

# Energy <sup>in</sup> Action

## South Carolina State Energy Plan

OFFICE OF REGULATORY STAFF



# The South Carolina Energy Conservation and Efficiency Act of 1992



- Established the State Energy Office
- Required a State Energy Plan
- Mandated conservation measures in state buildings
- Established minimum residential energy efficiency standards
- Required investor owned utilities to submit IRPs to the PSC
- Required Santee Cooper to submit an IRP to the State Energy Office
- Required the electric cooperatives to report their DSM activities to the State Energy Office
- Directed the PSC to establish demand side management and energy efficiency incentives

# Office of Regulatory Staff Energy Office

## **SECTION 48-52-410. State Energy Office established; purpose.**

“There is established the State Energy Office within the Office of Regulatory Staff which shall serve as the principal energy planning entity for the State. Its primary purpose is to develop and implement a well-balanced energy strategy and to increase the efficiency of use of all energy sources throughout South Carolina through the implementation of the Plan for State Energy Policy.”



Anthony James



Trish Jerman



Allyn Powell



Maeve Mason



Julia Parris



Landon Masters



Conn Fraser



Gene Soult

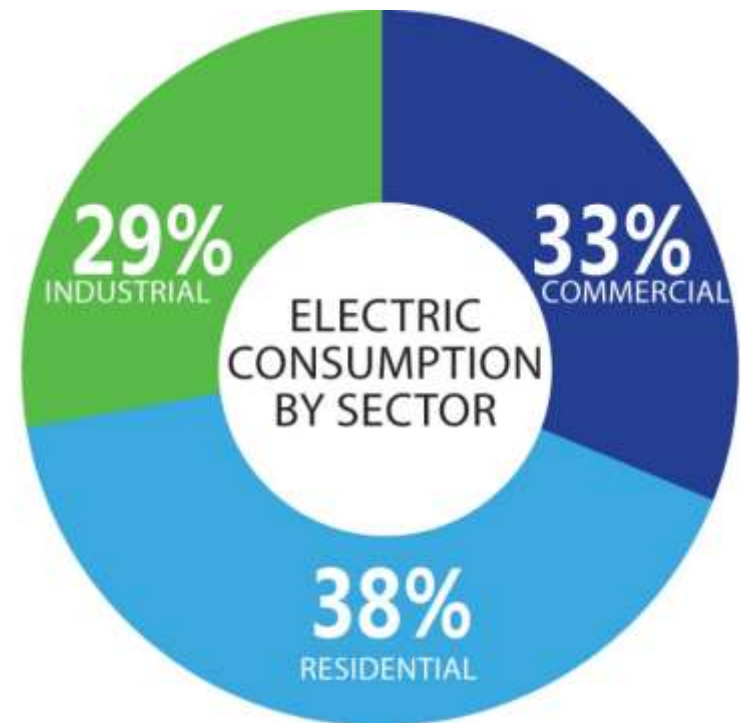


Stacey Washington

# State Energy Plan

## Pursuant to 48-52-210:

“(A) It is the policy of this State to have a comprehensive state energy plan that maximizes to the extent practical environmental quality and energy conservation and efficiency and minimizes the cost of energy throughout the State. To implement this policy there is adopted the Plan for State Energy Policy.”



2015

# Purpose of the State Energy Plan

## Pursuant to 48-52-210:

- Ensure long term access to adequate and reliable energy supplies
- Ensure access to energy supplies at the lowest practical economic cost and environmental impact
- Ensure demand-side options are pursued
- Ensure basic energy needs of all citizens, including low income, are met
- Encourage the development and use of clean energy resources

# Timing of Energy Plan Development

- Government Restructuring
- Clean Power Plan – Energy Advisory Committee
- Energy Advisory Council (2012 Resource Study)
- Increased Support for Renewable Development
- Diverse Generation
- Economic Development



# State Energy Plan Development





# State Energy Plan Development

## Steering Committee

- Conservationists
- Electric Cooperatives
- Investor-owned Utilities
- Large Industrial Companies
- Municipal Systems
- Santee Cooper
- SC Department of Health and Environmental Control
- State Regulation of Public Utilities Review Committee staff

# Phase I: Develop a Baseline

## Determine Starting Point

- Current State of the Environment
- Electric Infrastructure
- Natural Gas Infrastructure
- Transportation Infrastructure
- Energy Use and Resources
- State and Federal Statutes/Regulations
- Economic and Demographic Data

# Phase I: Initial Activities

## January 2016:

- Initial Public Engagement Sessions
- Steering Committee (1st meeting)

## Spring 2016: Phase I (Baseline) plan development

- May/June: Phase I Subcommittee Meetings
- June: Phase I Draft released for public comment

## Summer 2016: Public Engagement Sessions

*June 7: Columbia SC, DHEC*

*July 7: Charleston SC, North Charleston City Hall*

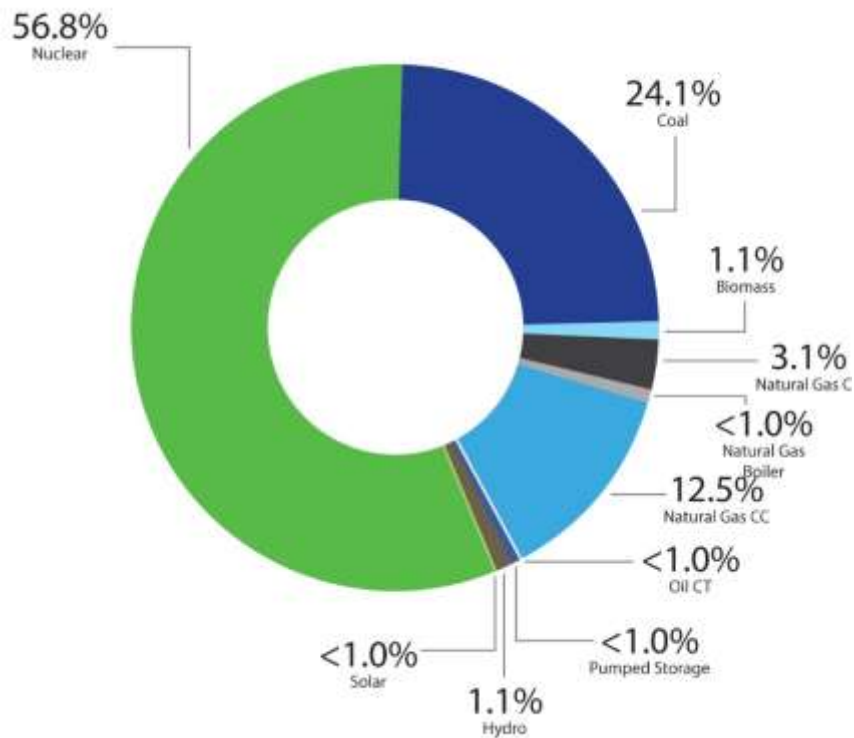
*July 26: Greenville SC, Greenville Hughes Main Library*

*August 4: Florence SC, Drs. Bruce & Lee Foundation Library*

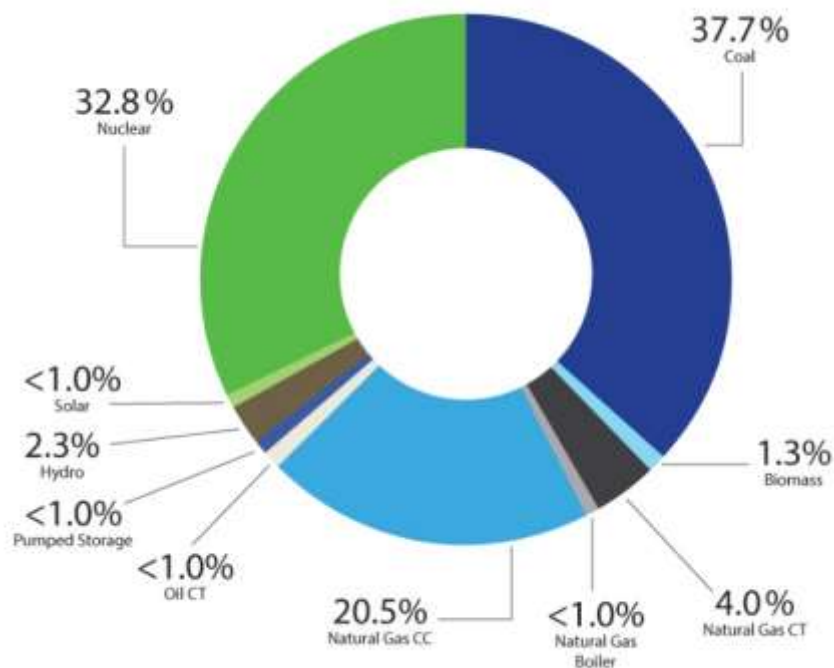
*August 9: Beaufort SC, Technical College of the Lowcountry*

# SC Generation & Allocation

## 2015 Generation

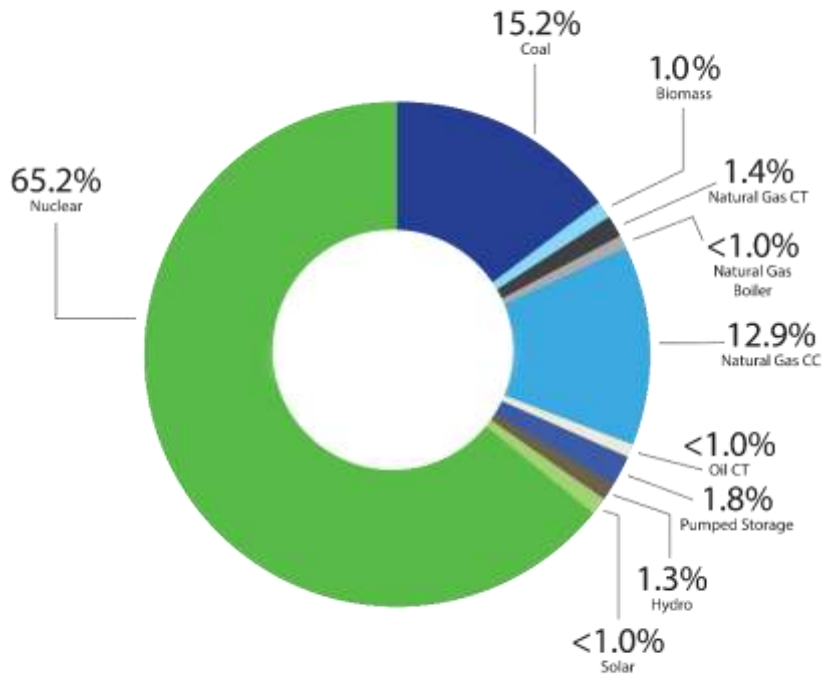


## 2015 Pro Rata Share

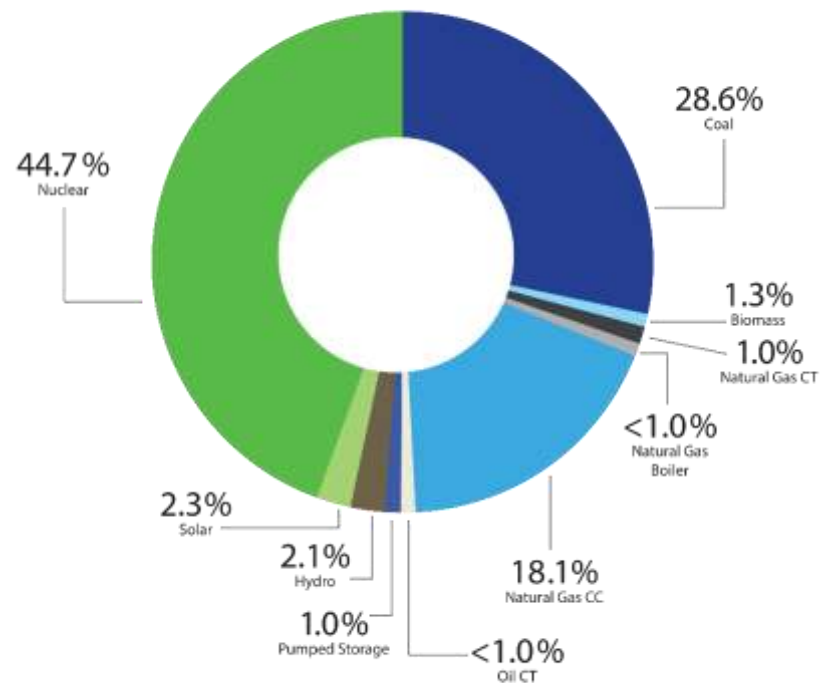


# SC Generation & Allocation

## 2025 Generation



## 2025 Pro Rata Share



# Phase II: Policy Recommendations

## Determine Next Steps: Where we go from here

- Electric and Natural Gas Resource Planning
- Demand Side Management–Demand Response-Energy Efficiency
- Environmental Justice/Economic Development
- Transportation
- State Government Energy Use Policy Review
- Renewables

# Phase I & II: Informed by South Carolinians

**5** public engagement sessions

**3** surveys -**330** responses

**130** professionals

**60** organizations

**45** subcommittee meetings

Over **80**  
recommendations  
were developed.



# Phase II: Policy Recommendations

- Integrated Resource Planning and Opt Out Study
- Natural Gas Infrastructure
- Economic Development
- Bldg Energy Labeling, Appliance Stds, and IECC Codes
- On-Bill Financing Options and Public Benefit Fund and Funding/Tax Credits
- EE in Rental and Public Housing
- Decommissioning Solar Farms, Best Practices, and PV Penetration Study
- Nodes: Alternative Fuel Infrastructure
- Complete Streets/Planning, Transit, and Connectivity
- Lead by Example: State Targets
- EJ Task Force: Assessments, ROW Maintenance, Advisory Panel
- Nuclear Relicensing/Renewals

# Phase III: Implementation & Study Committees

- Integrated Resource Planning and Opt Out Study
- Natural Gas Infrastructure
- Economic Development
- Bldg Energy Labeling, Appliance Stds, and IECC Codes
- On-Bill Financing Options and Public Benefit Fund and Funding/Tax Credits
- EE in Rental and Public Housing
- Decommissioning Solar Farms, Best Practices, and PV Penetration Study
- Nodes: Alternative Fuel Infrastructure
- Complete Streets/Planning, Transit, and Connectivity
- Lead by Example: State Targets
- EJ Task Force: Assessments, ROW Maintenance, Advisory Panel
- Nuclear Relicensing/Renewals



# Integrated Resource Planning

**Challenge:** Ensure that electric utility Integrated Resource Plans clearly demonstrate and reflect access to energy supplies at the lowest practical environmental and economic cost and demand-side options are pursued wherever economically and environmentally practical.

**Approach:** Study Committee to examine costs/benefits that can be achieved by various changes to the process



# Natural Gas Infrastructure

**Challenge:** Ensure that natural gas is a viable energy option for residential, commercial, industrial, and power generation customers across South Carolina and enable the state to continue to attract economic development prospects.

**Approach:** Study Committee to consider issues that prevent access to natural gas



# Building Codes

**Challenge:** Ensure that buildings owned or leased by the state of South Carolina are designed to minimize operational costs for energy. Prevent South Carolina from falling behind other states as energy codes advance.

**Approach:** Task Force to examine adoption of newest efficiency standards (2015 IECC)



# Energy Upgrades

**Challenge:** Develop the necessary funds to advance energy efficiency, renewable energy, and alternative transportation opportunities that support policy goals. Currently, South Carolina lacks a revenue stream to support these efforts.

**Approach:** Study Committee to examine solution to problems with funding energy efficiency (on-bill financing, public benefit funds, low-interest loans) and transportation



## Act 236 – Version 2.0

**Challenge:** Determine the needs of the state in terms of renewable energy in the context of Act 236 and beyond.

**Approach:** Study Committee to consider progress made; program modification required for advanced/integrated grid; opportunities to enhance infrastructure modernization, expansion, and reliability





# Environmental Equity

**Challenge:** Develop ways to coordinate government action to ensure it does not inadvertently affect environmental justice communities because of compounding impacts and/or cumulative effects of various stressors. Multiple agencies may have responsibilities in this arena, with minimal coordination among them.

**Approach:** Establish EJ advisory panel to serve as a “think tank” and resource center



## Lead by Example

**Challenge:** Look for ways to increase the adoption of alternative fuels. Currently, only a small portion of state-owned or leased fleet vehicles are fueled by a Department of Energy established alternative fuel. As a result, South Carolina's fleet lacks diversity, and fuel supply is vulnerable. These limitations compromise fuel efficiency and diversity in transportation.

**Approach:** Conduct a survey and convene a task force to 1) educate 2) identify barriers and 3) develop recommendations/state-wide goals



# State Energy Efficiency

**Challenge:** Pursue developing a policy to approve (qualification-based) selection of firms to perform energy audits. Currently, the process of performing energy audits, as a precursor to state agency energy efficiency retrofits, can be very difficult.

**Approach:** Establish a study committee to consider procedures to simplify the process state agencies must use to acquire the services of an energy auditor.

# Energy <sup>in</sup> Action

**Contact us at:**

*[scenergyplan@regstaff.sc.gov](mailto:scenergyplan@regstaff.sc.gov)*

**ENERGY.SC.GOV/****EnergyPlan**