# ANNUAL REPORT 2023



Annual Report on the Implementation of State Government Energy Conservation



#### Annual Report on the Implementation of State Government Energy Conservation

December 2023

#### Contact:

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South Carolina Office of Regulatory Staff

**Energy Office** 

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**ENERGY.SC.**GOV

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# **Executive Summary**

The South Carolina Office of Regulatory Staff – Energy Office (Energy Office) presents this Annual Report on the Implementation of State Government Energy Conservation. The performance period for this report is Fiscal Year 2023 (FY 2023).

#### **Background:**

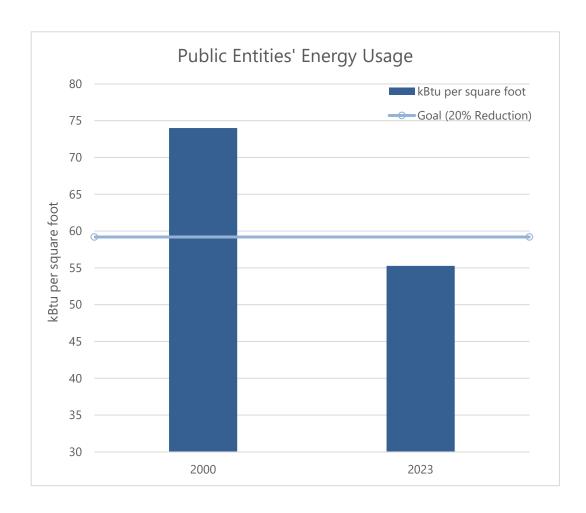
Section 48-52-620 of the South Carolina Code of Laws required state agencies, public school districts, and public colleges and universities (public entities) to develop energy conservation plans and work to reduce their energy consumption by 20% by 2020, as compared to 2000 levels. The Energy Office was tasked with collecting each public entity's annual report and tracking their progress towards the 20% energy usage reduction goal. While this initiative has successfully concluded with the state having collectively reached the energy usage reduction goal, the Energy Office has continued to collect energy data and progress reports from the public entities. To achieve further reductions in energy consumption by the state and assist public entities that have not met the 20% reduction goal, the Energy Office also continues to provide ongoing training, workshops, and technical assistance, and makes available low-interest loans for energy efficiency projects.

# **Findings:**

Data submitted for FY 2023 indicates that, compared to the Fiscal Year 2000 baseline, public entities reduced their energy use per square foot by 25% and energy spending per square foot by 19%. Collectively, public entities have achieved the 20% goal mandated by the General Assembly. (Note: an entity reaching the 20% reduction goal does not preclude their energy use from rising again.)

Public Entities	Average Energy Use per Square Foot (site kBtu)		Average Energy Spending per Square Foot (\$)			
by Type	FY 2000	FY 2000 FY 2023 % ch		FY 2000	FY 2023	% change
State Agencies	113	74.92	-34%	\$2.39	\$1.97	-17%
Residential Colleges and Universities	143	112.60	-21%	\$2.32	\$2.22	-4%
Non-Residential Colleges and Universities	80	62.87	-21%	\$2.07	\$1.77	-14%
School Districts	45	34.18	-24%	\$1.50	\$1.15	-24%
Overall	74	55.27	-25%	\$1.82	\$1.48	-19%

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.



Overall, the state's agencies, public school districts, and public colleges and universities have done an excellent job of reducing energy use. As a group, they have achieved the mandated goal and have continued in their efforts to reduce their energy consumption despite the conclusion of the goal period.

# **Background**

The State Energy Office (Energy Office) was established by the South Carolina Energy Efficiency Act of 1992 to serve as the principal energy planning entity for the state. The mission of the Energy Office is to advance South Carolina's energy strategy and policy through education and outreach. The Energy Office is funded by the US Department of Energy's State Energy Program.

Following the South Carolina Restructuring Act of 2014, the Energy Office is housed within the Office of Regulatory Staff. This reorganization has not altered the legislatively mandated duties of the Energy Office.

Section 48-52-620 of the South Carolina Code of Laws required affected state agencies, public school districts, and public colleges and universities (public entities) to develop energy conservation plans and work to reduce their energy consumption by 20% by 2020, as compared to 2000 levels. While the initiative has successfully concluded, public entities continue to submit annual energy conservation reports to the Energy Office. The reports consist of data showing energy use and cost per square foot and a narrative that outlines actions taken to implement the public entity's energy conservation plan. It also chronicles progress made in achieving the entity's energy use goals (see Progress toward Energy Conservation Goals for more detail). Section 48-52-620(E) required the Energy Office to compile this information and report it to the South Carolina General Assembly (General Assembly) by December 31 of each year.

To ensure the development of a fair and equitable methodology for implementing this legislative requirement, the Energy Office established an advisory group in 2008. The group consisted of representatives from a variety of state agencies, school districts, and public colleges and universities – all of which were affected by the legislative mandate. The composition of this group reflected the diversity of public entities affected by this legislation, both in size and type of institution.

Based on the advisory group's recommendations, the Energy Office offered four energy plan development workshops around the state. Over 140 individuals participated in these workshops; participants represented 20 state agencies, 49 school districts, and 17 public colleges and universities. After concluding the workshops, Energy Office staff developed a sample energy conservation plan template that was provided to all public entities and remains available on the Energy Office website as a guide.

In October 2019, the Energy Office launched the South Carolina Energy Efficiency Roadmap initiative. Facilitated by the Duke University Nicholas Institute, the initiative brought stakeholders together to review the remaining energy efficiency recommendations from the 2016 Energy Plan

and reassess them according to current priorities, as well as to identify new opportunities and develop next steps. Guided by an advisory committee, six working groups were formed to focus on different areas. One of these groups focused on non-profit and public entities; in consideration of the conclusion of the 20% by 2020 performance period, a resulting recommendation was to propose new legislation to re-establish the state's energy conservation goals for public entities. The goal proposed by the stakeholders involved in this initiative would require state agencies, public colleges and universities, and public school districts to (1) develop a new energy conservation plan and (2) reduce their energy consumption by 10% by 2030, as compared to 2015 levels. As of the writing of this report, no new legislation pertaining to state government energy conservation has been pursued.

# **Activities in Support of Implementation**

Section 48-52-620(E) required the Energy Office to provide the technical assistance necessary for state agencies and school districts to satisfy the requirements of the law. In addition to the energy plan development workshops noted above, the Energy Office has provided the following:

#### **Training**

In 2009, the Energy Office and the Association of South Carolina Energy Managers created a state-specific alternative to the national Certified Energy Manager© training: the Accredited Commercial Energy Manager (ACEM) training. The primary purpose of this training is to educate facility and energy managers as they work to reduce energy consumption in support of the legislative requirements. The course teaches participants to identify projects that can reduce their energy consumption and how to calculate their projected energy savings.

Since 2009, a total of 22 ACEM training classes have been held, most recently in December 2022. A total of 393 individuals have received this extensive energy management training. The pass rate for the course averages approximately 79%, with those passing the test receiving the ACEM certification. At the time of writing this report, the 23<sup>rd</sup> ACEM training class is scheduled to take place in early December 2023.

In Fiscal Year 2023 (FY 2023), the Energy Office also facilitated two courses offered by other organizations. In coordination with the Energy Office, the Energy Management Association offered a two-day, six-hour virtual course that provided an overview and refresher on energy management and how it can be applied. The seminar included actionable instruction covering all relevant energy aspects from codes, standards, and managerial planning to monitoring project performance and persistence of savings.

The Energy Office also facilitated the Boiler Efficiency Institute's two-day heating, ventilation, and air conditioning (HVAC) plant improvement course. The objective of this course was to develop the participants' ability to recognize cost-saving measures in HVAC equipment/operation and then to implement the appropriate changes to bring about these savings. Measures explored included low up-front-cost operations and maintenance procedures and fast payback equipment modification projects. Additional objectives included showing the participants the latest on measurement instrumentation, techniques for measuring and improving HVAC efficiency, and updating participants on the status of existing and new refrigerants including handling, recovery, and purchasing or retrofitting equipment.

# **Assistance to Agencies**

The Energy Office works with public entities requesting assistance with energy use reporting requirements and often devotes considerable effort to identifying and correcting reporting errors.

The Energy Office invites public entities to report using the mechanism most convenient for them, which can range from elaborate facility and energy management software to a simple Excelformat reporting spreadsheet developed by the Energy Office. To improve tracking and reporting, assistance is available to help public entities import their data into Portfolio Manager, a free online tool offered by the United States Environmental Protection Agency. The program not only helps with long-term benchmarking but also allows users to apply for ENERGY STAR® designations for individual buildings.

In addition, the Energy Office – through its Energy Technical Assistance Program – provides free energy assessments for facilities owned by state and local governments as well as other entities. These walk-through assessments help to identify cost-effective energy conservation measures and set priorities for action. More information on Energy Technical Assistance may be found at <a href="https://energy.sc.gov/programs/technical-assistance">https://energy.sc.gov/programs/technical-assistance</a>.

In July 2020, the Energy Office also launched its Energy Saver Tool, which enables both commercial and residential end users to find energy saving programs that may be available to them. By inputting certain information including their end use, utility provider, and county, the tool will provide a list of applicable grants, loans, rebates, tax incentives, and other programs that may be available from various sources. These results can be easily printed or saved, and the website also offers tips on how to save energy. The Energy Saver Tool can be found at <a href="https://energysaver.sc.gov/">https://energysaver.sc.gov/</a>.



#### ConserFund

Funding assistance for energy efficiency improvements is available through the ConserFund low-interest loan program. Loans are available to state agencies, public colleges and universities, school districts, local governments, and private non-profit organizations. Loans have a fixed annual interest rate currently set at 1.5%, and the program is structured so that the cost savings resulting from the energy efficiency upgrades can be used to repay the loan. More information on ConserFund may be found at <a href="https://www.energy.sc.gov/programs/funding/loans/conserfund">https://www.energy.sc.gov/programs/funding/loans/conserfund</a>.

ConserFund Plus is a variation of the standard ConserFund loan and offers funding as a 70% loan and a 30% grant. ConserFund Plus is only available to state agencies, public colleges and

universities, and public K-12 schools. Due to the popularity of the program, as of August 2019, all available funds have been disbursed, so these funds are temporarily unavailable. However, these funds will become available again as loans are repaid.

#### **Workforce Development Tool**

The Energy Office has developed a <u>Clean Energy Workforce Development Tool</u> designed to connect individuals and organizations with training resources to adapt to the rapidly evolving clean energy field. Students, job seekers, technical trade workers, and employers may use the database to find information on a variety of clean energy training opportunities such as apprenticeships, certificates, degree programs, and stand-alone courses. In-person and online training opportunities in numerous clean energy subfields are included in the Clean Energy Workforce Development Tool including solar, energy efficiency, HVAC, refrigeration, and more. The opportunities listed in the database are South Carolina-focused and are not exhaustive, but they will be updated periodically to ensure they are as accurate as possible. If you have any questions about this or would like to suggest additional resources that should be added, please <u>email</u> the Energy Office.

#### **Milestone Recognition Awards**

The Energy Office provides tangible recognition for those public entities that have met their mandated 20% reduction in energy intensity since the year 2000. The following entities were issued awards after completion of the Fiscal Year 2022 report, based on having two or more consecutive years of meeting the 20% reduction goal:



CHANGING THE HEADLINES...ALLENDALE FORWARD

Allendale County School District



**Chester County School District** 



Inquiry \$ Innovation

**Dorchester School District Four** 

McCormick County School District





Palmetto Railways

South Carolina Vocational Rehabilitation Department



University of South Carolina Lancaster

For FY 2023, 73 public entities are recognized for achieving the 20% energy intensity reduction goal and are eligible to receive an Energy Reduction Milestone Achievement Award offered by the Energy Office (Note that recognition does not ensure that an agency's energy use has not since risen or may not rise in the future.)

Aiken School District	Piedmont Technical College
Aiken Technical College	Richland School District 2
Allendale School District	Rock Hill School District 3
Anderson School District 2	Saluda School District
Anderson School District 5	SC Department of Administration - Facilities
	Management
Barnwell School District 45	SC Department of Agriculture
Beaufort School District	SC Department of Corrections
Chesterfield School District	SC Department of Disabilities & Special Needs
Coastal Carolina University	SC Department of Health and Environmental Control
College of Charleston	SC Department of Labor, Licensing, & Regulation -
	Division of Fire and Life Safety
Colleton School District	SC Department of Natural Resources
Darlington School District	SC Department of Parks, Recreation & Tourism
Dorchester School District 2	SC Department of Public Safety
Dorchester School District 4	SC Department of Transportation
Fairfield School District	SC Educational Television
Florence School District 3	SC Law Enforcement Division
Florence School District 5	SC Military Department
Georgetown School District	SC Sea Grant Consortium
Greenville School District	SC State University
Greenville Technical College	SC Vocational Rehabilitation Department
Greenwood School District 50	Spartanburg Community College
Greenwood School District 51	Spartanburg School District 1
Greenwood School District 52	Spartanburg School District 2
Horry County School District	Spartanburg School District 4

Kershaw School District	Spartanburg School District 5
Laurens School District 55	Spartanburg School District 7
Laurens School District 56	Sumter School District
Lee School District	Technical College of the Low Country
Lexington-Richland School District 5	The Citadel
McCormick School District	Union School District
Medical University of SC	University of SC - Aiken
Old Exchange Building Commission	University of SC - Lancaster
Orangeburg School District	University of SC - Union
Orangeburg-Calhoun Technical College	Williamsburg School District
Palmetto Railways	Williamsburg Technical College
Patriots Point Development Authority	Winthrop University
Pickens School District	

Since the initial performance period of FY 2001, 112 of 140 (80%) of public entities have achieved the 20% energy intensity reduction goal in at least one fiscal year.

# **Submission of Annual Progress Reports**

For FY 2023, public entities were asked to complete the following five sections:

# **Section 1: Energy Conservation Measures**

This section requires an inventory of energy conservation measures implemented during the year, including any measured or projected energy savings.

#### **Section 2: Energy Consumption Data**

In this section, overall energy consumption data is reported, either through a web-based reporting tool or a spreadsheet provided by the Energy Office.

# **Section 3: Purchase of Energy Conservation Products**

This section requests a confirmation that all purchased energy conservation products have been certified and/or approved by the Energy Office, as per § 48-52-640.

#### **Section 4: Additional Questions**

This section solicits information about organizations' interest in obtaining technical assistance from the Energy Office or in receiving the *Energy Connection* newsletter. Additional information is requested on any installed photovoltaic systems.

# **Section 5: Energy Plan Update and Success Stories**

This section requests that organizations send a current copy of their energy conservation plans to the Energy Office if they have made significant changes since 2009. If no major revisions occurred, agencies are asked to provide an update on progress toward achieving the goals outlined in their plans, including both successes and barriers.

Of the 140 public entities, 125 (89%) submitted complete reports; 14 (10%) did not submit a report. The remaining one (1%) submitted an incomplete report.

Public Entities by Type <sup>1</sup>	Total Number of Public entities	Complete	% Complete	Partially Complete	% Partially Complete	Non- Submitting	% Non- Submitting
State Agencies	33	31	94%	0	0%	2	6%
Residential Colleges and Universities <sup>2</sup>	12	11	92%	0	0%	1	8%
Non-Residential Colleges and Universities	21	19	90%	1	5%	1	5%
School Districts	74	64	86%	0	0%	10	14%
Totals	140	125	89%	1	1%	14	10%

A sample of completed Annual Progress Reports is provided in Appendix A. These reports are included to illustrate the range of energy conservation and efficiency activities used by many public entities.

This appendix includes a sampling of complete reports and is not intended to imply Energy Office endorsement of the reports included in the sampling over those not included.

<sup>1</sup> For reporting purposes, public entities were separated into peer groups that most closely mirrored their energy consumption and energy expenditure levels. These group types are as follows: state agencies, residential colleges and universities, non-residential colleges and universities, and school districts.

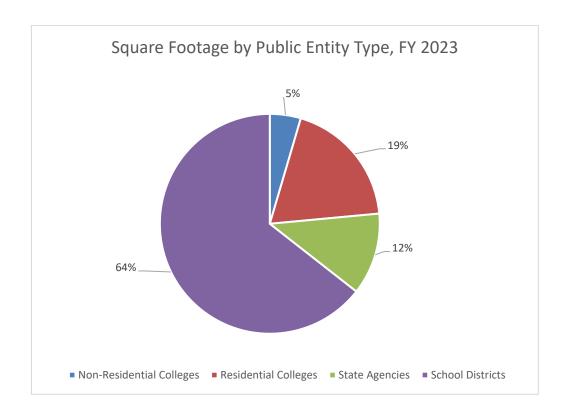
<sup>2</sup> The Medical University of South Carolina is included in the Residential Colleges and Universities organization type for this report as its energy consumption levels are most similar to this peer group.

# **Progress toward Energy Conservation Goals**

The General Assembly requires public entities to work toward meeting specific goals in reducing their energy intensity (defined as total-site energy consumption measured in thousands of British Thermal Units (kBtu) per gross square foot). The Energy Office has collected data on energy consumption, energy spending, and building square footage from public entities on an annual basis for more than 20 years. The data can be used as a basis for estimating the progress made by public entities toward meeting required energy goals. However, the data is accepted as received, and the Energy Office makes no representation regarding accuracy. In addition, some entities did not submit reports to the Energy Office, which introduces a potential source of bias. Additional inconsistencies have been introduced because the 2008 legislation exempted buildings constructed under the Energy Independence and Sustainable Construction Act of 2007 as well as buildings not in existence in both 2000 and 2008. However, many agencies and schools simply report on all their buildings, and certainly plan for all their buildings, so the data collected may include energy intensity in buildings that should be excluded from the 20% reduction goal. Consequently, the statistics reported in this section should be interpreted with caution.

For reporting trends, public entities were separated into peer groups that most closely mirrored their energy consumption and energy expenditure levels. The group types are as follows: state agencies, residential colleges and universities, non-residential colleges and universities, and school districts. The Medical University of South Carolina is included in the residential colleges and universities organization type for this report as its energy consumption levels are most similar to this peer group. Individual reports for each reporting entity are available upon request.

In FY 2023, school districts (64%) accounted for the largest share of square footage by type of public entity reporting. The next largest category (19%) was residential colleges and universities. State agencies (12%) and non-residential colleges and universities (5%) accounted for the smallest categories of reporting entities.



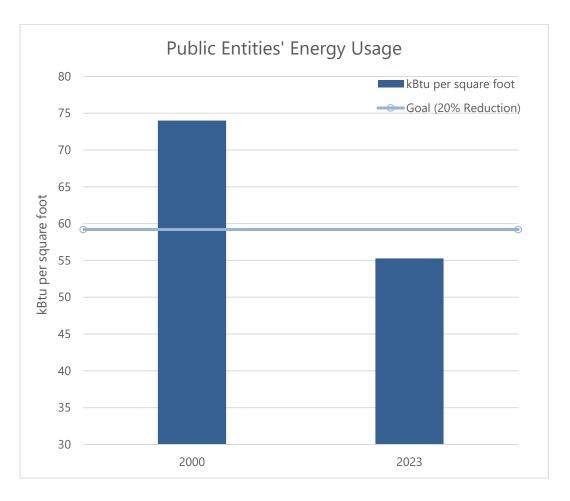
Data submitted for FY 2023 indicates that, overall, public entities reduced their energy use intensity by 25% compared to the Fiscal Year 2000 baseline. School districts – the least energy intensive category of public entities – reported improvements of 24%. Residential colleges – the most energy intensive category – reported improvements of 21%.

Public entities reduced their energy spending per square foot by 19% from 2000 levels (adjusted for inflation). This differential indicates that the reporting public entities' efforts to control energy use are paying off. Without those efforts, rising energy costs are likely to have a significant effect on agency budgets.

Public Entities by Type	Average Energy Use per Square Foot (site kBtu)		Average Energy Spending per Squa Foot (\$)			
	FY 2000	FY 2023	% change	FY 2000 <sup>3</sup>	FY 2023	% change
State Agencies	113	74.92	-34%	\$2.31	\$1.97	-17%
Residential Colleges and Universities	143	112.60	-21%	\$2.25	\$2.22	-4%
Non-Residential Colleges and Universities	80	62.87	-21%	\$2.01	\$1.77	-14%
School Districts	45	34.18	-24%	\$1.46	\$1.15	-24%
Overall	74	55.27	-25%	\$1.77	\$1.48	-19%

Note: These statistics are based on data submitted by public entities. The Energy Office makes no representation regarding the accuracy of the data it received.

<sup>3</sup> These figures have been adjusted for inflation using the Bureau of Labor Statistics' CPI Inflation Calculator (available at https://data.bls.gov/cgi-bin/cpicalc.pl). Therefore, figures here are presented in 2022 dollars.



In aggregate, public entities have reported significant improvements in energy intensity compared to the FY 2000 baseline. As noted in the table below, overall energy intensity has decreased from 74 kBTU per square foot to 55 kBTU per square foot. The 20% reduction goal of 59 kBTU per square foot has been exceeded.

	Entities′ ⁄ Usage
Year	kBtu per ft²
2000	74
2023	55

Note: These statistics are based on data submitted by public entities. The Energy Office makes no representation regarding the accuracy of the data it received.

Based on information submitted to the Energy Office, public entities have collectively achieved the 20% goal set by the General Assembly. Energy savings are being realized, and Fiscal Year 2024 will provide an opportunity for public entities to continue to reduce their energy consumption. The

Energy Office is only able to report on the data submitted by public entities. Partially complete or missing data also affect the savings metrics and can lead to difficulty in year-by-year comparisons of energy use.

# **Conclusion**

The Energy Office continues to provide training, technical assistance, and funding to public entities in support of their efforts to achieve energy conservation goals. Overall, South Carolina's public entities have done an excellent job of reducing energy use. As a group, they have achieved the mandated goal. The Energy Office continues to work with individual agencies to help them achieve, maintain, and exceed the mandated goal as well. The Energy Office looks forward to further savings in Fiscal Year 2024 and will continue to provide assistance in support of South Carolina's energy conservation goals.

# **APPENDIX A:**Sample Progress Reports

Disclaimer: The reports in this section are re-printed as submitted to the Energy Office by the reporting entities and are meant to illustrate the programs undertaken in FY 2023. Errors contained in this section are not the responsibility of the Energy Office, and the reports have not been altered or corrected.

To be submitted to the Office of Regulatory Staff, Energy Office State Government Energy Conservation Act, Code of Laws of South Carolina

Organization Name:	CLEMSON UNIVERSITY
Person(s) Filing Rep	ort
Name: THOMAS SUT	TLES
Phone Number: 864-643	3-6090
Email: suttles@clemso	on.edu

Please complete this report and return it to Michael Garner at the Office of Regulatory Staff, Energy Office (<a href="mailto:mgarner@ors.sc.gov">mgarner@ors.sc.gov</a>) no later than September 22, 2023. Completion of Section II requires the submission of energy consumption data, as described below. You may use the attached reporting tool or the format you normally use to track your energy use.

This report will allow the Energy Office to continue to measure the state's progress in reducing energy consumption by its public entities. In addition, the energy consumption data you provide will be made available to assist in statewide energy planning efforts. Please ensure that your submission is as complete and accurate as possible. If you need additional space, please attach pages or documents as necessary. If you have questions, please contact Michael Garner at 803-737-2090 or <a href="majarner@ors.sc.gov">mgarner@ors.sc.gov</a>.

#### **Section I: Energy Conservation Measures**

§48-52-820 requires entities to report activities undertaken to implement their Energy Conservation Plan. For this section, please list each energy conservation measure that you implemented in FY23. For each measure, please include the following:

- 1. A description of the energy conservation measure implemented including an estimate of square footage affected.
- 2. The estimated and/or observed annual energy savings (if available) and estimation method (if applicable.).

If you implemented no energy conservation measures in FY23, simply write "None."

Johnson Controls Inc. was chosen as our partner for the campus wide Green Tiger 1 energy efficiency improvement project. This project will retrofit the majority of our lighting to LED, replace legacy laboratory controls in several buildings, provide updated HVAC equipment and controls in select buildings, and implement building envelope improvements as needed. This project will cover our main campus facilities, the Advanced Materials campus in Anderson, and several facilities in Pendleton. The work began this spring and will take about 2 years to complete at a cost of \$45 million.

To be submitted to the Office of Regulatory Staff, Energy Office State Government Energy Conservation Act, Code of Laws of South Carolina

#### **Section II: Energy Consumption Data**

To verify progress made toward state energy conservation goals and to assist in statewide energy planning efforts, please provide your complete energy consumption data for FY23 (including all sources of energy used in your buildings) in a format described below:

- If you use energy accounting software, please submit a file containing data showing energy consumption, energy cost, and gross square footage in FY23:
  - As totals for your organization
  - o If available, for each meter and/or each building in your organization
- If you do not currently use any energy accounting software:
  - Use Portfolio Manager: You may want to consider using Portfolio Manager, the free, web-based energy accounting system provided by ENERGY STAR. If you would like more assistance with entering your data into Portfolio Manager, please email <a href="mailto:mgarner@ors.sc.gov">mgarner@ors.sc.gov</a>.
  - Use the SCEO Consumption Reporting Tool: You may choose to complete and submit the file entitled SCEO Consumption Reporting Tool, which can be downloaded from the Energy Office website.
  - Otherwise please submit data using Excel.

#### **Section III: Purchase of Energy Conservation Products**

§48-52-640 mandates that all state agencies "shall submit a disclaimer statement to the State Energy Office with [their] annual report stating that [they] did not purchase an energy conservation product that had not been certified by the State Energy Office."

The Energy Office has posted a <u>list of pre-certified and/or approved energy conservation products/measures</u> on the Energy Office website. For any products/measures not listed here, agencies should contact Rick Campana at <u>rcampana@ors.sc.gov</u> or by telephone at 803-737-5229.

#### **Statement**

I hereby certify that my organization did not purchase any energy conservation products that have not been certified and/or approved by the Energy Office.

Initials	TFS

To be submitted to the Office of Regulatory Staff, Energy Office State Government Energy Conservation Act, Code of Laws of South Carolina

#### **Section IV: Additional Questions**

Your answers to these questions help the Energy Office tailor outreach and activities to address the needs of your organizations, thank you for your feedback!

•	member of the Energy Office's Technical Assistance team?
	Y or √N
•	If you would like to subscribe to the South Carolina Energy Office newsletter The Energy Connection, please write the preferred e-mail:
	Email: suttles@clemson.edu
•	If any of your facilities have solar panels used to generate energy for the facility or to put back on the grid, please provide the name of the facility, kW (AC) capacity, and the interconnected utility.
	Name of the facility: P-8 Parking Lot Solar Canopy
	o Capacity (kWAC): 990 kW AC
	Interconnected utility: Main Campus Electrical Grid

# Section V: Energy Plan Update & Success Stories

#### **Energy Plan Updates**

- A. You submitted an Energy Conservation Plan, required by law, to the Energy Office in 2009; if you have significantly revised your Plan, please send a copy for our files to mgarner@ors.sc.gov.
- B. If you have not made significant revisions to your Plan, but have only refined it, please provide a brief write-up addressing any changes that may have occurred since submission of your Plan in 2009. Please include energy team training and education. In addition, please let us know about any successes deserving mention, or barriers to improvement that you have faced. We want to publicize your successes and assist with obstacles where we can.

We continue to work to maximize utility efficiency and expect to see about a 15% reduction in our electrical consumption after the Green Tiger 1 project is completed. Installation of a steam driven generator to take advantage of excess steam from the Duke Energy combined heat and power plant is also nearing completion. It will provide 2.8 MW of electrical energy directly to our campus, decreasing our requirements from the electrical grid.

To be submitted to the Office of Regulatory Staff, Energy Office State Government Energy Conservation Act, Code of Laws of South Carolina

Orgar	nization Name: 🏻	Laurens School District 55
Perso	n(s) Filing Repo	ort
Name:	Phillip Roberts	
Phone	Number: 864-704-	-2382
Email:	onroberts@laure	ns55.org

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This report will allow the Energy Office to continue to measure the state's progress in reducing energy consumption by its public entities. In addition, the energy consumption data you provide will be made available to assist in statewide energy planning efforts. Please ensure that your submission is as complete and accurate as possible. If you need additional space, please attach pages or documents as necessary. If you have questions, please contact Michael Garner at 803-737-2090 or <a href="majarner@ors.sc.gov">mgarner@ors.sc.gov</a>.

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- 1. A description of the energy conservation measure implemented including an estimate of square footage affected.
- 2. The estimated and/or observed annual energy savings (if available) and estimation method (if applicable.).

#### If you implemented no energy conservation measures in FY23, simply write "None."

Laurens District 55 has replaced all fluorescence light fixtures with LED lights throughout 4 facilities, Ford, Gray Court Owings, Hickory Tavern, and Laurens District High School. Some of these LED lights serve as Emergency lights in these facilities.

Laurens 55 has partnered with Cenergistic. To implement an energy conservation program in all Laurens District 55 schools, affecting 100% of the square footage.

112 HVAC units were replaced with 112 HVAC units having an EER rating of 11.

To be submitted to the Office of Regulatory Staff, Energy Office State Government Energy Conservation Act, Code of Laws of South Carolina

#### **Section II: Energy Consumption Data**

To verify progress made toward state energy conservation goals and to assist in statewide energy planning efforts, please provide your complete energy consumption data for FY23 (including all sources of energy used in your buildings) in a format described below:

- If you use energy accounting software, please submit a file containing data showing energy consumption, energy cost, and gross square footage in FY23:
  - As totals for your organization
  - o If available, for each meter and/or each building in your organization
- If you do not currently use any energy accounting software:
  - Use Portfolio Manager: You may want to consider using Portfolio Manager, the free, web-based energy accounting system provided by ENERGY STAR. If you would like more assistance with entering your data into Portfolio Manager, please email <a href="mailto:mgarner@ors.sc.gov">mgarner@ors.sc.gov</a>.
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#### **Section III: Purchase of Energy Conservation Products**

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The Energy Office has posted a <u>list of pre-certified and/or approved energy conservation products/measures</u> on the Energy Office website. For any products/measures not listed here, agencies should contact Rick Campana at <u>rcampana@ors.sc.gov</u> or by telephone at 803-737-5229.

#### **Statement**

I hereby certify that my organization did not purchase any energy conservation products that have not been certified and/or approved by the Energy Office.

Initials	PNR

To be submitted to the Office of Regulatory Staff, Energy Office State Government Energy Conservation Act, Code of Laws of South Carolina

#### **Section IV: Additional Questions**

Your answers to these questions help the Energy Office tailor outreach and activities to address the needs of your organizations, thank you for your feedback!

•	Are you interested in a free walk-through energy assessment performed by a member of the Energy Office's Technical Assistance team?
	☐Y or ✓N
•	If you would like to subscribe to the South Carolina Energy Office newsletter The Energy Connection, please write the preferred e-mail:
	Email:
•	If any of your facilities have solar panels used to generate energy for the facility or to put back on the grid, please provide the name of the facility, kW (AC) capacity, and the interconnected utility.
	Name of the facility:
	o Capacity (kWAC):
	Interconnected utility:
	rgy Plan Update & Success Stories
Δ	A. You submitted an Energy Conservation Plan, required by law, to the Energy Office in 2009; if you have significantly revised your Plan, please send a copy for our files to <a href="mailto:mgarner@ors.sc.gov">mgarner@ors.sc.gov</a> .
E	3. If you have not made significant revisions to your Plan, but have only refined it, please provide a brief write-up addressing any changes that may have occurred since submission of your Plan in 2009. Please include energy team training and education. In addition, please let us know about any successes deserving mention, or barriers to improvement that you have faced. We want to publicize your successes and assist with obstacles where we can.
f	Laurens 55 has partenered with Cenergistic to proved an energy conservation program, for all facilites. This energy program is helping to create new energy conservation habits, through on-site audits and education.

To be submitted to the Office of Regulatory Staff, Energy Office State Government Energy Conservation Act, Code of Laws of South Carolina

Organization	Name: SC Department of Mental Health
Person(s) Fili	ng Report
Name: Pete Cr	reighton
Phone Number:	803-530-3667
Email: peter.cre	eighton@scdmh.org

Please complete this report and return it to Michael Garner at the Office of Regulatory Staff, Energy Office (<a href="mailto:mgarner@ors.sc.gov">mgarner@ors.sc.gov</a>) no later than September 22, 2023. Completion of Section II requires the submission of energy consumption data, as described below. You may use the attached reporting tool or the format you normally use to track your energy use.

This report will allow the Energy Office to continue to measure the state's progress in reducing energy consumption by its public entities. In addition, the energy consumption data you provide will be made available to assist in statewide energy planning efforts. Please ensure that your submission is as complete and accurate as possible. If you need additional space, please attach pages or documents as necessary. If you have questions, please contact Michael Garner at 803-737-2090 or <a href="majarner@ors.sc.gov">mgarner@ors.sc.gov</a>.

#### **Section I: Energy Conservation Measures**

§48-52-820 requires entities to report activities undertaken to implement their Energy Conservation Plan. For this section, please list each energy conservation measure that you implemented in FY23. For each measure, please include the following:

- 1. A description of the energy conservation measure implemented including an estimate of square footage affected.
- 2. The estimated and/or observed annual energy savings (if available) and estimation method (if applicable.).

If you implemented no energy conservation measures in FY23, simply write "None."

Continuation of replacing fluorescent and incandescent lights with LED. HVAC systems have been replaced in DMH buildings across the state with more energy efficient units. Energy conservation focus has been through the construction of new buildings and renovation of existing.

We will focus on getting accurate data for next FY report.

To be submitted to the Office of Regulatory Staff, Energy Office State Government Energy Conservation Act, Code of Laws of South Carolina

#### **Section II: Energy Consumption Data**

To verify progress made toward state energy conservation goals and to assist in statewide energy planning efforts, please provide your complete energy consumption data for FY23 (including all sources of energy used in your buildings) in a format described below:

- If you use energy accounting software, please submit a file containing data showing energy consumption, energy cost, and gross square footage in FY23:
  - As totals for your organization
  - o If available, for each meter and/or each building in your organization
- If you do not currently use any energy accounting software:
  - Use Portfolio Manager: You may want to consider using Portfolio Manager, the free, web-based energy accounting system provided by ENERGY STAR. If you would like more assistance with entering your data into Portfolio Manager, please email <a href="mailto:mgarner@ors.sc.gov">mgarner@ors.sc.gov</a>.
  - Use the SCEO Consumption Reporting Tool: You may choose to complete and submit the file entitled SCEO Consumption Reporting Tool, which can be downloaded from the Energy Office website.
  - Otherwise please submit data using Excel.

#### **Section III: Purchase of Energy Conservation Products**

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Initials	PJC

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☐Y or ✓N
If you would like to subscribe to the South Carolina Energy Office newsletter The Energy Connection, please write the preferred e-mail:
Email: peter.creighton@scdmh.org
If any of your facilities have solar panels used to generate energy for the facility or to put back on the grid, please provide the name of the facility, kW (AC) capacity, and the interconnected utility.
Name of the facility:
o Capacity (kWAC):

# Section V: Energy Plan Update & Success Stories

#### **Energy Plan Updates**

- A. You submitted an Energy Conservation Plan, required by law, to the Energy Office in 2009; if you have significantly revised your Plan, please send a copy for our files to mgarner@ors.sc.gov.
- B. If you have not made significant revisions to your Plan, but have only refined it, please provide a brief write-up addressing any changes that may have occurred since submission of your Plan in 2009. Please include energy team training and education. In addition, please let us know about any successes deserving mention, or barriers to improvement that you have faced. We want to publicize your successes and assist with obstacles where we can.

At this time we have only been replacing HVAC units and Lighting. Soon we hope to have Dominion take over the CFSH campus grid affecting 4 campuses. This will replace an old 50 year old grid system with a new more efficient one. This will also remove the possibility of a single point of failure causing a power loss to 4 campuses.

To be submitted to the Office of Regulatory Staff, Energy Office State Government Energy Conservation Act, Code of Laws of South Carolina

Orgar	nization	Name:	Tri-County Technical College
Perso	n(s) Fili	ng Rep	ort
Name:	Greg G	rogan	
Phone	Number:	864-646	6-1842
Email:[	ggrogan	n@tctc.e	edu

Please complete this report and return it to Michael Garner at the Office of Regulatory Staff, Energy Office (<a href="mailto:mgarner@ors.sc.gov">mgarner@ors.sc.gov</a>) no later than September 22, 2023. Completion of Section II requires the submission of energy consumption data, as described below. You may use the attached reporting tool or the format you normally use to track your energy use.

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If you implemented no energy conservation measures in FY23, simply write "None."

Updated Lighting from Fluorescent to LED as follows:
Pickens Hall 20,000 sq. ft.
Cleveland Hall 5,000 sq. ft.
Miller Hall 5,000 sq. ft.
ITC Building 10,000 sq. ft.
AHEC 4,000 sq. ft.

Added window glazing to 10 windows at ITC

Replaced HVAC at 4 classrooms in Miller Hall and the Anderson Campus Data Closets

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#### **Section II: Energy Consumption Data**

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Initials	(( i( i
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	Email:
•	<ul> <li>If any of your facilities have solar panels used to generate energy for the facility or to put back on the grid, please provide the name of the facility, kW (AC) capacity, and the interconnected utility.</li> </ul>
	○ Name of the facility: N/A
	○ Capacity (kWAC): N/A
	<ul> <li>Interconnected utility: N/A</li> </ul>
Sec	otion V. Enorgy Plan Undata & Success Stories
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