ENERGY OFFICE

STATE ENERGY ACTION PLAN 2024

ABOUT THE SOUTH CAROLINA ENERGY OFFICE

The State Energy Office serves as the principal energy planning entity for South Carolina. The mission of the State Energy Office is to promote energy efficiency, renewable energy, and clean transportation through initiatives providing planning, education, outreach and training, funding opportunities, and technical and energy data services. Its primary purpose is to develop and implement a well-balanced energy strategy that increases the efficiency of use of all energy sources in furtherance of the state's statutory energy policy to maximize environmental quality and energy conservation and efficiency and minimize the cost of energy throughout the State.

2023 AT A GLANCE

Energy Savings (kBTU)
3,977,011

GHGs Reduced
(metric tons of CO2e)
300

Funding Awarded
$492,662

Manufacturing home energy efficiency labels distributed
2,639

Energy Start manufactured home tax credits approved
$89,250

Trainings Offered:

- **HVAC Improvement Course**
- **Energy Management Professional Course**
- **Accredited Commercial Energy Manager Course**

2024 SOUTH CAROLINA STATE ENERGY ACTION PLAN

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BACKGROUND

Pursuant to the South Carolina Code of Laws Section 48-52-410, the State Energy Office, within the Office of Regulatory Staff, is a non-regulatory body which serves as the principal energy planning entity for the State. In accordance with Section 48-52-430, the State Energy Office releases an annual State Energy Action Plan which describes the following:

(a) activities by the State Energy Office to carry out the Plan for State Energy Policy;

(b) recommendations for long-term quantitative and qualitative energy goals for the residential, commercial, industrial, transportation, governmental, and utility sectors, and measures of progress for these goals;

(c) identification of obstacles to efficiency for which legislative, regulatory, or other governmental remedies are appropriate.

Recommendations for energy goals across all sectors and obstacles to efficiency facing South Carolina are described in detail in the 2016 State Energy Plan, the 2020 Energy Efficiency Roadmap, and the 2022 Electric Vehicle Stakeholder Initiative Report. The State Energy Office, in collaboration with its partners, made significant progress towards addressing many of the recommendations identified in these documents and continues to carry out its charge to increase the efficiency of use of all energy sources in South Carolina. Specifically, the State Energy Office provides financial assistance, technical assistance, education and outreach, and strategic planning. The State Energy Office continues to sponsor on-going programs and projects and will host new activities in 2025.

FINANCIAL ASSISTANCE

ConserFund

ConserFund is a revolving loan program administered by the State Energy Office for energy-efficiency improvements in state agencies, public colleges or universities, school districts, local governments, and 501 (c)(3) organizations. The ConserFund program is focused to support the implementation of energy-efficient improvements that provide long-term cost reductions and energy savings.

Energy Efficiency and Conservation Block Grants (EECBG)

The State Energy Office received formula funding through the US Department of Energy's (USDOE) EECBG Program to award subgrants to support local government projects and programs to improve energy efficiency, cut carbon emissions, and reduce energy use in South Carolina.

Energy Efficiency Revolving Loan (EERL)

The EERL program was established through the USDOE and State Energy Office using American Recovery and Reinvestment Act (ARRA) funding. It is administered by the South Carolina Business Development Corporation, in partnership with the State Energy Office. The EERL program is designed to encourage borrowers to invest in energy efficient upgrades to reduce electricity consumption. The EERL program is primarily directed towards for-profit organizations but is also available to non-profits and governmental entities.

Home Electrification and Appliance Rebates (HEAR)

The State Energy Office expects to receive $68 million from the USDOE to provide rebates to low- to moderate-income households for some electrification and appliance efficiency projects available. The HEAR program will include a $14,000 rebate cap per household with additional caps on individual equipment types.

Home Efficiency Rebates (HOMES)

The State Energy Office expects to receive an additional $68 million from the USDOE to provide rebates for energy efficiency retrofits ranging from $2,000 - $4,000 for individual households and up to $400,000 for multi-family buildings. Rebate amounts may depend on the amount of energy savings achieved by the proposed retrofits, and maximum rebate amounts may double for retrofits of low- and moderate-income homes.

Mini-Grants

The State Energy Office awards Mini-Grant funding to support high-impact demonstration projects in the areas of energy efficiency, renewable energy, and clean transportation. Eligible applicants include state agencies, local governments, public colleges/universities/technical colleges, K-12 public schools, and non-profit organizations.

Energy Resilience Grants

Utilizing approximately $575,000 from the USDOE's State Energy Program, the State Energy Office will develop an Energy Resilience Grant program to provide local governments, school districts, and non-profit organizations with funding to install resilience energy technologies at community-serving facilities.

Training for Residential Energy Contractors (TREC)

The State Energy Office expects to receive approximately $2.4 million from the USDOE to train, test, and certify residential energy efficiency and electrification contractors.

TECHNICAL ASSISTANCE

Energy Technical Assistance Program (ETAP)

Through ETAP, the State Energy Office helps public and non-profit organizations identify ways to reduce their energy use and then fund those energy-saving improvements. The free evaluation includes a utility bill data analysis, walk-through assessment, and funding advisement.

Fleet Assessments

The Palmetto Clean Fuels Coalition (PCF), a USDOE Clean Cities Coalition housed within the State Energy Office, offers consultation and technical assistance to fleet operators seeking clean transportation solutions.

Renewable Energy Siting through Technical Engagement and Planning (R-STEP)

The North Carolina Clean Energy Technology Center (NCCETC) received approximately $2 million from the USDOE through the R-STEP program. The State Energy Office partnered with NCCETC in its effort to create an online technical assistance and education hub to respond to specific concerns and needs from communities, local governments, landowners, and developers in North and South Carolina.

EDUCATION & OUTREACH

CURRICULUM

The State Energy Office provides resources for teachers in South Carolina to use to enhance energy-related education materials.

Energy Lesson Plans
The State Energy Office developed ten free energy lesson plans specifically for South Carolina teachers. These lessons align with the 2021 South Carolina Science Standards and indicate the grade level covered by the standard. Lesson topics include renewables, energy conservation, green buildings, energy sources, and transportation.

EV Curriculum
In partnership with the National Energy Foundation's rEV program, the EV Curriculum will be launched in 2025 to educate students on EV technology. Teacher lessons, crafted to instruct students on the advantages of EVs using STEM-based learning approaches, will also be accessible for integration into classroom activities.

DATA HUB

The State Energy Office Data Hub contains data gathered from utilities, the Energy Information Administration, and other organizations pertaining to South Carolina's energy landscape. Topics include natural gas, transportation, electric, renewables, and more. The State Energy Office also partnered with the South Carolina Department of Motor Vehicles to provide South Carolina EV registration data upon request.

ENERGYSAVER.SC.GOV

The Energy Saver Tool is a free, online resource that individuals and businesses in South Carolina can utilize to discover state, federal, utility, and other energy-saving programs.

EV AWARENESS CAMPAIGN

One of the recommendations from the EV Stakeholder Initiative was for the State Energy Office to develop and fund a brand-agnostic EV awareness campaign for the state. The State Energy Office will work with a contractor to conduct market research, craft messaging, and develop an online EV Resource Hub to provide South Carolinians with up-to-date, factual information regarding EVs and EV charging.

MANUFACTURED HOUSING

The State Energy Office manages two energy efficiency programs for manufactured housing. Through the Energy Efficient Manufactured Homes Labeling Program, the State Energy Office provides labels to manufacturers of compliant homes which exempt customers from paying sales tax in excess of $300. Through the Energy Efficient Manufactured Home Incentives Program, the State Energy Office reviews applications for $750 nonrefundable state income tax credits for customers who purchase an ENERGY STAR-certified manufactured home.

HOME ENERGY LABELING

The State Energy Office is developing a home energy labeling framework for the state as a result of recommendations from the Energy Efficiency Roadmap. Residential energy labeling programs produce an assessment of a home's energy performance and compares it to that of other similar homes.

SOLAR.SC.GOV

Solar.sc.gov is an online resource for individuals and businesses in South Carolina interested in learning more about solar energy. The website includes topics such as consumer protections, system selection and installation, and financing.

CLEAN ENERGY WORKFORCE DEVELOPMENT TOOL

The State Energy Office created and maintains the South Carolina Clean Energy Workforce Development Tool to help connect individuals and organizations with the training resources they need to adapt to the rapidly evolving clean energy field. The tool allows users to explore in-person and online training opportunities in numerous clean energy subfields including solar, energy efficiency, and heating, ventilation, air conditioning, and refrigeration (HVAC-R).

PLUGinSC

PLUGinSC is a marketing campaign designed to encourage a unified approach to EV signage based on nationally recognized templates. PLUGinSC provides standardized EV charging station signage, pavement markings, and directional signage to qualifying participants. In addition, PLUGinSC serves as an EV information clearinghouse for best practices in implementation.

TRAININGS

Each year, the State Energy Office offers energy-focused trainings for a variety of audiences. Past training topics included boiler efficiency, HVAC efficiency, solar, energy efficient building management, and resilience. In 2025, the State Energy Office expects to offer the following trainings and courses:

Accredited Commercial Energy Manager (ACEM) Course

The ACEM course was developed by the Association of South Carolina Energy Managers with support from the State Energy Office. This 4.5-day workshop provides energy managers with a thorough overview of the many factors that affect commercial energy consumption and a foundation for identifying energy-saving investment opportunities. This training prepares attendees to perform commercial energy audits and provide energy management services to South Carolina's commercial sector and State of South Carolina governmental facilities.

Coastal Carolina University Solar Course

The State Energy Office will sponsor a Solar Course hosted by Coastal Carolina University which aims to support workforce development surrounding the solar industry. Participants of this course will learn the mechanics, installation, and maintenance of solar photovoltaic (PV) systems. At the conclusion of the course, students will be prepared for a national certification exam.

Energy: Beyond the Outlet Course

The Energy: Beyond the Outlet course is designed to educate the general public about types of energy, how energy is generated, how consumers use energy in their homes, and energy trends over time in South Carolina.

Green Residential Appraiser Training

The State Energy Office will sponsor South Carolina licensed appraisers and real estate agents to participate in a 3-day in-person professional development program, valuation of sustainable buildings, hosted by the South Carolina Chapter of The Appraisal Institute. This program focuses on the basic principles of green buildings, methods for valuing green residential properties, and approaches to value energy produced by solar PV systems.

HVAC Plant Improvement Workshop

The goal of this workshop is to train a range of South Carolina professional such as HVAC operators, technicians, licensed engineers, and registered architects in energy efficiency measures.

Teach-the-Teacher Workshops

With the goal of increasing energy literacy in schools, the Teach-the-Teacher workshops will introduce the State Energy Office's educational lessons to educators across South Carolina and help them incorporate the lessons into their teachings.

PLANNING

2016 State Energy Plan

The State Energy Plan provides a comprehensive blueprint for a reliable, resilient, clean, and affordable energy system for South Carolina residents and businesses. The Energy Plan is designed to maximize reliability, environmental quality, energy conservation, and energy efficiency while minimizing the cost of energy throughout the state. It contains an exhaustive list of cross-cutting energy policy recommendations. Of the list of recommendations, eight “top-tier” recommendations informed various on-going initiatives of the State Energy Office, including the Energy Efficiency Roadmap, and the Electric Vehicle Stakeholder Initiative.

2020 Energy Efficiency Roadmap

The Energy Efficiency Roadmap convened stakeholders from across the state to think collectively about how to increase investment in energy efficiency in South Carolina. Using the energy efficiency-focused recommendations from the 2016 State Energy Plan as a foundation, the objective of the Energy Efficiency Roadmap was to build on the collective priorities and strengths of the state’s energy stakeholders to identify and achieve a shared set of energy efficiency policy goals and inform the state’s energy efficiency strategy.

2022 Electric Vehicle Stakeholder Initiative

The Electric Vehicle Stakeholder Initiative (EV Stakeholder Initiative) facilitated a collaborative statewide discussion to explore opportunities to advance electric vehicle (EV) deployment in South Carolina. The objectives of the EV Stakeholder Initiative were to examine the legislative and regulatory environment surrounding EVs and EV charging station access and adoption, identify challenges and opportunities for EVs and EV charging stations, and develop recommendations surrounding EV penetration and EV charging stations in SC.

2024 State Energy Security Plan

The South Carolina State Energy Security Plan (SESP), prepared by the State Energy Office, describes South Carolina’s energy landscape, people, processes, and strategy to build energy resilience. As outlined in Section 40108 of the federal Infrastructure Investment and Jobs Act, passed and signed into law in November 2021, all states are required to maintain a SESP.

PROGRESS ON THE OPPORTUNITIES AND CHALLENGES

The 2020 Energy Efficiency Roadmap identified 20 recommendations and a path for collaborative work. Many of these recommendations are progressing including activities related to the following:

- The State Energy Office assisted the University of South Carolina to complete a market and feasibility assessment to support the establishment of a Green Bank for South Carolina. The work on a Green Bank continues at a regional level in collaboration with the North Carolina Clean Energy Fund. Visit https://www.nccleanenergyfund.com/careers/

- The State Energy Office, through the procurement process, is working with EarthAdvantage to develop and establish a statewide home energy labeling program in 2025.

- The State Energy Office, with funding from USDOE, is currently collaborating with other state agencies and non-profits to develop and establish a one-stop-shop for low-income residents to apply for weatherization and home rehabilitee services.

The 2022 EV Stakeholder Initiative identified 27 recommendations for a fair, efficient, and cost-effective transition to electrification. Of those recommendations, the State Energy Office committed to initiation of a Statewide EV Awareness Effort aimed at developing and funding a brand-agnostic EV awareness effort for South Carolina. The State Energy Office, using emergency procurement authority granted it by the General Assembly in the last State Appropriations Bill, will soon have a partner to develop and establish a statewide EV Awareness Campaign in late 2025.

While many recommendations in the 2016 State Energy Plan, the 2020 Energy Efficiency Roadmap, and the 2022 EV Stakeholder Initiative had broad stakeholder support, not all of them reflect consensus. Some stakeholder recommendations are only achievable through legislative or regulatory changes. Another challenge to implementation of recommendations is the need to balance environmental quality, energy efficiency, and conservation with the need to minimize the cost of energy for consumers. The federal Infrastructure Investment and Jobs Act and Inflation Reduction Act provide additional funding that helps mitigate challenges of limited resources.

CONCLUSION

This annual State Energy Action Plan is submitted in accordance with SC Code of Laws Section 48-52-430 highlights recent efforts by the State Energy Office pursuant to stakeholder recommendations and provides a framework for activities moving forward. The State Energy Office continues to collaborate, communicate, and cooperate with partners and organizations in South Carolina with the goal of increasing the efficiency of use of all energy sources in South Carolina. The State Energy Office expects to hire a consultant in 2025 to assist in development of a well-balanced energy strategy for South Carolina. The updated State Energy Strategy will provide a factual assessment of South Carolina's current energy landscape and propose pathways for South Carolina to achieve energy policy goals established by State leaders.

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