

# **SY 2021-2022, 1/2 Year Energy Report**

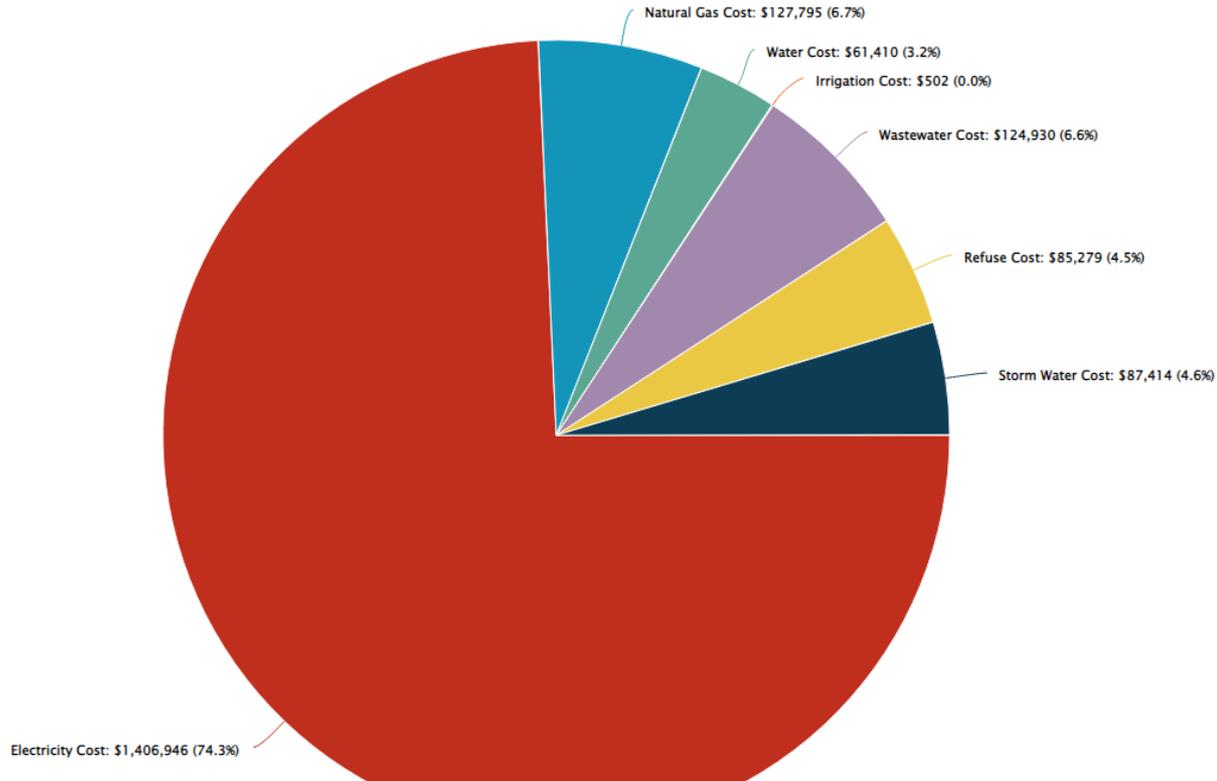
**July 2022 – December 2022**

**By Kim Melander, Energy Manager**

**4/12/2023**

## Utility Cost Breakdown

All Facilities -- 07/2022 to 12/2022



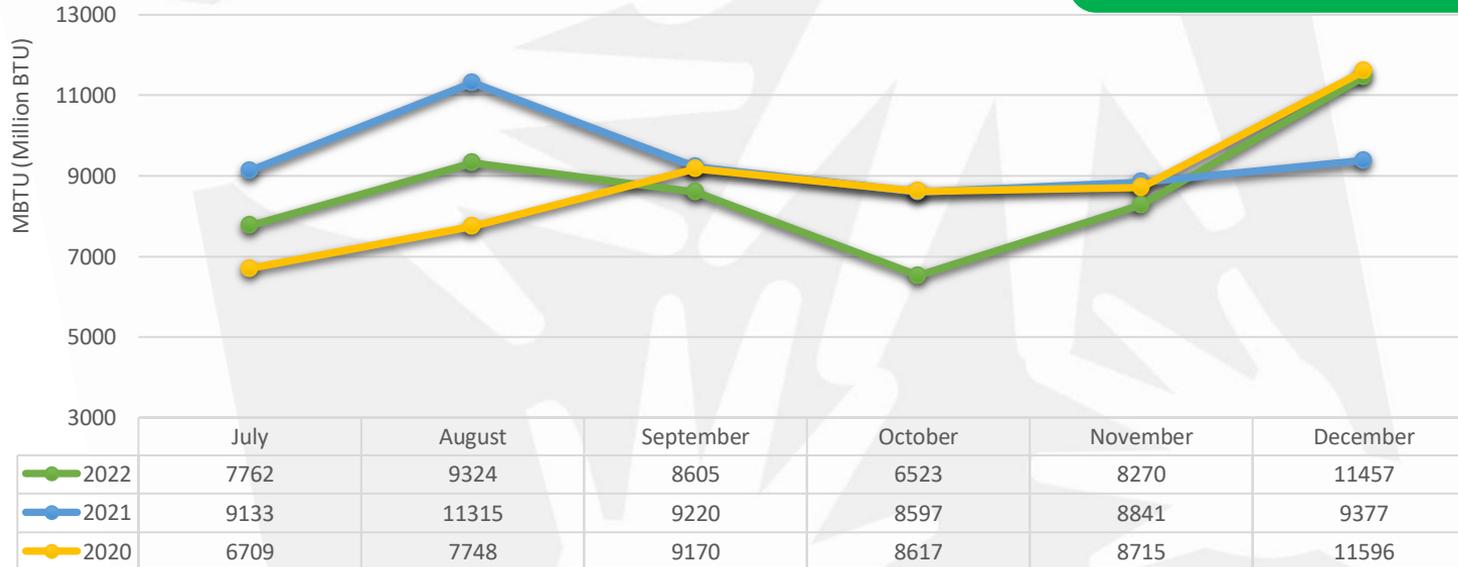
Year (partial)	Electricity Cost	Natural Gas Cost	Water Cost	Irrigation Cost	Wastewater Cost	Refuse Cost	Storm Water Cost	Total Cost
2022	\$1,406,946	\$127,795	\$61,410	\$502	\$124,930	\$85,279	\$87,414	\$1,894,277
2021	\$1,704,438	\$93,748	\$61,353	\$349	\$133,771	\$88,633	\$88,675	\$2,170,967
2020	\$1,678,383	\$104,622	\$53,479	\$1,559	\$117,593	\$81,154	\$89,977	\$2,126,768

## Total Energy Usage (Electricity and Natural Gas Combined)

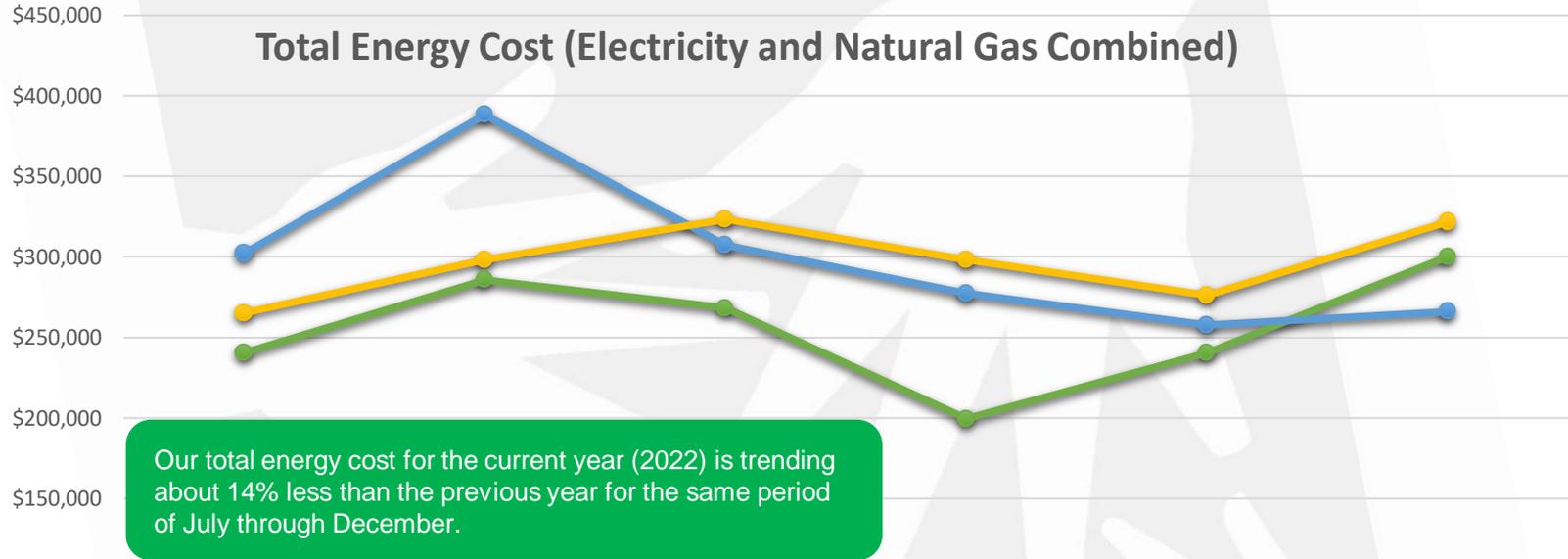
### Definitions/Conversions:

- BTU = British Thermal Unit. A measure of the heat content of fuels or energy sources.
- MBTU = 1,000,000 BTU

Our total energy usage for 2022 is trending about 8% lower than the previous year for the same period of July through December.



## Total Energy Cost (Electricity and Natural Gas Combined)



	July	August	September	October	November	December
2022	\$240,472	\$285,535	\$268,488	\$199,607	\$240,368	\$300,270
2021	\$301,945	\$388,152	\$307,078	\$277,489	\$257,730	\$265,790
2020	\$265,333	\$298,002	\$323,291	\$298,337	\$276,256	\$321,786

## City of Rock Hill Accounts

- Applied Tech. Center
- Belleview ES
- Castle Heights MS
- Central Child
- Central Office
- Cherry Park ES
- Dist. 3 Stadium
- 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 Dr ES
- Safety/Security Bldg.
- Sullivan MS
- Sunset Park ES
- Sylvia Circle
- Saluda Trail MS
- South Point HS
- Transportation
- York Road ES

## Duke Energy Accounts

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

## York Electric Cooperative Accounts

- Mount Gallant ES
- Mount Holly ES
- Oakdale ES

Our average cost per kWh from the City of Rock Hill has decreased by 9.8% compared to the same period last year. This represents a \$122k reduction in cost.

Our average cost per kWh from Duke Energy has increased by 11.5% compared to the same period last year. This represents a \$17k increase in cost.

Our average cost per kWh from York Electric has increased by 0.6% compared to the same period last year. This represents a \$682 increase in cost.

### Vendor Use & Cost Ranking

#### Rock Hill District 3

#### City Of Rock Hill -- 7/2022 to 12/2022

Vendor	Electricity (kWh)	Electricity Cost	Electricity Cost/kWh
City Of Rock Hill	9,835,216	\$1,125,649	\$0.1145
<b>Grand Total</b>	<b>9,835,216</b>	<b>\$1,125,649</b>	<b>\$0.1145</b>

### Vendor Use & Cost Ranking

#### Rock Hill District 3

#### Duke Energy -- 7/2022 to 12/2022

Vendor	Electricity (kWh)	Electricity Cost	Electricity Cost/kWh
Duke Energy	1,535,195	\$169,427	\$0.1104
<b>Grand Total</b>	<b>1,535,195</b>	<b>\$169,427</b>	<b>\$0.1104</b>

### Vendor Use & Cost Ranking

#### Rock Hill District 3

#### York Electric -- 7/2022 to 12/2022

Vendor	Electricity (kWh)	Electricity Cost	Electricity Cost/kWh
York Electric	919,668	\$111,870	\$0.1216
<b>Grand Total</b>	<b>919,668</b>	<b>\$111,870</b>	<b>\$0.1216</b>

Our 22/23 average total energy cost per unit was 4% less.

Our 22/23 average electricity cost per kWh was 5.6% less.

### \$/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 22/23 average natural gas cost per Therm increased by nearly 20% .

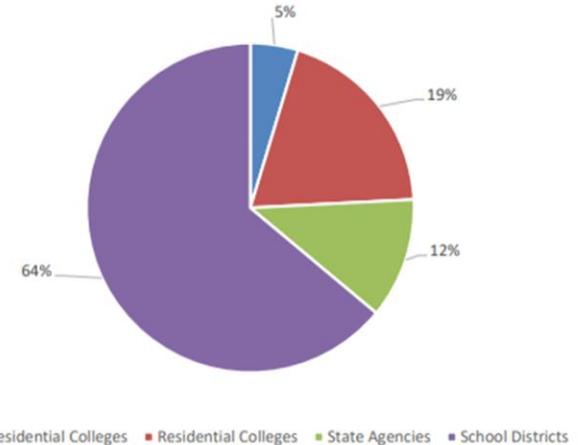
## SC 2022 Annual Energy Report Data

Public Entities by Type	Average Energy Use per Square Foot (site kBtu)			Average Energy Spending per Square Foot (\$)		
	FY 2000	FY 2022	% change	FY 2000	FY 2022	% change
State Agencies	113	76.64	-32%	\$2.31	\$1.82	-21%
Residential Colleges and Universities	143	112.87	-21%	\$2.25	\$1.92	-15%
Non-Residential Colleges and Universities	80	63.84	-20%	\$2.01	\$1.54	-23%
School Districts	45	35.40	-21%	\$1.46	\$1.10	-25%
<b>Overall</b>	<b>74</b>	<b>56.55</b>	<b>-24%</b>	<b>\$1.77</b>	<b>\$1.36</b>	<b>-23%</b>

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.

- Our energy use per square foot = 31.2 kBtu. This is 12% less than the reported SC State average for School Districts.
- Our energy cost per square foot is \$0.96, which is 13% less than the reported State average.

Square Footage by Public Entity Type, FY 2022





# ROCK HILL *Schools*