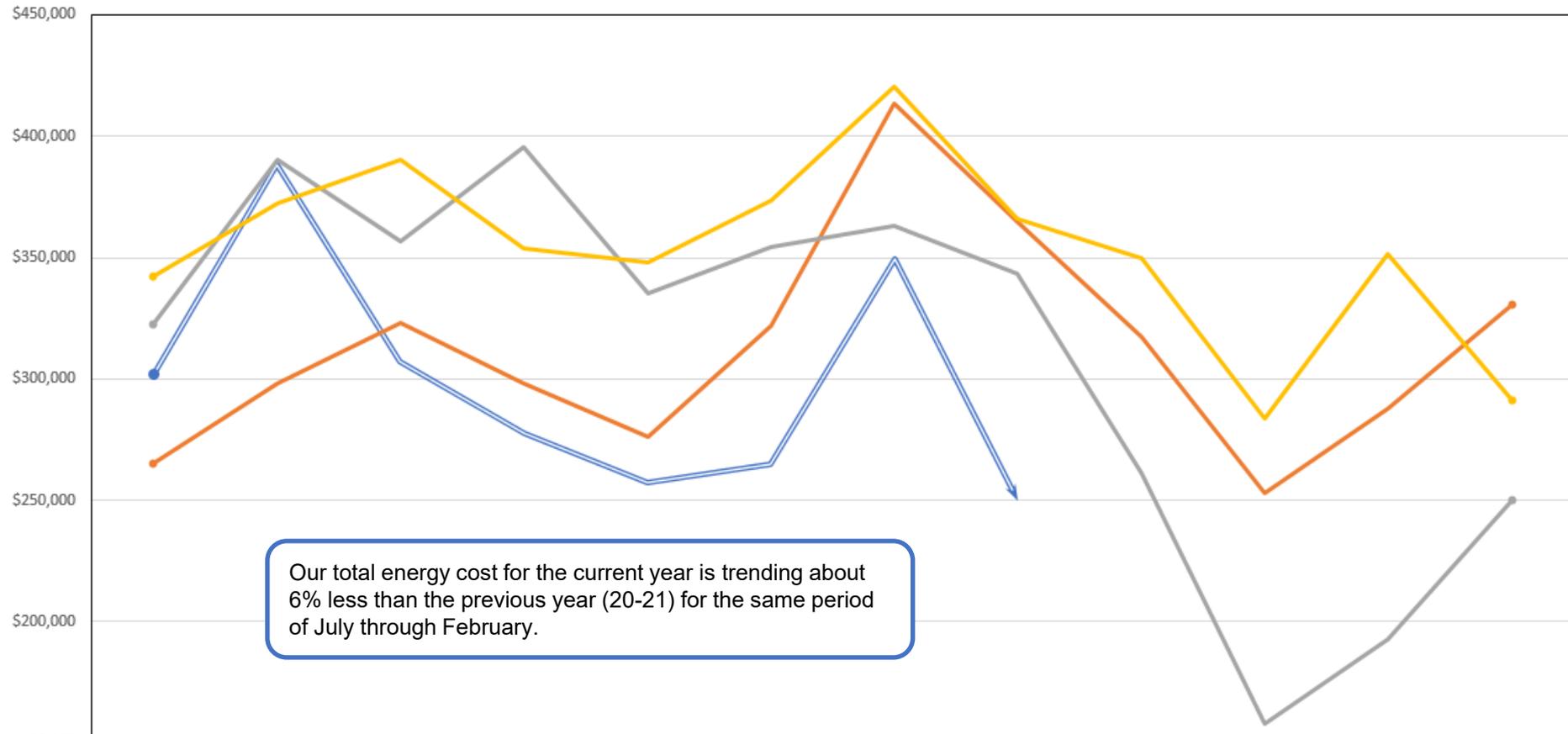
This pie-chart graphic shows our different utility costs by percentage of total cost.

Rock Hill Schools Total Energy Use - through February 2022



	M01-July	M02-August	M03-September	M04-October	M05-November	M06-December	M07-January	M08-February	M09-March	M10-April	M11-May	M12-June
21-22	9133	11315	9220	8597	8829	9356	13641	8346				
20-21	6709	7748	9170	8617	8715	11596	15744	13471	9967	7191	8093	9288
19-20	7940	10220	10369	9986	10406	10951	11616	11141	7514	3696	4546	5876
18-19	8605	10218	11603	10200	10745	12234	14492	12424	11126	7797	9354	7226

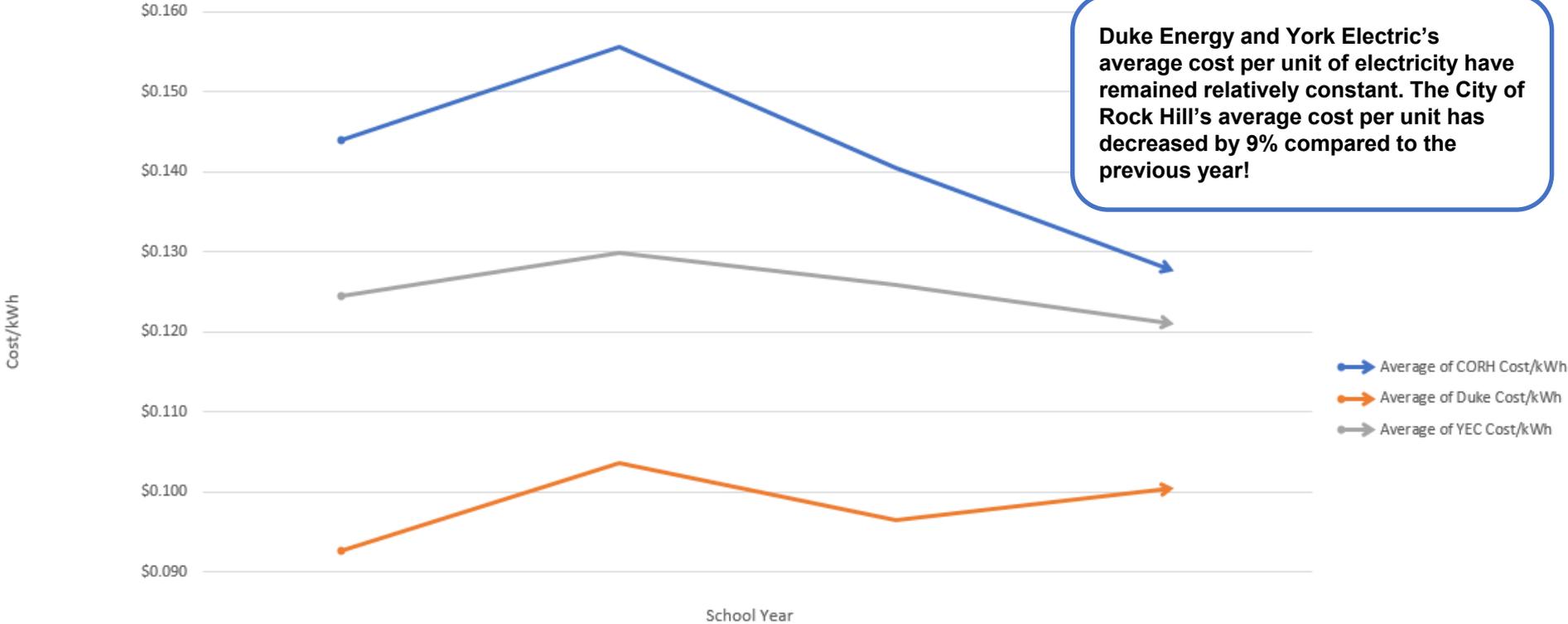
Rock Hill Schools Total Energy Cost - February 2022



Our total energy cost for the current year is trending about 6% less than the previous year (20-21) for the same period of July through February.

	M1-July	M2-August	M3-September	M4-October	M5-November	M6-December	M7-January	M8-February	M9-March	M10-April	M11-May	M12-June
21-22	\$301,945	\$388,152	\$307,078	\$277,489	\$257,269	\$265,039	\$349,591	\$249,841				
20-21	\$265,333	\$298,002	\$323,291	\$298,337	\$276,256	\$321,786	\$413,628	\$364,879	\$317,063	\$253,058	\$287,769	\$330,575
19-20	\$322,361	\$390,530	\$356,780	\$395,261	\$335,125	\$354,479	\$362,784	\$343,337	\$260,906	\$158,090	\$192,733	\$250,332
18-19	\$342,150	\$372,629	\$390,046	\$353,581	\$347,745	\$373,267	\$420,504	\$365,785	\$349,469	\$283,708	\$351,375	\$291,050

Average Cost/kWh by Utility Provider through 2/2022



	18-19	19-20	20-21	21-22
Average of CORH Cost/kWh	\$0.144	\$0.156	\$0.141	\$0.128
Average of Duke Cost/kWh	\$0.093	\$0.104	\$0.096	\$0.100
Average of YEC Cost/kWh	\$0.125	\$0.130	\$0.126	\$0.121

City of Rock Hill Accounts

- Applied Tech. Center
- Belleview ES
- Castle Heights MS
- Central Child
- Central Office
- Cherry Park ES
- Dutchman Creek MS
- Ebenezer ES
- Ebinport ES
- Facilities Services
- Finley Road ES
- Flex Learning Center
- India Hook ES
- Northside ES
- Northwestern HS
- Old Pointe ES
- Rawlinson Road ES
- Richmond Drive ES
- Rosewood ES
- Safety/Security Bldg.
- Sullivan MS
- Sunset Park ES
- Sylvia Circle
- Saluda Trail MS
- South Point HS
- Transportation
- York Road ES

Vendor Use & Cost Ranking

Rock Hill District 3

City Of Rock Hill -- 7/2021 to 2/2022

Vendor	Electricity (kWh)	Electricity Cost	Electricity Cost/kWh
City Of Rock Hill	14,726,303	\$1,869,278	\$0.1269

Our average cost per kWh from the City of Rock Hill has decreased by \$0.014, or 9% compared to the same period last year. This represents a \$206k reduction in total cost.

Vendor Use & Cost Ranking

Rock Hill District 3

Duke Energy -- 7/2021 to 2/2022

Vendor	Electricity (kWh)	Electricity Cost	Electricity Cost/kWh
Duke Energy	2,107,873	\$208,702	\$0.0990

Our average cost per kWh from Duke Energy has decreased by \$0.004, or 4% compared to the same period last year. This represents a \$8k reduction in total cost.

Duke Energy Accounts

- Carroll School
- Independence ES
- Lesslie ES
- Rock Hill HS

Vendor Use & Cost Ranking

Rock Hill District 3

York Electric -- 7/2021 to 2/2022

Vendor	Electricity (kWh)	Electricity Cost	Electricity Cost/kWh
York Electric	1,137,199	\$137,464	\$0.1209

Our average cost per kWh from York Electric has decreased by \$0.004, or 4% compared to the same period last year. This represents a \$4.5k reduction in total cost.

York Electric Cooperative Accounts

- Mount Gallant ES
- Mount Holly ES
- Oakdale ES

Our 21/22 average total energy cost per unit was 6.4% less than the previous period.

Our 21/22 average electricity cost per kWh was 8% less than the previous period.

\$/MMBTU



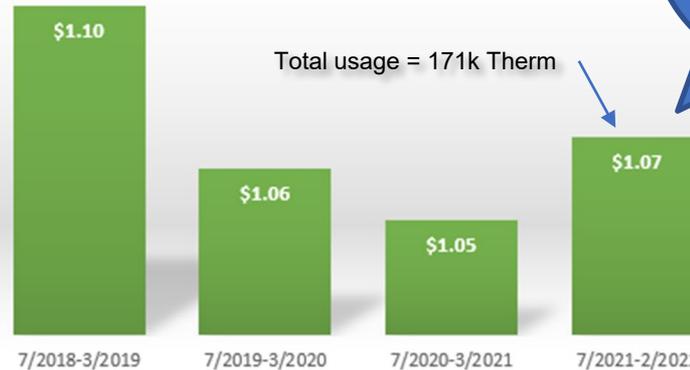
Definitions:

- BTU = British Thermal Unit. A measure of heat content. 1 BTU is the amount of heat necessary to raise the temperature of 1 pound of water, 1 degree Fahrenheit.
- MMBTU = 1,000,000 BTU
- kWh = Kilowatt-hour. 1 kWh = 1000 Watthours. It is the measure of energy that a 1000-Watt light bulb would consume in 1 hour of time.
- Therm = measure of Natural Gas consumption. 1 Therm = 100,000 BTU of energy.

\$/kWh (electricity)



\$/Therm (natural gas)



Our 21/22 average natural gas cost per Therm increased by 1.9% compared to the previous period.

SC 2021 Annual Energy Report Data

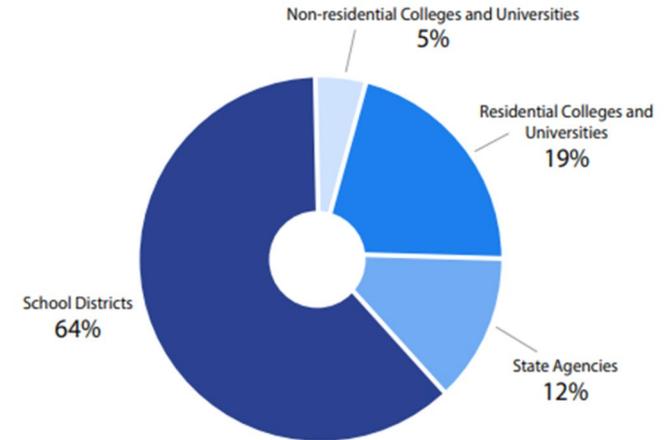
Public Entities by Type	Average Energy Use per Square Foot (site kBTU)			Average Energy Spending per Square Foot (\$)		
	FY 2000	FY 2021	% change	FY 2000	FY 2021	% change
State Agencies	113	78.93	-30%	\$2.13	\$1.82	-14%
Residential Colleges and Universities	143	110.94	-22%	\$2.07	\$1.69	-18%
Non-Residential Colleges and Universities	80	64.97	-19%	\$1.85	\$1.57	-15%
School Districts	45	34.25	-24%	\$1.34	\$1.04	-23%
Overall	74	55.93	-24%	\$1.63	\$1.28	-21%

Note: These statistics are based on self-reported data submitted by public entities. The Energy Office makes no representation regarding the accuracy of these data.

RHSD Average Energy Use per Square Foot = 33.3 kBTU. This is 2.8% less than the reported SC State average for School Districts. Our average energy cost per square foot is \$1.03, which is 1% less than the reported State average.

The National Average Energy Use per square foot for Public Schools is 42.7 kBTU, as reported by the EPA, which is 22% higher than RHSD.

Square Footage by Public Entity Type FY 2021

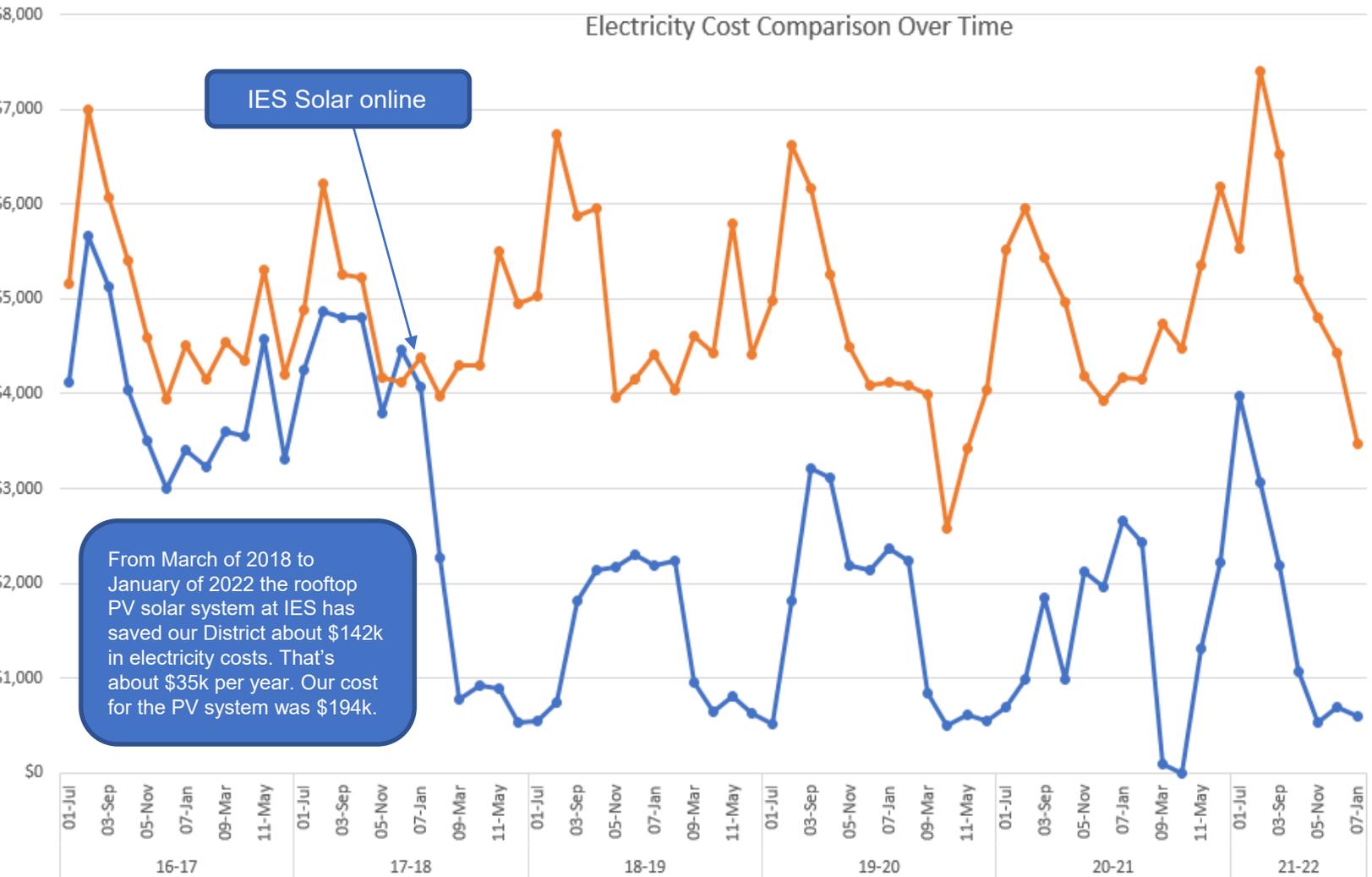


Electricity Cost Comparison Over Time

IES Solar online

From March of 2018 to January of 2022 the rooftop PV solar system at IES has saved our District about \$142k in electricity costs. That's about \$35k per year. Our cost for the PV system was \$194k.

IES Electricity Cost
 MGES Electricity Cost





ROCK HILL

Schools