

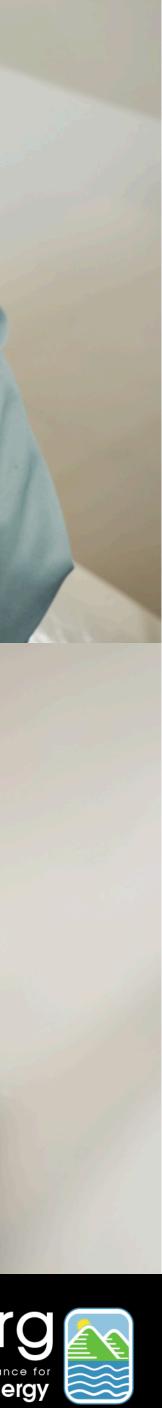
ENERGY EFFICIENCY IN THE SOUTHEAST

THIRD ANNUAL REPORT - JANUARY 2021

Southern Alliance for Clean Energy P.O. Box 1842 | Knoxville, TN 37901 | 865.637.6055

cleanenergy.org

Clean Energy



SACE MISSION AND REPORT AUTHORS

ABOUT SACE

The Southern Alliance for Clean Energy (SACE) is a nonprofit organization that promotes responsible and equitable energy choices to ensure clean, safe, and healthy communities throughout the Southeast. As a leading voice for energy policy in our region, SACE is focused on transforming the way we produce and consume energy in the Southeast.



FOREST BRADLEY-WRIGHT Energy Efficiency Director

Energy Efficiency in the Southeast Annual Report



HEATHER POHNAN Energy Policy Manager





INTRODUCTION

SCOPE

"Energy Efficiency in the Southeast" documents energy efficiency trends at the utility and state levels and identifies policies and practices impacting energy efficiency resource adoption in the Southeast.

METHOD

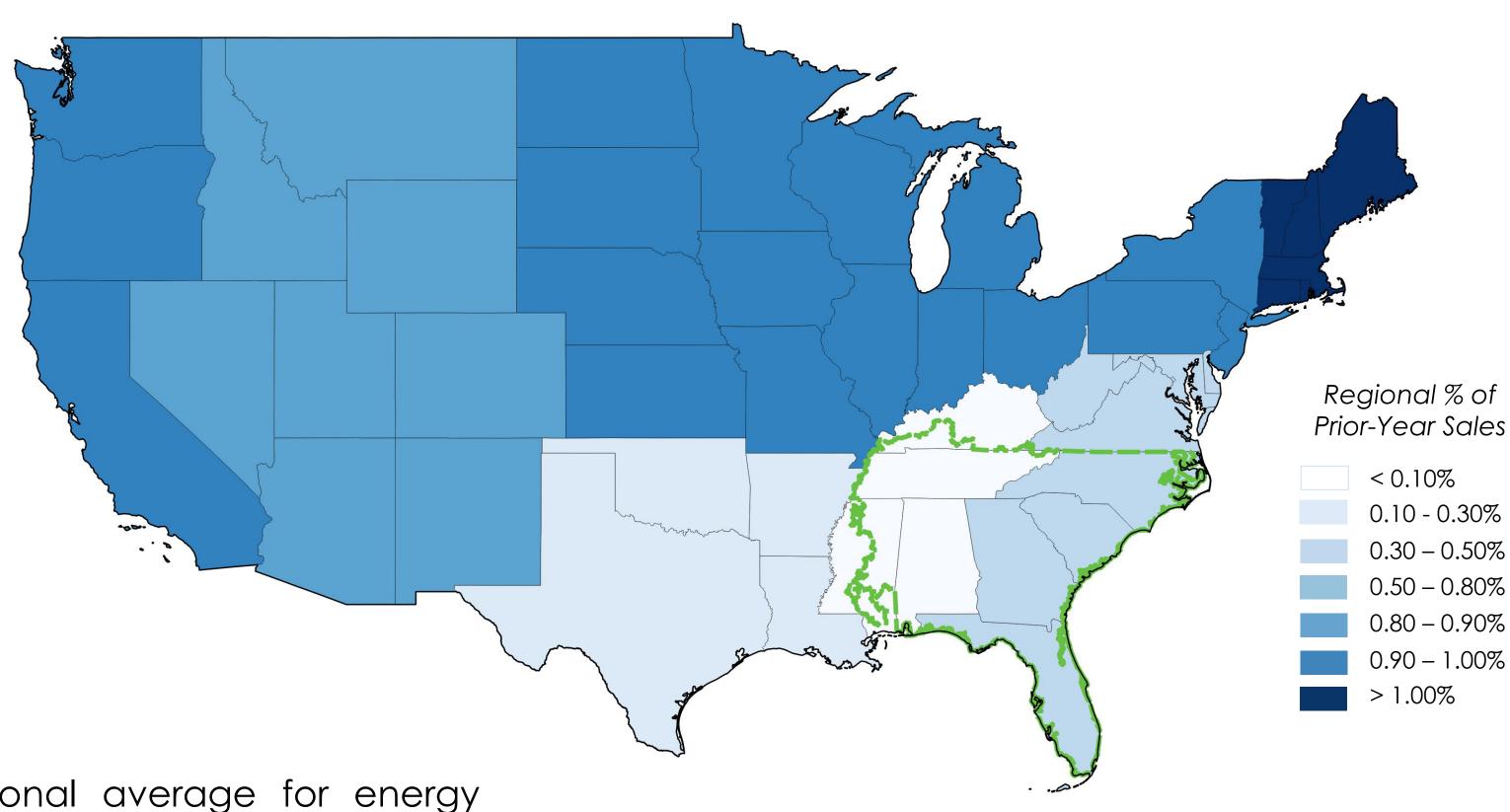
SACE analysis examined nearly 500 Southeast utility's energy efficiency savings as a percentage of prior-year retail sales using data from 2019. For major utilities, savings figures come primarily from annual energy efficiency reports state regulators require utilities to file, allowing for the collection of detailed savings and budget data on specific programs.





PERFORMANCE OF REGIONS

REGION	% of sales
NORTHEAST	2.15%
WEST-PACIFIC	0.87%
MIDWEST	0.97%
WEST-MOUNTAIN	0.87%
SOUTHEAST	0.26%
U.S. TOTAL	0.67%



KEY TAKEAWAYS

Southeast is less than half the national average for energy savings as a percentage of prior-year retail sales.

The Northeast leads with savings that exceed 2%.

THE SOUTHEAST IN U.S. CONTEXT

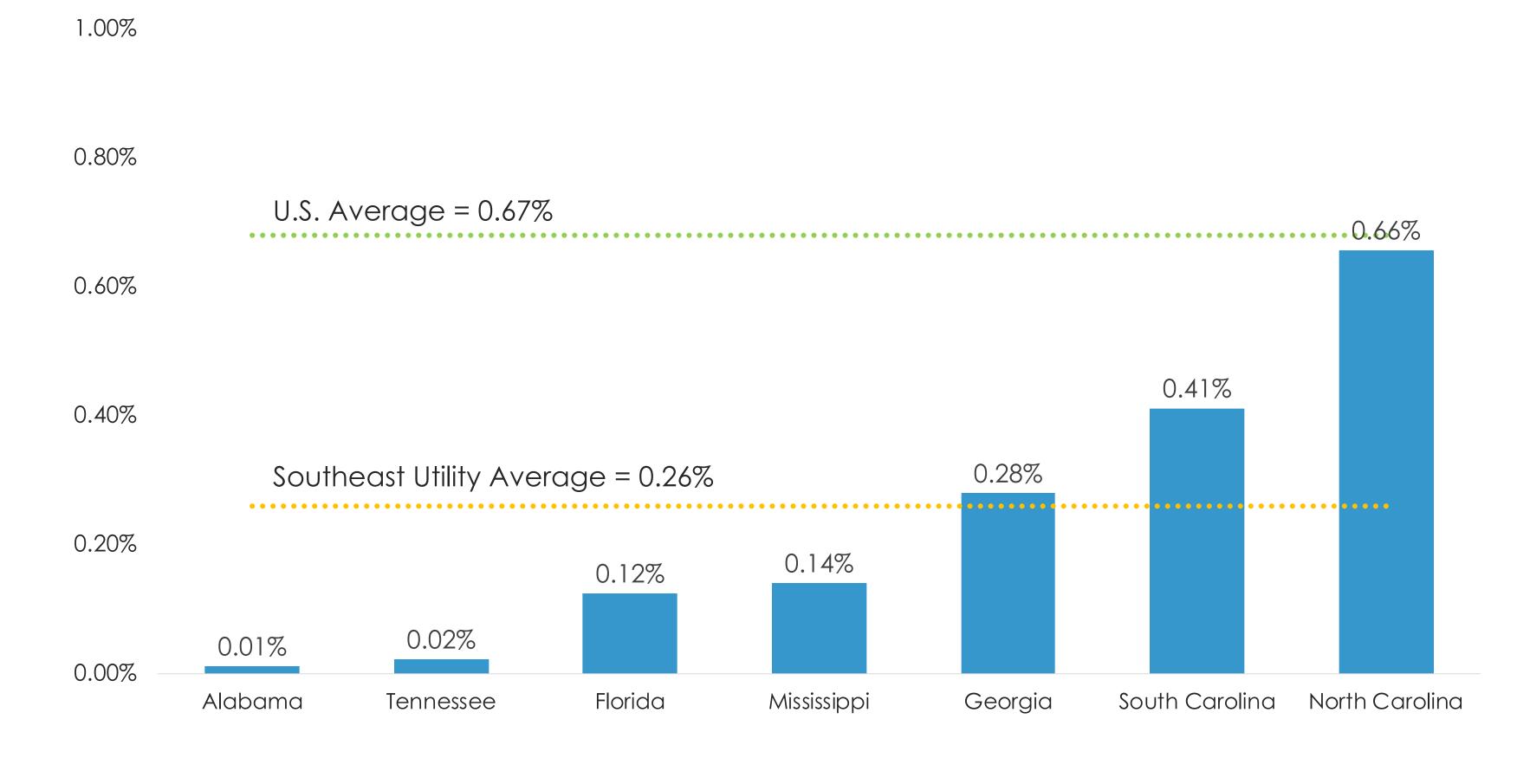
Area outlined in green covered in report.





EFFICIENCY PERFORMANCE OF SOUTHEASTERN STATES

2019 ENERGY SAVINGS AS % OF PRIOR YEAR RETAIL SALES



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KEY TAKEAWAYS

North Carolina is the only Southeast state to approach the national average.

The Carolinas boost the regional average, while Georgia narrowly exceeds it.

Underperforming states bring down the regional average.

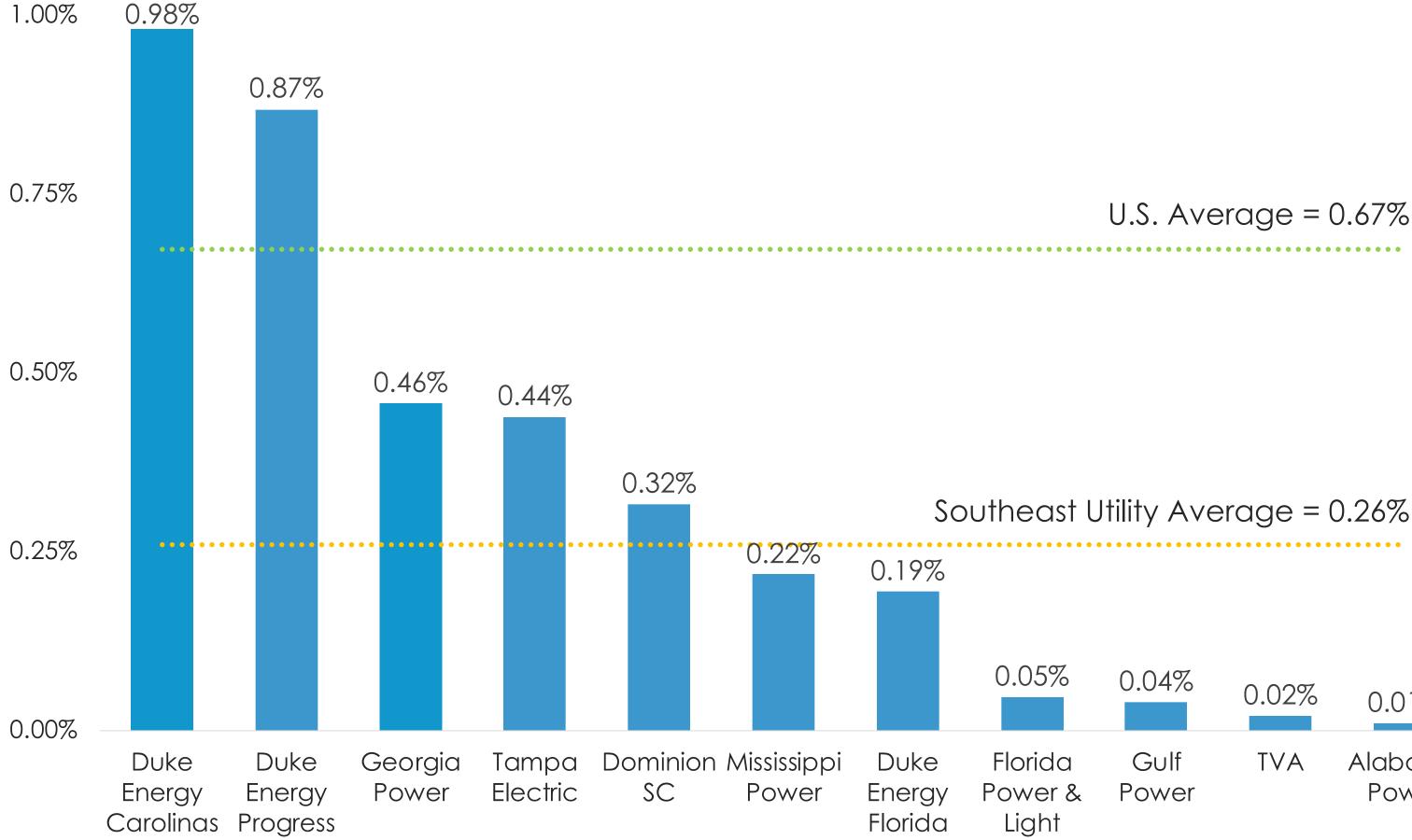






EFFICIENCY PERFORMANCE OF MAJOR SOUTHEASTERN UTILITIES

2019 ENERGY SAVINGS AS % OF PRIOR YEAR RETAIL SALES



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U.S. Average = 0.67%

KEY TAKEAWAYS

Duke Energy Carolinas and Duke Energy Progress lead the region.

Georgia Power, Tampa Electric, and Dominion exceed the regional average but not the national average.

TVA and Florida Power & Light, two of the largest utilities, are driving down the Southeast regional average.

).05%	0.04%	0.02%	0.01%
lorida ower & Light	Gulf Power	TVA	Alabama Power

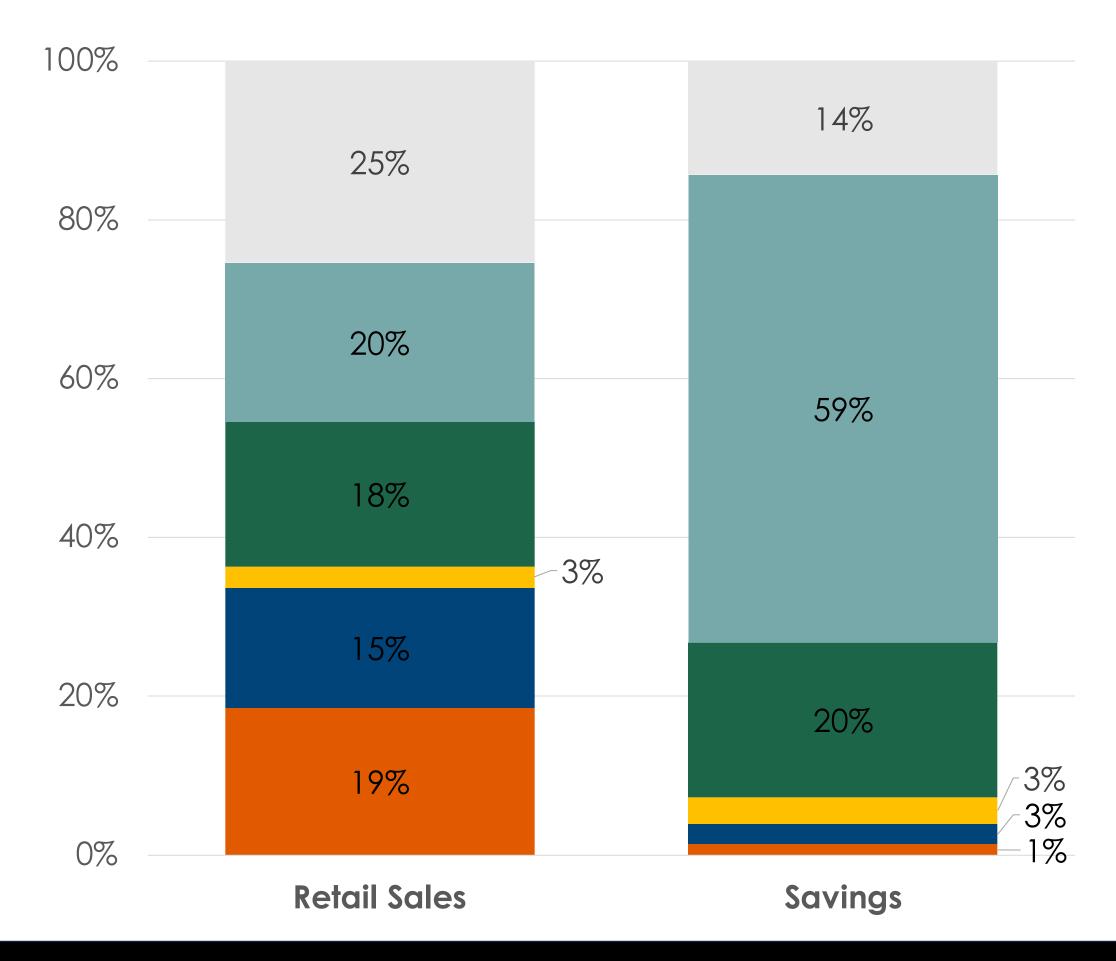






SOUTHEAST UTILITY SYSTEM EFFICIENCY SAVINGS BREAKDOWN

2019 RETAIL SALES AND SAVINGS BY UTILITY GROUP



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KEY TAKEAWAYS

Three utilities deliver ~75% of total savings in the Southeast: Duke Energy Carolinas, Duke Energy Progress, and Georgia Power.

Georgia Power and Dominion South Carolina achieve savings levels roughly equal to their share of regional electricity sales.

TVA and NextEra, owner of FPL and Gulf Power, are seriously underperforming.



Other Utilities

Duke Energy

Southern Co.

Dominion SC

NextEra

TVA

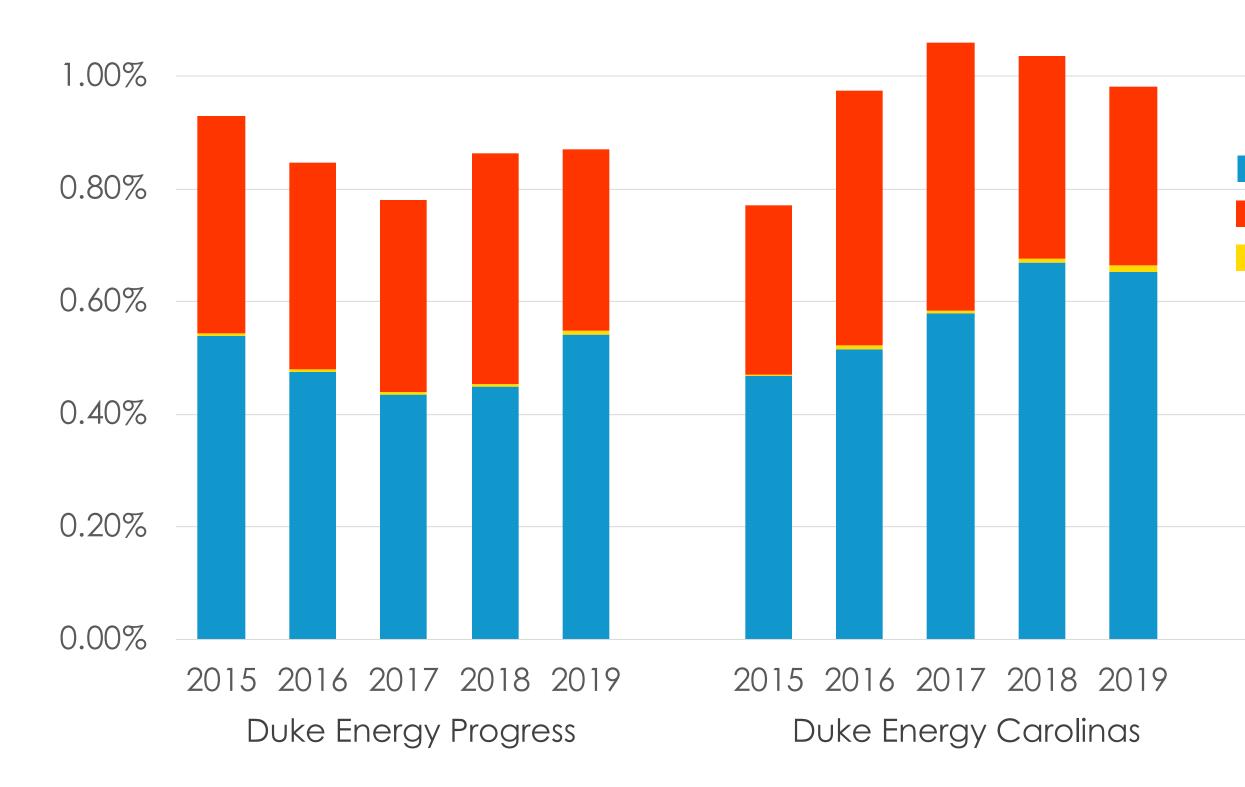






DUKE ENERGY FLEXIBILITY AND EVOLUTION KEY TO SAVINGS PERFORMANCE

ENERGY SAVINGS AS % OF PRIOR YEAR RETAIL SALES



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PROGRAM TYPE

Residential

Commercial & Industrial

Low-Income

KEY TAKEAWAYS

Savings gap persists between Duke utilities in the Carolinas and Florida.

Periodic modification of program offerings is key to achieving high savings.

implemented Duke safety protocols after COVID-19 and is expected to achieve 2020 targets.

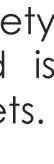
state policies in North New Carolina, South Carolina, Florida may lead to higher savings.











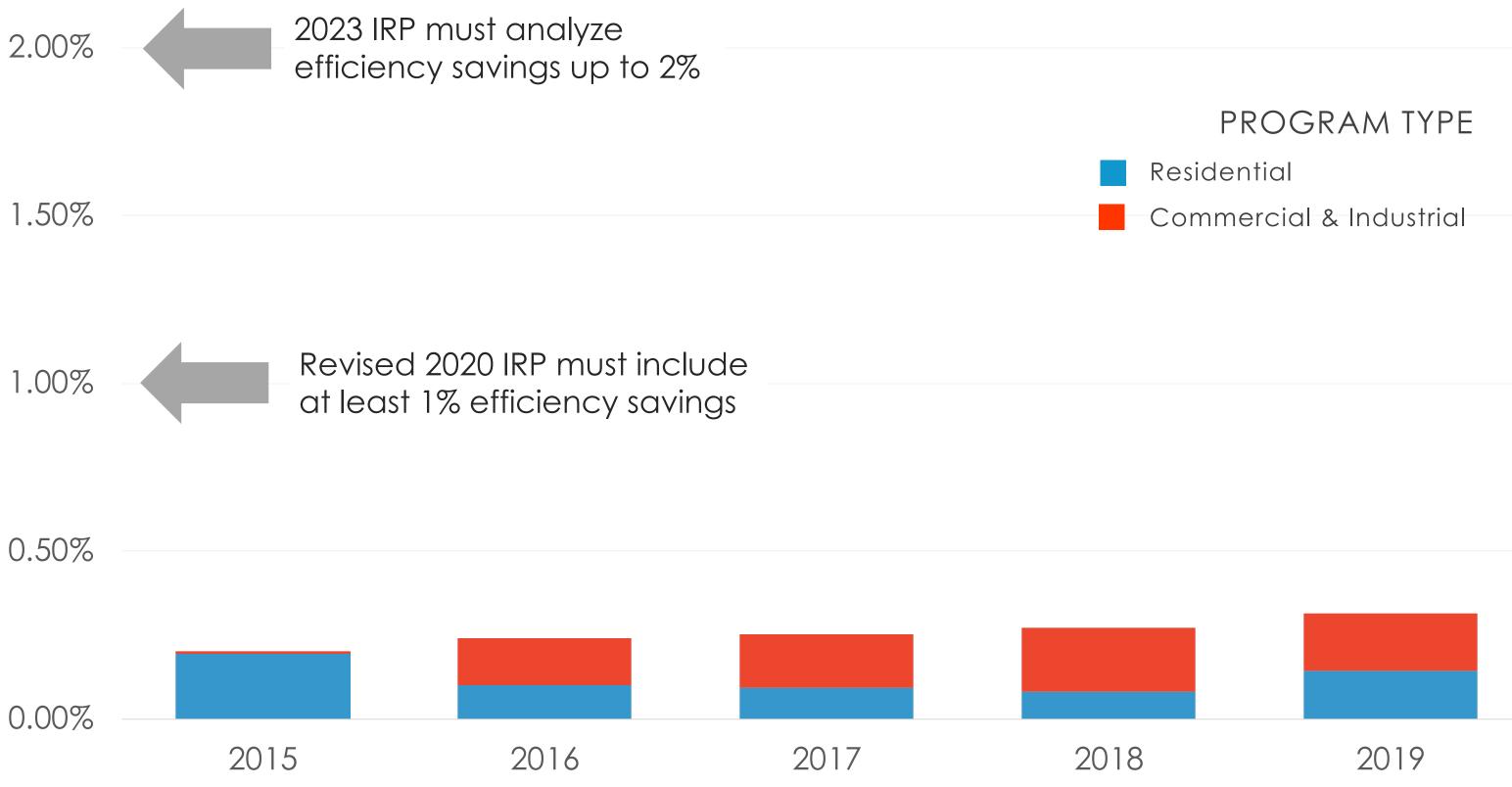






DOMINION SOUTH CAROLINA NEW COMPANY + NEW COMMISSION = NEW EXPECTATIONS

ENERGY SAVINGS AS % OF PRIOR YEAR RETAIL SALES



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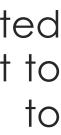


The South Carolina PSC rejected Dominion SC's latest IRP, requiring it to work with advocates, like SACE, to increase efficiency and solar.

Dominion required to refile its IRP while analyzing annual efficiency savings of at least 1%. Its 2023 IRP must analyze efficiency savings up to 2%.

Utility efficiency potential studies do reflect the upper limit not achievable cost-effective savings.







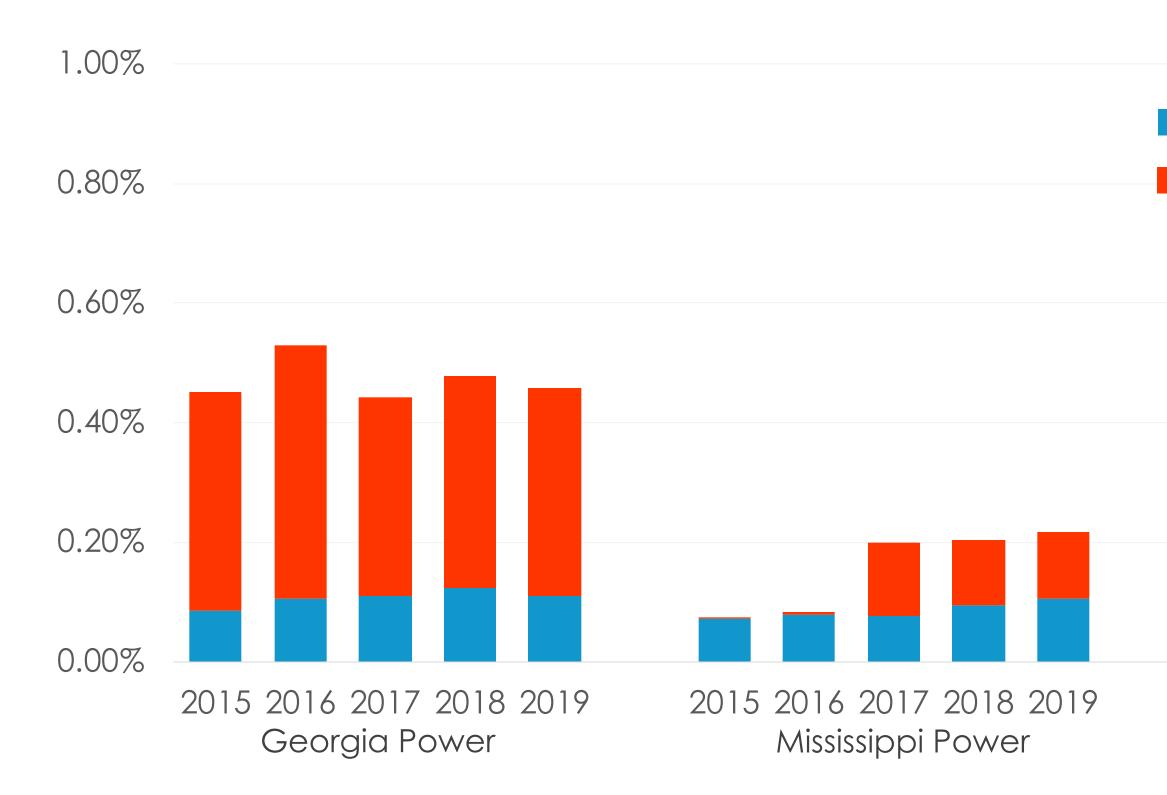






SOUTHERN COMPANY PROGRAM SUSPENSIONS AND ROLLOUT DELAYS

ENERGY SAVINGS AS % OF PRIOR YEAR RETAIL SALES



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KEY TAKEAWAYS

Mississippi Power is the only Southern subsidiary to see growth in savings.

PROGRAM TYPE

Residential

Commercial & Industrial

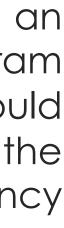
Georgia Power expected to see savings decline in 2020 instead of the required 15% increase.

Georgia Power is launching financing pilot program inclusive called Pay-As-You-Save, which could help customers that struggle with the upfront costs of efficiency improvements.

2015 2016 2017 2018 2019 Alabama Power

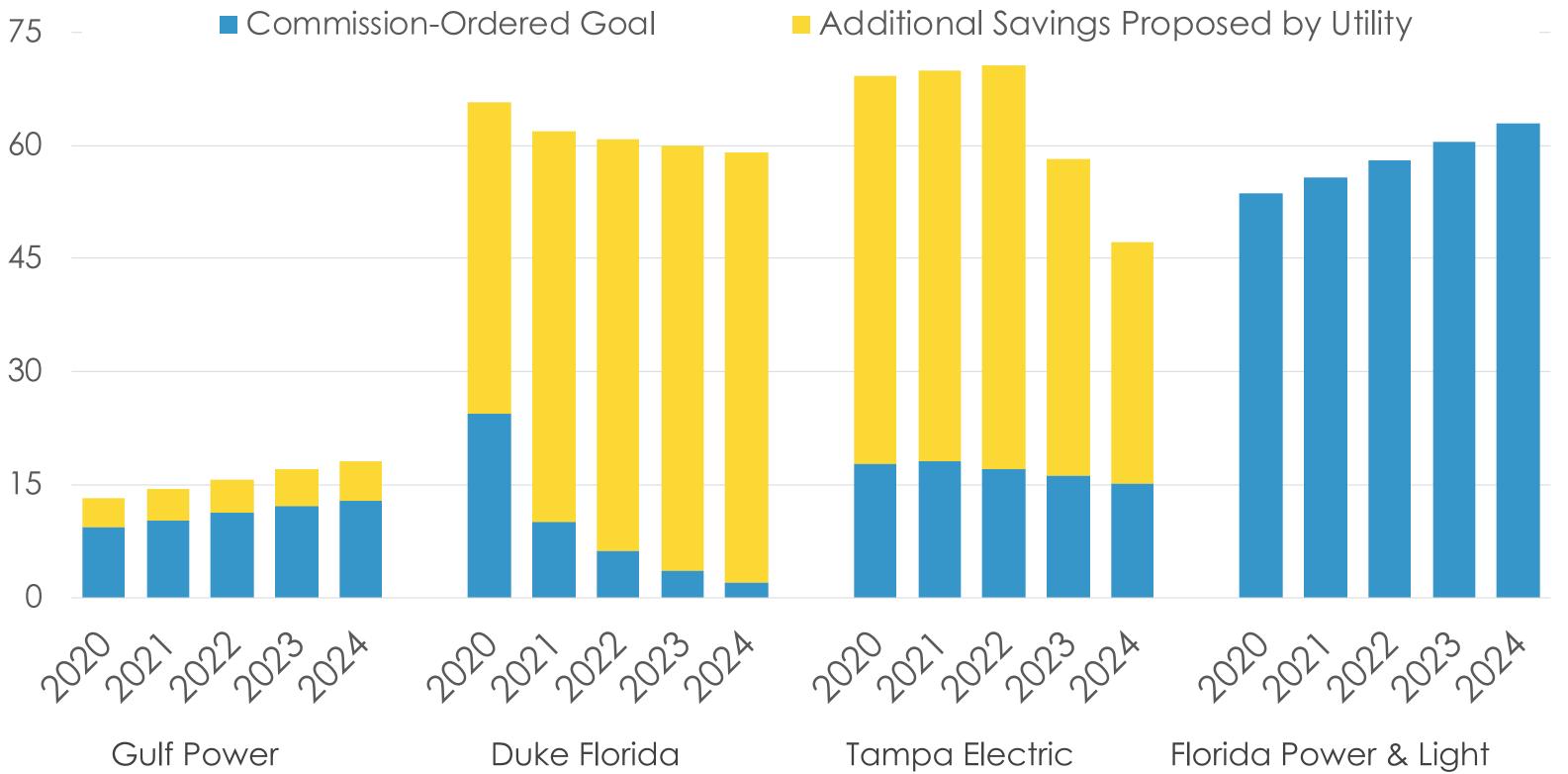






NEXTERA ENERGY THE LEAST THEY COULD DO

UTILITY-PROJECTED ENERGY SAVINGS (GWH)



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0.05%

System Avg.



KEY TAKEAWAYS

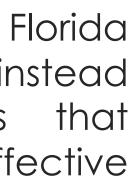
NextEra companies aim to minimally meet Commission-required savings targets.

modernizing FPL opposes efficiency policy, instead energy defending flawed practices that eliminate of proven and cost-effective efficiency measures.

FPL recently took a small step forward, triple planning to low-income participation over the next 5 years.





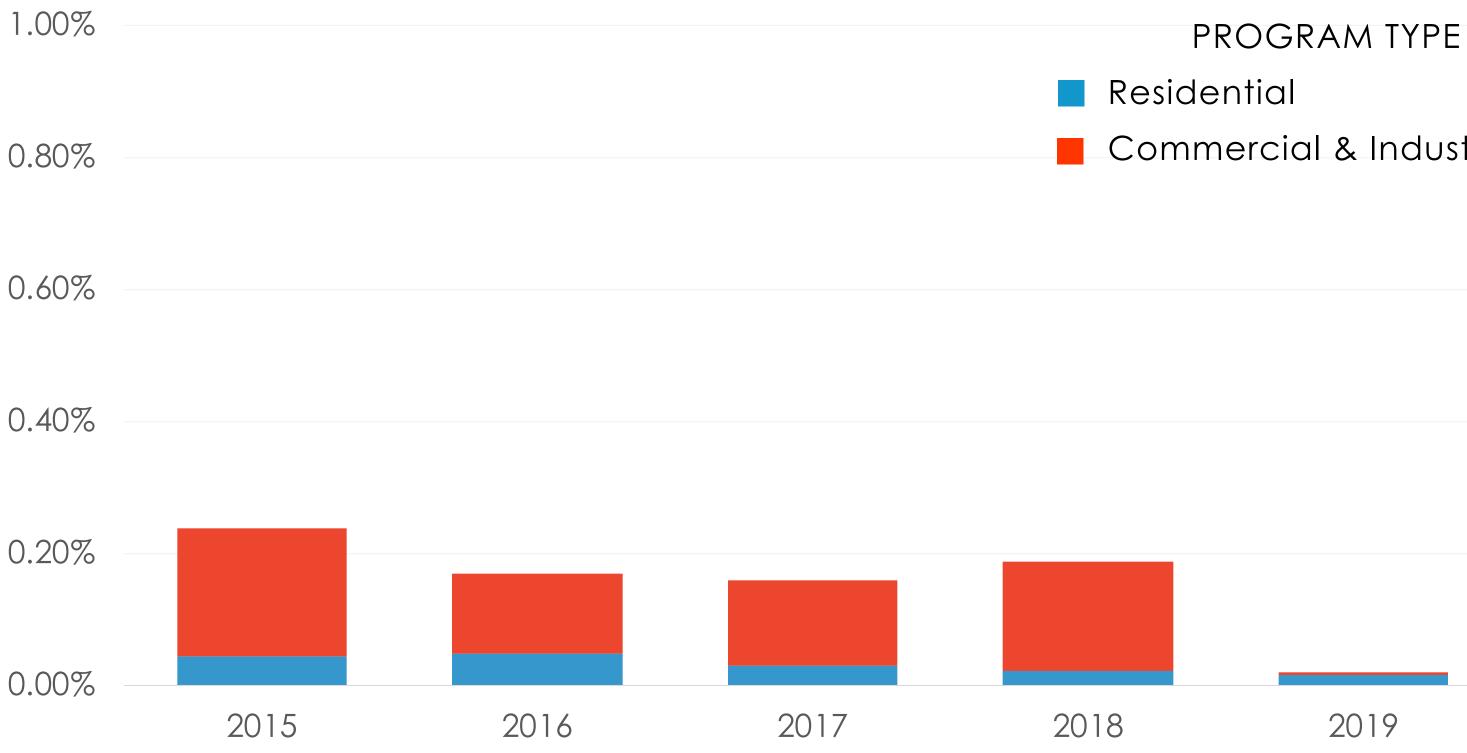






TENNESSEE VALLEY AUTHORITY AN INNOVATION LAB FOR THE FUTURE?

ENERGY SAVINGS AS % OF PRIOR YEAR RETAIL SALES



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- Commercial & Industrial

KEY TAKEAWAYS

The Tennessee Valley Authority, the nation's largest public power utility, has gutted its energy efficiency programs.

TVA's largest utility customer, Memphis Light, Gas & Water, may leave TVA after a study showed it could reduce power costs through alternative suppliers and an increase in efficiency.

TVA could become a clean energy leader as part of the Biden administration's actions on climate change and economic recovery.



COVID-19 CREATES NEW CHALLENGES AND INCREASED NEED FOR EFFICIENCY

EVEN BEFORE THE PANDEMIC, 17% OF HOUSEHOLDS WERE WORRIED ABOUT HOW TO KEEP THE LIGHTS ON AFTER RECEIVING A DISCONNECT NOTICE FROM THEIR UTILITY.

SOURCE: EIA RESIDENTIAL ENERGY CONSUMPTION SURVEY

URGENT		
AST DUE		
SENT	PAST DUE	
URGENT		

- ECONOMIC HARDSHIP MAKES ENERGY BILLS UNAFFORDABLE Disconnection moratoriums provided short-term protection, but do not address underlying energy burden issues.
- Energy efficiency, repayment plans, and some level of debt • forgiveness could prevent higher costs to all customers.

- Duke in the Carolinas implemented safety protocols, resumed efficiency operations, and was on track for 2020 savings targets.
- Georgia Power struggled to adapt its programs, shift funding, and will fall far short of annual savings goals.

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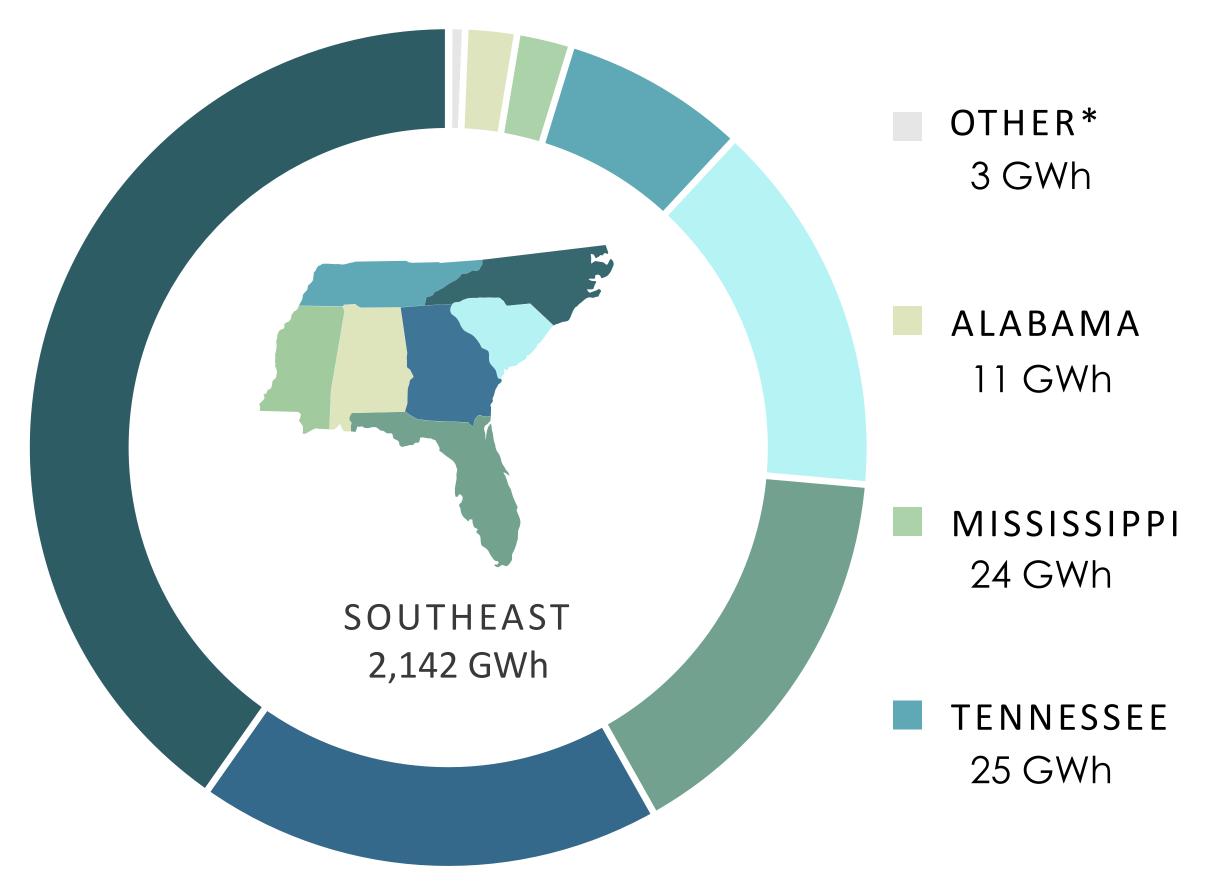
MAJOR DIFFERENCES IN UTILITY RESPONSE

Flexibility, new program strategies, and safety protocols were required to resume efficiency implementation.



SOUTHEASTERN STATES EFFICIENCY SAVINGS BREAKDOWN

KEY TAKEAWAYS North Carolina accounted for 45% of regional savings in 2019.	NORTH CAROLINA 975 GWh
Florida has over 1/3 of the region's population, but captures less savings than South Carolina.	GEORGIA 421 GWh
After TVA slashed its programs, efficiency savings for customers dropped 77% in Alabama and 86% in Tennessee in just one year.	SOUTH CAROLINA 362 GWh
	FLORIDA 320 GWh







FLORIDA A LONG TIME COMING: EFFICIENCY RULE REFORM

KEY TAKEAWAYS

Florida's utilities are divided on efficiency.

Florida's low overall performance is the result of outdo regulatory practices.

The Florida Public Service Commission is revising its Florida Ene Efficiency Conservation Act (FEECA) rules, the first time in 27 ye

The Commission must replace the outdated RIM test and twopayback screen with modern, industry standard practices efficiency in Florida to improve.

FLORIDA ENERGY EFFICIENCY AND CONSERVATION ACT (FEECA) THROUGH THE YEARS

1980	1991/93	2008	2009
Florida legislature enacts	The last time FPSC modified its	Legislature amends FEECA law to emphasize	Despite new law, FPSC takes no action to amend its FEECA
FEECA.	FEECA rules.	pursuit of all cost- effective efficiency.	rules, but substantially increases utility efficiency targets.

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ENERGY SAVED AS A % OF ANNUAL SALES

lated	UTILITY	EFFICIENCY AS % OF PRIOR YEAR SALES
	TAMPA ELECTRIC	0.44 %
	JACKSONVILLE ELECTRIC	0.40 %
nergy ears.	ORLANDO UTILITIES COMMISSION	0.35 %
	SOUTHEAST AVERAGE	0.26 %
-year es for	DUKE ENERGY FLORIDA	0.19 %
	FLORIDA AVERAGE	0.12 %
	FLORIDA POWER & LIGHT	0.05 %
	GULF POWER	0.04 %

2014
Utilities and
FPSC slash
FEECA
savings
targets by
87%.

2019

Utilities propose reducing efficiency savings even further (a 99.5% reduction from 2009 levels) with some proposing goals of zero.

2019/20

FPSC rejects their proposal and calls for rule reform.

2021

Rulemaking underway.

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NORTH CAROLINA EFFICIENCY LEADER IMPLEMENTS CARBON POLICIES

ENERGY SAVED AS A % OF ANNUAL SALES

UTILITY	2019
DUKE ENERGY CAROLINAS	0.98%
DUKE ENERGY PROGRESS	0.87%
NORTH CAROLINA AVERAGE	0.66%
NC ELECTRIC COOPERATIVES	0.31 %
SOUTHEAST AVERAGE	0.26 %
NC MUNICIPAL POWER	0.03 %

Note: The Southeast region for SACE does not include the portion of North Carolina in the PJM territory served by Dominion Energy.

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KEY TAKEAWAYS

Governor Cooper enacted Executive Order 80 in 2018 to reduce state carbon emissions 40% by 2025.

Reaching this target will require action by the legislature, executive branch, Utilities Commission, and the state's power companies.

The most promising strategies for cutting emissions expand renewable energy and energy efficiency.

Stakeholders have made clear that the transition to a clean energy future must include addressing issues of equity.







KEY TAKEAWAYS

The South Carolina legislature unanimously passed clean energy policies as part of the 2019 Energy Freedom Act (EFA) and replaced every member of its Public Service Commission in response to the failure of the VC Summer nuclear project.

The Commission rejected Dominion's IRP for falling short of the clean energy requirements set out in the EFA, making it clear that the EFA's requirements will be enforced.

Santee Cooper could soon be held to the same requirements or become the target of a utility takeover. Either way, it is time for Santee Cooper to fully embrace energy efficiency in its resource planning.





ENERGY SAVED AS A % OF ANNUAL SALES

	UTILITY	2019
e	DUKE ENERGY CAROLINAS	0.98 %
	DUKE ENERGY PROGRESS	0.87 %
	SOUTH CAROLINA AVERAGE	0.41 %
-s —	SOUTHEAST AVERAGE	0.26 %
е	DOMINION ENERGY	0.32 %
	SANTEE COOPER	0.07 %







CONCLUSION RETIRING FOSSIL FUELS FOR A CLEAN AND AFFORDABLE ENERGY FUTURE

EFFICIENCY IS THE CLEAR SOLUTION

As the Southeast retires coal and gas, we must reject the rush to build new fossil gas in favor of expanding investment in efficiency and renewable energy.

The Southeast has among the highest electricity bills in the country, and the lowest investment in energy efficiency. Energy efficiency is a clear and equitable solution.

CLEAN ENERGY LEADERSHIP

A growing number of local communities, Southeastern states, electric utilities, and the new federal administration are committed to prioritizing energy efficiency as a tool to reduce carbon emissions and build a stronger economy.





51 GW OF COAL + 121 GW OF GAS 178 GW TOTAL FOSSIL CAPACITY CURRENTLY OPERATES IN THE SOUTHEAST

ENERGY EFFICIENCY HAS THE POWER TO REPLACE DIRTY FUELS AND DECARBONIZE THE ENERGY SECTOR







ENERGY EFFICIENCY IN THE SOUTHEAST Annual Report, Released January 2021

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