

ANNUAL REPORT 2020



Annual Report on the Implementation of
State Government Energy Conservation

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December 2020

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Energy Office

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This material is based upon work supported by the Department of Energy under Award Number(s) DE-EE0006996.

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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 to the South Carolina General Assembly (General Assembly). The performance period for this report is Fiscal Year 2020 (FY 2020).

Background:

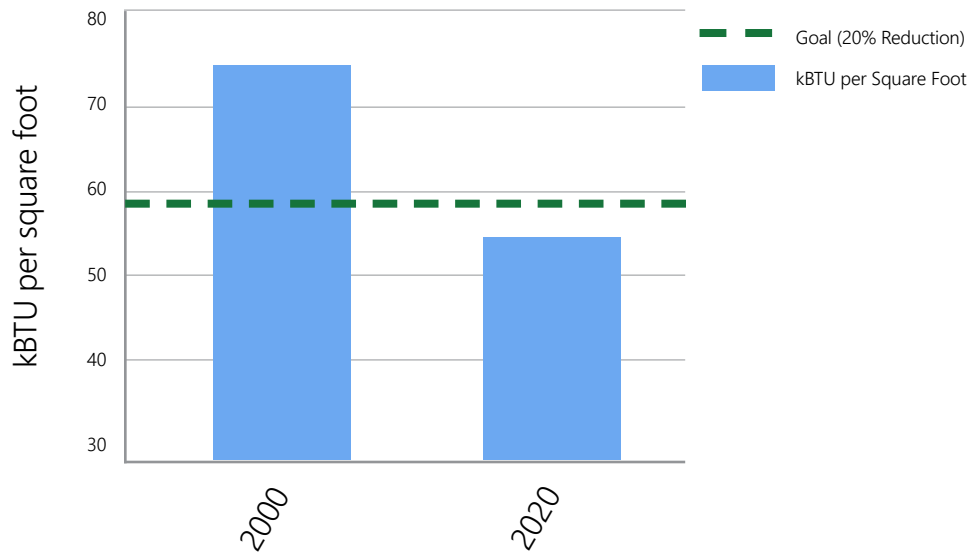
Section 48-52-620 of the South Carolina Code of Laws requires state agencies, public school districts, and public colleges and universities (public entities) to develop energy conservation plans and work to reduce their energy consumption by 20% by 2020, as compared to 2000 levels. The Energy Office is tasked with collecting each public entity’s annual report and tracking their progress toward the 20% energy usage reduction goal. To assist the public entities in reaching the goal, the Energy Office provides ongoing training, workshops, and technical assistance, and makes low-interest loans available for energy efficiency projects.

Findings:

Data submitted for FY 2020 indicate that public entities reduced their energy use per square foot by 25% and their energy spending per square foot by 15%. 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 by Type	Average Energy Use per Square Foot (site kBTU)			Average Energy Spending per Square Foot (\$)		
	FY 2000	FY 2020	% change	FY 2000	FY 2020	% change
State Agencies	113	77.47	-31%	\$2.02	\$1.78	-12%
Residential Colleges and Universities	143	110.76	-23%	\$1.96	\$1.82	-7%
Non-Residential Colleges and Universities	80	63.19	-21%	\$1.75	\$1.57	-10%
School Districts	45	33.90	-25%	\$1.27	\$1.05	-17%
Overall	74	55.24	-25%	\$1.54	\$1.31	-15%

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 public entities have done an excellent job of reducing energy use. As a group, they have achieved the mandated goal. While this is the final year for organizations to reach the 20% reduction target, the Energy Office continues to work with individual public entities to help them achieve the mandated goal as well. The Energy Office intends to continue collecting energy data in Fiscal Year 2021 and beyond and will continue to provide assistance in support of South Carolina’s energy conservation goals.



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 requires 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. These public entities are required 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 Section III for more detail). Section 48-52-620(E) requires 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 new 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.



Activities in Support of Implementation

Section 48-52-620(E) requires 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 20 ACEM training classes have been held, most recently in November 2020. A total of 348 individuals have received this extensive energy-management training. The pass rate for the course averages approximately 80%, with those passing the test receiving the ACEM certification.

In FY 2020, the Energy Office also offered two two-day courses delivered by the Boiler Efficiency Institute: *Heating, Ventilating, & Air Conditioning (HVAC)* and *Boiler and Steam Systems*. These courses respectively teach students how to recognize and implement cost-saving measures in HVAC and boiler equipment.

The Energy Office also facilitated the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) course *How Smart, Efficient, Sustainable Systems Lead to Improved Resilience*. This course provides a descriptive summary of the concept of resilience in built environment and how sustainability efficiency, and smart technology can help improve resilience.

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 Excel format 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 government as well as other entities. These walk-through assessments help to identify cost-effective energy conservation measures and set priorities for action. While the Energy Office has put a temporary pause on providing energy assessments due to the COVID-19 pandemic, they have continued to offer their bill analysis and funding advisement services to public entities. More information on Energy Technical Assistance may be found at www.ENERGY.SC.GOV/Public.

In July 2020, the Energy Office also launched its new 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 www.EnergySaver.SC.GOV.



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 www.ENERGY.SC.GOV/Incentives/Conserfund.

ConserFund Plus is a variation of the standard ConserFund loan, offering funding as a 70% loan and a 30% grant, and 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.

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 2019 report, based on having two or more consecutive years of meeting the 20% reduction goal:



Greenwood County School District 52



Old Exchange Building Commission



South Carolina State University



Spartanburg School District 7

For FY 2020, 84 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	Pickens School District
Aiken Technical College	Piedmont Technical College
Allendale School District	Rock Hill School District 3
Anderson School District 2	Saluda School District
Barnwell School District 45	SC Department of Administration - Facilities Management
Beaufort School District	SC Department of Agriculture
Berkeley School District	SC Department of Disabilities & Special Needs
Charleston School District	SC Department of Health & Environmental Control
Chester School District	SC Department of Juvenile Justice
Chesterfield School District	SC Department of Labor, Licensing & Regulation - Division of Fire and Life Safety
Clarendon School District 1	SC Department of Mental Health
Clemson University	SC Department of Natural Resources
Coastal Carolina University	SC Department of Parks, Recreation & Tourism
College of Charleston	SC Department of Public Safety
Colleton School District	SC Department of Transportation
Denmark-Olar School District 2	SC Educational Television
Dorchester School District 2	SC Forestry Commission
Fairfield School District	SC Governor's School for Agriculture at John de la Howe
Florence School District 5	SC Law Enforcement Division
Georgetown School District	SC Military Department
Greenville School District	SC Sea Grant Consortium
Greenville Technical College	SC State University
Greenwood School District 50	SC Vocational Rehabilitation Department
Greenwood School District 51	Spartanburg Community College
Greenwood School District 52	Spartanburg School District 1
Hampton School District 1	Spartanburg School District 2
Hampton School District 2	Spartanburg School District 3
Horry School District	Spartanburg School District 4
Kershaw School District	Spartanburg School District 5
Lancaster School District	Spartanburg School District 7
Laurens School District 55	Sumter School District
Laurens School District 56	Technical College of the Low Country
Lee School District	The Citadel
Lexington School District 4	Union School District

Lexington-Richland School District 5	University of SC - Aiken
McCormick School District	University of SC - Lancaster
Medical University of SC	University of SC - Sumter
Newberry School District	University of SC - Union
Northeastern Technical College	Williamsburg School District
Orangeburg School District 3	Williamsburg Technical College
Orangeburg School District 5	Williston School District 29
Patriots Point Development Authority	Winthrop University

Twenty-six entities have been recognized previously for achieving the 20% energy intensity reduction goal in one or more years during FY 2001 – FY 2019 performance periods but have not met the threshold for FY 2020.

Anderson School District 3	Old Exchange Building Commission
Anderson School District 5	Orangeburg School District 4
Bamberg School District 1	Orangeburg-Calhoun Technical College
Clarendon School District 3	Palmetto Railways
Darlington School District	Richland School District 1
Denmark Technical College	SC Department of Corrections
Dorchester School District 4	SC Department of Employment & Workforce
Edgefield School District	Spartanburg School District 6
Florence School District 2	Tri-County Technical College
Florence-Darlington Technical College	Trident Technical College
Fort Mill School District 4	University of SC - Columbia
Francis Marion University	University of SC - Upstate
Lander University	York School District 1

Many factors may contribute to an organization’s energy use rising again, such as changes in operating hours or construction of new facilities that contain more technological components that consume electricity.

Since the initial performance period of FY 2001, 110 of 147 (75%) of public entities have achieved the 20% energy intensity reduction goal in at least one fiscal year.

Submission of Annual Progress Reports

For FY 2020, public entities were required to complete the following five sections of the report:

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 faced.

Of the 147 public entities, 137 (93%) submitted complete reports. Nine (6%) did not submit a report. The remaining one (1%) submitted an incomplete report.

Public Entities by Type¹	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 ²	12	11	92%	0	0%	1	8%
Non-Residential Colleges and Universities	21	20	95%	0	0%	1	5%
School Districts	81	75	93%	1	1%	5	6%
Totals	147	137	93%	1	1%	9	6%

A list of non-submitting entities is included in Appendix A. Energy Office staff continues to provide assistance to public entities upon request.

A sample of completed Annual Progress Reports is provided in Appendix B. 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.

¹ 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.

² 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.

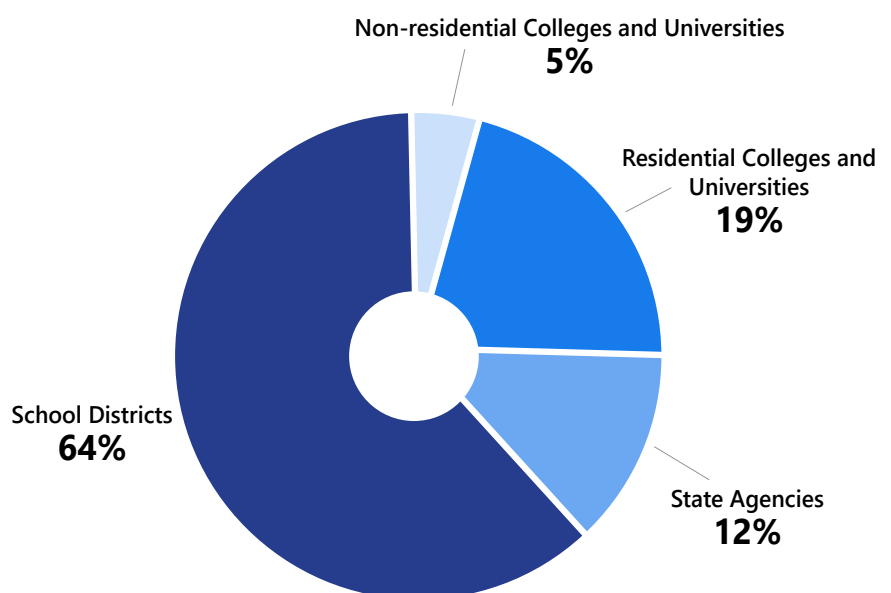
Progress toward Energy Conservation Goals

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. This data can be used as a basis for estimating the progress made by public entities toward meeting required energy goals. However, this data is accepted as received, and the Energy Office can make 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 of their buildings, and certainly plan for all of 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 the purpose of reporting trends, 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. 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 2020, school districts accounted for the largest share of square footage by type of public entity (64%). 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.

Square Footage by Public Entity Type FY 2020



Data submitted for FY 2020 indicate that public entities reduced their energy use intensity by 25% compared to the FY 2000 baseline. School districts – the least energy-intensive category of public entities – reported improvements of 25%. Residential colleges – the most energy-intensive category – reported improvements of 23%.

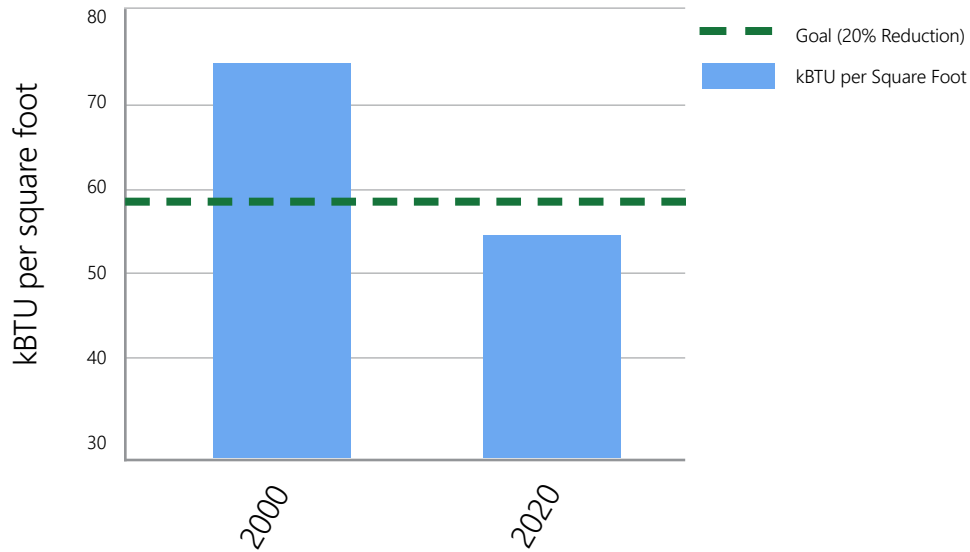
Public entities reduced their energy spending per square foot by 15% from 2000 levels (adjusted for inflation). This differential indicates that the reporting public entities' efforts to control energy use are working. Without those efforts, rising energy costs are likely to have a significant effect on agency budgets.

As the COVID-19 pandemic caused many entities to temporarily close or limit their operating hours, the pandemic likely also contributed to the decreases seen in energy use and energy spending in FY 2020. However, as the state saw overall decreases of 21% and 9% in energy use and energy spending, respectively, in Fiscal Year 2019, it is also evident that public entities were already making a conscious effort to lower their energy consumption.

Public entities by Type	Average Energy Use per Square Foot (site kBTU)			Average Energy Spending per Square Foot (\$)		
	FY 2000	FY 2020	% change	FY 2000 ³	FY 2020	% change
State Agencies	113	77.47	-31%	\$2.02	\$1.78	-12%
Residential Colleges and Universities	143	110.76	-23%	\$1.96	\$1.82	-7%
Non-Residential Colleges and Universities	80	63.19	-21%	\$1.73	\$1.57	-10%
School Districts	45	33.90	-25%	\$1.27	\$1.05	-17%
Overall	74	55.24	-25%	\$1.54	\$1.31	-15%

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.

³ 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 2020 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.

Public entities Energy Usage	
Year	kBTU per ft ²
2000	74
2020	55

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

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 2021 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, the state's agencies and public schools 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 the mandated goal as well. While this marks the end of the legislatively mandated performance period, the Energy Office is looking forward to further savings in Fiscal Year 2021 and will continue to provide assistance in support of South Carolina's energy conservation goals.



APPENDIX A:

Non-Reporting Public Entities

At the time this annual report was written, the following public entities had not submitted a report for FY 2020:

Anderson School District 1

Clarendon School District 3

Darlington School District

Denmark Technical College

Florence School District 4

Lander University

Hampton School District 2

SC Department of Corrections

SC Governor's School for the Arts & Humanities

APPENDIX B:

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 2020. Errors contained in this section are not the responsibility of the Energy Office and the reports have not been altered or corrected.

FY20 Annual Progress Report

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 Criminal Justice Academy

Person(s) Filing Report (name, phone number, email):

John Mincy, 803-896-3801, jcmincy@sccja.sc.gov

Please complete this report and return it to Rick Campana at the Office of Regulatory Staff, Energy Office (rcampana@ors.sc.gov) no later than September 11, 2020. 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 verify your compliance with the State Government Energy Conservation Act (§48-52-610 through 680 and §48-52-910, Code of Laws of South Carolina). 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 Rick Campana at 803-737-5229 or rcampana@ors.sc.gov.

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 FY20. 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 FY20, simply write "None."

We are also constantly making small changes and upgrades to our automation system and schedule to try and improve our energy use. We have also taken various other measures to improve some of our building envelopes to reduce efficiency loss through the buildings.

FY20 Annual Progress 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 FY20 (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 FY20:
 - As totals for your organization
 - If available, for each meter and/or each building in your organization
- If you do not currently use any energy accounting software:
 - You may want to consider using Portfolio Manager, the free, web-based energy accounting system provided by ENERGY STAR. To access Portfolio Manager, please click [here](#). If you would like more assistance with entering your data into Portfolio Manager, please email rcampana@ors.sc.gov.
 - You may choose to complete and submit the file entitled "SCEO Consumption Reporting Tool", which can be downloaded from our website (please click [here](#)).
 - 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 list of pre-certified and/or approved energy conservation products/measures on our website (please click [here](#)). For any products/measures not listed here, agencies should contact Rick Campana at rcampana@ors.sc.gov or by telephone at 803-737-5229.

Statement	Initials
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.	JCM

FY20 Annual Progress Report

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: _____
- 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 N/A
 - Capacity (kWAC) _____
 - Interconnected utility _____

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 rcampana@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 are showing members of our facilities team how to monitor the automation system and continue to become more familiar with it. We have also designated a few members to have the primary duties of maintaining our automation system so that we continually operate at the best efficiency possible for our facilities.

- C. Please provide the contact (name, phone, email) for your Plan:

FY20 Annual Progress Report

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 Report (name, phone number, email):

Thomas Suttles, 864-933-6853

Please complete this report and return it to Rick Campana at the Office of Regulatory Staff, Energy Office (rcampana@ors.sc.gov) no later than September 11, 2020. 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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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 FY20, simply write "None."

We have continued our ongoing improvements in chilled water efficiency with the addition of a new chiller in the West Energy Plant. The Duke Energy combined heat and power plant is operational and we will be using steam from it this fall. Other improvements to lighting and HVAC are implemented as appropriate during normal maintenance and renovation projects.

FY20 Annual Progress 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 FY20 (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 FY20:
 - As totals for your organization
 - If available, for each meter and/or each building in your organization
- If you do not currently use any energy accounting software:
 - You may want to consider using Portfolio Manager, the free, web-based energy accounting system provided by ENERGY STAR. To access Portfolio Manager, please click [here](#). If you would like more assistance with entering your data into Portfolio Manager, please email rcampana@ors.sc.gov.
 - You may choose to complete and submit the file entitled "SCEO Consumption Reporting Tool", which can be downloaded from our website (please click [here](#)).
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Statement	Initials
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.	TFS

FY20 Annual Progress Report

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

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- 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: suttles@clemsun.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 Fluor Daniel & Life Science Facility
 - Capacity (kWAC) 15 KW each
 - Interconnected utility Building only

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 rcampana@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.

Preparations are underway for a 1 MW solar canopy installation in our R-6 parking lot. Construction should be completed in the 2021 fiscal year. We are also working with the State Engineer's Office to pursue a Guaranteed Energy Saving Project through an ESCO for multiple energy saving measures in a large number of campus buildings.

- C. Please provide the contact (name, phone, email) for your Plan:

Thomas Suttles, 864-933-6853, suttles@clemsun.edu

FY20 Annual Progress Report

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

Organization Name:

Trident Technical College

Person(s) Filing Report (name, phone number, email):

Jarvis Scott, 843-574-6340, jarvis.scott@tridenttech.edu

Please complete this report and return it to **Rick Campana** at the Office of Regulatory Staff, Energy Office (rcampana@ors.sc.gov) no later than September 11, 2020.

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 verify your compliance with the State Government Energy Conservation Act (§48-52-610 through 680 and §48-52-910, Code of Laws of South Carolina). 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 **Rick Campana** at 803-737-5229 or rcampana@ors.sc.gov.

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 FY20. 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 FY20, simply write "None."

Building 920 Replacement of AHU-13 Blower Motor;
Building 420 Replacement of Compressor;
Berkeley Replacement of RTU-12 Compressor;
Palmer Replacement of Chiller Boards & Compressor Contactors;
Building 620 Replacement of Heat Pump Unit;
Building 410 Replacement of Chiller Pump;
Annual Maintenance Service of all systems on all campuses and sites

FY20 Annual Progress Report

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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 FY20 (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 FY20:
 - As totals for your organization
 - If available, for each meter and/or each building in your organization
- If you do not currently use any energy accounting software:
 - You may want to consider using Portfolio Manager, the free, web-based energy accounting system provided by ENERGY STAR. To access Portfolio Manager, please click [here](#). If you would like more assistance with entering your data into Portfolio Manager, please email rcampana@ors.sc.gov.
 - You may choose to complete and submit the file entitled "SCEO Consumption Reporting Tool", which can be downloaded from our website (please click [here](#)).
 - 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 list of pre-certified and/or approved energy conservation products/measures on our website (please click [here](#)). For any products/measures not listed here, agencies should contact **Rick Campana** at rcampana@ors.sc.gov or by telephone at 803-737-5229.

Statement	Initials
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.	JS

FY20 Annual Progress Report

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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: jarvis.scott@tridenttech.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 B1000 (South Carolina Aeronautical Training Center)
 - Capacity (kWAC) 210kWAC
 - Interconnected utility Dominion Energy

Section V: Energy Plan Update & Success Stories

Energy Plan Updates

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Green Globes Training - Eric A Hamilton
B1000 Mechanical Training - Eric A. Hamilton & Jarvis Scott
Johnson Controls Training - Eric A. Hamilton & Jarvis Scott

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JARVIS SCOTT 843-574-6340, jarvis.scott@tridenttech.edu

FY20 Annual Progress Report

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

Organization Name:

Spartanburg School District Three

Person(s) Filing Report (name, phone number, email):

Paul Hollifield, 864.279.6027, phollifield@spartanburg3.org

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Standardized occupied/unoccupied temps throughout district with HVAC controls. Also, utilized a "holiday" unoccupied schedule longer thru COVID shutdown in Spring 2020.
Square footage affected - 820,000. Approx 10% savings (costs) and 14% in pure consumption

FY20 Annual Progress Report

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Statement	Initials
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Paul Hollifield, 864.279.6027, phollifield@spartanburg3.org

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6/3/2020

ENERGY.SC.GOV

Office of Regulatory Staff

1401 Main Street

Suite 900

Columbia, SC 29201

