SOUTHERN ALLIANCE FOR CLEAN ENERGY

ENERGY EFFICIENCY IN THE SOUTHEAST

SIXTH EDITION REPORT

cleanenergy.org
Southern Alliance for Clean Energy

JANUARY 2025

ENERGY EFFICIENCY IN THE SOUTHEAST

SIXTH EDITION REPORT

AUTHORS

Heather Pohnan
Senior Energy Policy Manager

CONTRIBUTORS

Eddy Moore
Decarbonization Director

Maggie Shober
Research Director

ABOUT SOUTHERN ALLIANCE FOR CLEAN ENERGY

The Southern Alliance for Clean Energy 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.

Proper citation for this report:

Southern Alliance for Clean Energy (2025).
Energy Efficiency in the Southeast, Sixth Edition

CONTENTS

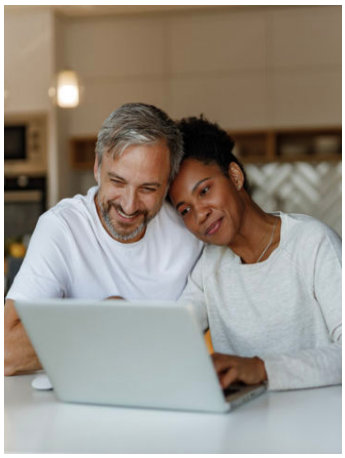
INTRODUCTION 3
EXECUTIVE SUMMARY 4
ENERGY EFFICIENCY AS A RESOURCE 5
REGIONAL TRENDS - STATE RANKINGS 7
UTILITY TRENDS - LARGE UTILITY RANKINGS 9
EARLY IMPACTS OF FEDERAL POLICY 10
UTILITY COMPANY PROFILES 12
STATE PROFILES 18
APPENDICES 24

INTRODUCTION

Energy efficiency is a proven low-cost clean energy resource, but Southeastern utilities and regulators continue to underinvest and deprioritize it. As a result, the region lags behind the rest of the country in utility energy efficiency. The sixth edition of the "Energy Efficiency in the Southeast" report examines the connection between energy efficiency and electric utility resource planning, as well as the status of federal investments in deploying energy efficiency in the region from the Inflation Reduction Act (IRA). Additionally, the report details the slow rebound of utility energy efficiency programs from the COVID-19 pandemic.

Utility energy efficiency portfolios are ranked based on the first-year energy saved reported in 2023 as a percentage of the utility's total amount of electricity sold to customers. Additional policy context is then added along with comparisons to state, regional, and national averages that highlight recent trends. The appendices include data for each of the utilities that fall within the scope of this report, which generally covers electric utilities operating in Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee that are not part of interstate electricity markets.

The purpose of this report is to document current progress and trends at both utility and state levels, as well as identify policies and practices to drive continued energy efficiency in the Southeast.



EXECUTIVE SUMMARY

ENERGY EFFICIENCY IS A RESOURCE TO MEET LOAD GROWTH

Past underutilization of energy efficiency in the Southeast means that utilities in the region still have abundant, low-cost efficiency resources available now. Crucially, this efficiency potential remains untapped at a time when utilities are reporting high anticipated load growth to regulators. Utilities need to use all tools in their tool box to meet this stated load growth, so it is more important now than ever to properly value energy efficiency as a resource and plan to maximize its benefits.

LARGER UTILITIES NOT DELIVERING LARGER SAVINGS

The Southeast is home to some of the largest utility systems in the nation, many of which have been in the spotlight for their commitments to decarbonization. However, when utility energy efficiency performance is measured by savings as a percentage (%) of the amount of electricity sold, many larger utilities fail to deliver proportionally large savings from their energy efficiency portfolio. In particular, the Tennessee Valley Authority (TVA) and Florida Power & Light (FPL) have ranked below the national and regional average every year for the past five years, despite comprising the majority of retail sales in the region. Could new developments such as TVA's latest integrated resource plan (IRP) help remedy this?

FEDERAL FUNDING FOR ENERGY EFFICIENCY IS AT STAKE

The Home Efficiency Rebate (HER) funds made available by the IRA are crucial for providing a pathway to deeper, whole-home energy efficiency measures that may not be covered by tax credits or utility programs alone. However, the impact of the efficiency may be limited since the future of the program remains uncertain due to the incoming Trump administration. Still, as a matter of process, utilities should diligently explore the implications of federal efficiency spending. Ultimately, it is up to regulators to ensure utility resource plans appropriately consider and incorporate the impacts of IRA on utility resource planning.

ENERGY EFFICIENCY SLOW TO REBOUND FROM PANDEMIC

We now have several years of post-pandemic energy efficiency performance to observe. In 2021, a few Southeastern utilities saw partial rebounds in their annual efficiency savings from the previous year, while others continued to slide. In 2022 and 2023, most utilities sustained or slightly improved their previous performances. However, even utilities that mostly sustained their savings during the pandemic are still not at earlier levels of savings from 2019 and earlier. The only notable exception to this is Dominion Energy South Carolina, which had its regulatory oversight significantly altered in 2021.

DUKE ENERGY CONTINUES TO BE LEADER BY DEFAULT

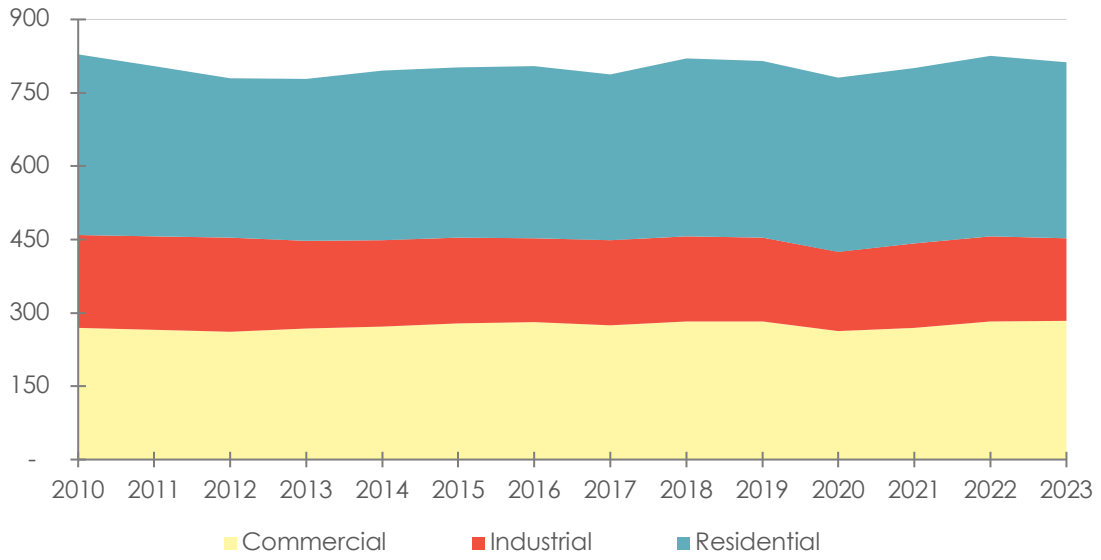
In the absence of other serious energy efficiency efforts in the region, Duke Energy's subsidiaries operating in North and South Carolina have continued to lead the Southeast in rankings of utility energy efficiency program savings. Despite holding up relatively well during the pandemic, they have not yet returned to their previous peaks in 2017-2019 that either neared or exceeded 1.0% of savings.

ENERGY EFFICIENCY AS A RESOURCE

WHY ENERGY EFFICIENCY?

Many electric utilities offer energy efficiency programs, incentives, and rebates to customers because it is often cheaper to invest in helping customers cut energy waste than it is to meet the same energy needs by building new power plants. ***Energy efficiency***, which reduces the total amount of energy needed to produce a service (such as lighting or cooling), is a subset of the broader concept of "***demand-side management***," which also includes programs that shift customer energy usage to less expensive, non-peak times for grid services.

SOUTHEAST ELECTRICITY SALES (GWH) BY CUSTOMER TYPE



WHAT SAVINGS DO ENERGY EFFICIENCY PROGRAMS PRODUCE?

Energy efficiency programs produce energy savings, which in turn can also produce cost savings. A well-designed portfolio of energy efficiency programs should offer opportunities for significant cost savings for residential, commercial, and industrial customers while also scaling energy savings for the utility.

In the ***residential*** sector, the biggest energy use is for home heating and cooling, which is often driven by air leakage in ducts or walls, and by a lack of adequate insulation. Replacing outdated equipment or technology can also produce energy savings, such as a more efficient air conditioner or heat pump. More recently, heat pump water heaters are a major savings opportunity in the residential sector.

In the ***commercial and industrial*** sectors, a wide range of operations offer efficiency opportunities, from HVAC and refrigeration to food service equipment, to industrial processes such as pumping, compressed air systems, and management of fan systems.

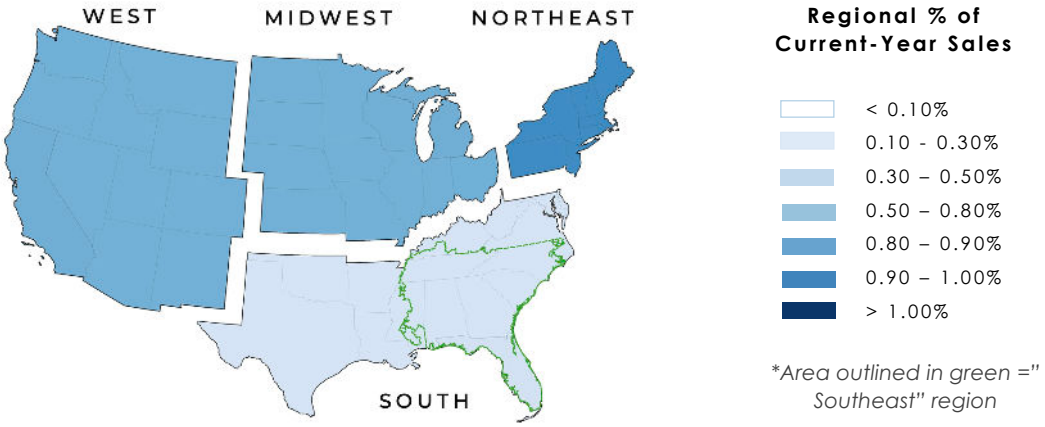
Generally, all of these residential, commercial, and industrial energy uses are becoming gradually more efficient as technology improves. Utility-funded energy efficiency programs incent customers to adopt efficient measures sooner than they would have otherwise, or to adopt more efficient equipment than they would have otherwise purchased. Program managers then measure the difference between baseline energy usage (often defined by federal minimum efficiency standards) and the equipment installed through energy efficiency programs. **These energy savings are then measured in megawatt hours (MWh) and often expressed as a percent (%) of the amount of energy sold by the utility.**

SOUTHEAST ENERGY EFFICIENCY IN NATIONAL CONTEXT

In the Southeast, a utility energy efficiency program that saved an amount of energy equal to 1% of annual sales of electricity is often used as a symbolic benchmark for respectable energy efficiency program performance. Note that utility energy efficiency savings are usually reported on a per-utility basis, with leading utilities saving 2% or more per year. Statewide savings numbers usually are lower because they may include areas with utilities that do not operate energy efficiency programs or underperforming utilities.

ENERGY PERFORMANCE OF U.S. REGIONS IN 2023

REGION	MWH SAVINGS	MWH SALES	PERCENTAGE
South Total	4,866,766	1,859,040,129	0.26%
Midwest Total	5,068,055	853,290,387	0.59%
Northeast Total	3,813,262	460,559,162	0.83%
West Total	5,628,948	701,363,684	0.80%
National Total & Average	19,377,031	3,874,253,362	0.50%
Southeast Utility Systems	**1,700,826**	**821,220,641**	**0.21%**

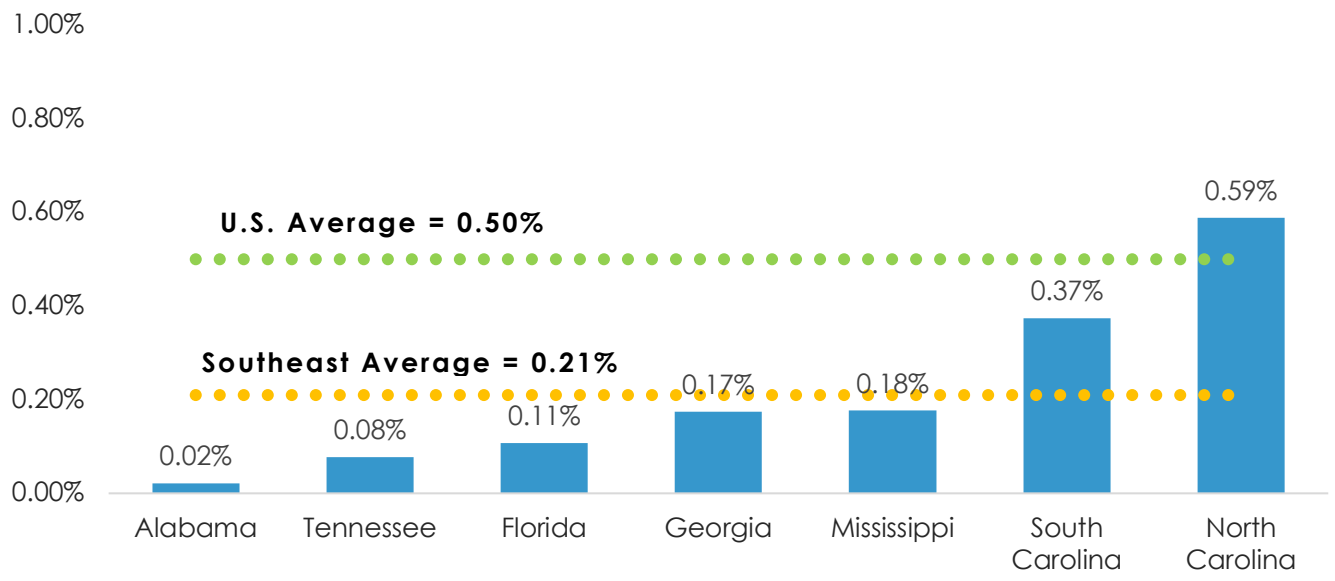


When utility energy efficiency performance is measured by savings as a percentage of the amount of electricity sold, the Southeast is far below other regions and the nation as a whole. While other regions show how much higher efficiency saving performance can be, finding the next batch of efficiency savings can sometimes be more challenging and more expensive than reaching for low-hanging fruits.

By contrast, historic underinvestment in efficiency in the Southeast means that utilities in the region still have abundant, low-cost efficiency resources available now. **Crucially, this efficiency potential remains untapped at a time when utilities are reporting high anticipated load growth. It is more important now than ever to properly value energy efficiency as a resource and plan to maximize its benefits.**

REGIONAL TRENDS – SNAPSHOT OF 2023 ENERGY SAVINGS AND SALES

ENERGY SAVINGS AS A % ELECTRICITY SALES IN 2023

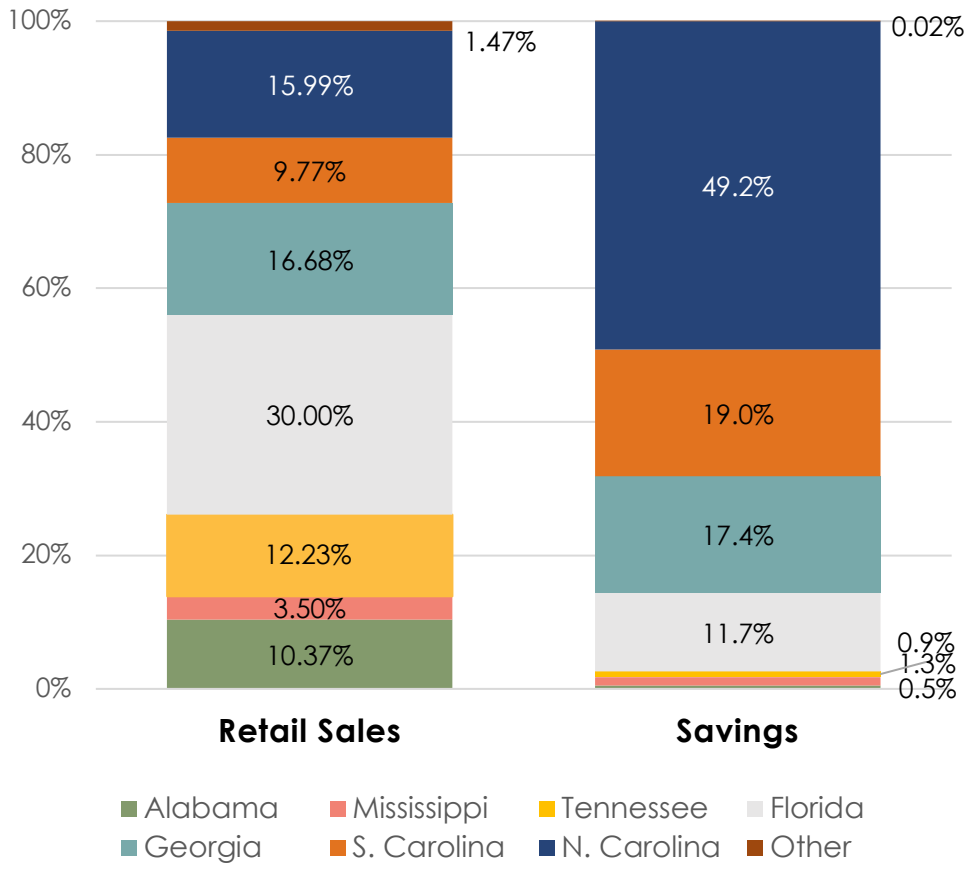


Savings are measured by the difference between baseline energy usage (often defined by federal minimum efficiency standards) and the equipment installed through energy efficiency programs. These energy savings are then measured in megawatt hours (MWh) and often expressed as a percent (%) of the amount of energy sold by the utility.

To provide a normalized comparison among hundreds of different utilities in the Southeast, SACE uses a standard metric that compares the percentage of annual energy saved by utility programs to total retail electricity consumption. Some states use this metric to set energy efficiency portfolio standards, although no states in the Southeast have adopted this policy. While some utilities in the Southeast have seen modest efficiency savings increases over their past performances, each state failed to return to their pre-pandemic levels in 2023. North Carolina remains the only state to exceed the national average, while all others fall short.

Some utilities in the Southeast, like FPL and TVA, have incorrectly argued in the past that building codes and federal standards make utility energy efficiency programs unnecessary. Yet utilities and states with similar or higher codes and standards in other parts of the country have still managed to deliver savings that are many times higher than the Southeast.

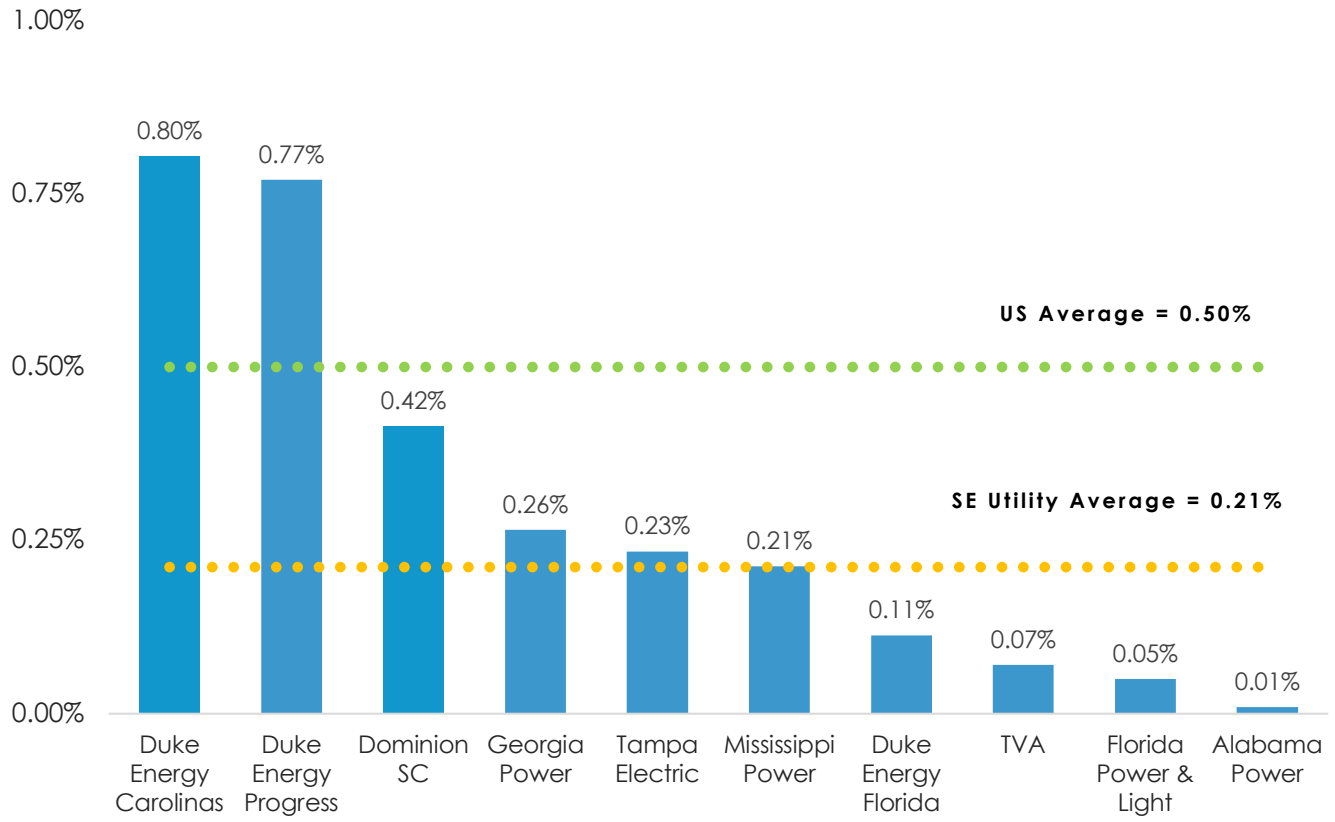
SOUTHEAST STATES SHARE OF REGIONAL 2023 SALES AND SAVINGS



Only two states in the Southeast, North and South Carolina, deliver substantially more efficiency savings relative to their share of total retail electric sales (26% of regional electric sales vs. 68% of efficiency savings). Georgia's share of efficiency savings is slightly more than its share of electric sales. Efficiency savings in Florida, Tennessee, Mississippi, and Alabama are far below their proportionate share, indicating that their customers are being deprived of valuable efficiency resources.

UTILITY TRENDS – LARGE UTILITY RANKINGS

EFFICIENCY PERFORMANCE OF SOUTHEASTERN UTILITIES IN 2023



MAJOR UTILITIES IN THE SOUTHEAST

- **Duke Energy's utilities in North & South Carolina** once again hold up the regional average and are the only major utilities in the region to actually exceed the national average. However, they still have yet to fully rebound to their pre-pandemic levels of approximately 1%.

- **Dominion Energy South Carolina** reported savings that bring it near the regional average, a marked difference when compared to its own performance in previous years or when compared to its peers.

- **Mississippi Power** is notably one of the only utilities to exceed its pre-pandemic levels. In 2023 it was even close to matching the performance of its sister company, **Georgia Power.** Georgia Power reported a slight dip in 2023 and fell to the lowest performance it has seen aside from the pandemic.

- Utility giants **Florida Power & Light (FPL)** and the **Tennessee Valley Authority (TVA)** made slight improvements when compared to previous years. ***But due to the size of each utility system, the relatively low performance of both TVA and FPL signals a significant missed opportunity for the region as a whole.***

EARLY IMPACTS OF FEDERAL POLICY

The federal government took an unprecedented step towards investing in clean energy, including energy efficiency, with the passage of the Inflation Reduction Act (IRA) in 2022. Combining traditional utility energy efficiency programs with the federal spending is a unique chance for the Southeast to make up for lost time by capturing untapped efficiency resources. States and utilities in other regions have already begun to take advantage of the federal spending, but there are mixed results for states in the Southeast thus far.

ENERGY EFFICIENT HOME IMPROVEMENT TAX CREDIT

The new energy efficiency home improvement tax credits can cover the costs of multiple types of improvements, including energy audits and efficient air conditioners and hot water heaters. Nationally, over 2 million households took advantage of these tax credits in tax year 2023, comprising roughly 2% of all returns filed[1]. The most common costs for 2023 returns are insulation or air sealing materials/systems, and exterior windows & skylights, with about 30% of tax credit recipients making those improvements. Within the Southeast, almost 400,000 households claimed the new federal home efficiency credit, saving over $300 million on their taxes, as summarized below, plus even more on energy savings.

ENERGY EFFICIENCY TAX CREDITS BY STATE

STATE	RETURNS FILED	TAX CREDIT AMOUNT
Alabama	30,580	$27,801,000
Florida	154,440	$130,724,000
Georgia	57,970	$51,543,000
Mississippi	12,870	$10,423,000
North Carolina	62,490	$62,963,000
South Carolina	29,270	$27,952,000
Tennessee	37,320	$33,658,000
Southeast Total	**384,940**	**$340,064,000**

HOME EFFICIENCY REBATE PROGRAMS

The Home Efficiency Rebate (HER) funds made available by the IRA are crucial for providing a pathway to deeper, whole-home energy efficiency measures that may not be covered by tax credits or utility programs alone. The purpose of the funds is to help pay for energy efficiency upgrades that will save at least 20% of the home's energy use for single-family and multi-family households.

The actual energy savings and cost savings impact of this program could be limited - the future of the program remains uncertain due to the incoming Trump administration since some states have not yet had their

[1] Internal Revenue Service, Statistics on Income (SOI) Tax Stats – Clean Energy Tax Credit Statistics. Table 3. Form 5695 Residential Energy Credits by State Tax Year 2023.

application approved. Still, as a matter of process, utilities should continue to diligently explore the implications of federal efficiency spending. Ultimately, it is up to regulators to ensure utility resource plans appropriately consider and incorporate the impacts of IRA on utility resource planning.

HOME ENERGY EFFICIENCY REBATE FEDERAL FUNDING

STATE	APPLICATION STATUS	FUNDING ALLOCATED
Alabama	Preparing	$145,495,685
Florida	Approved	$345,975,930
Georgia	Available*	$218,778,746
Mississippi	Submitted	$104,674,339
North Carolina	Approved	$209,014,397
South Carolina	Preparing	$137,168,611
Tennessee	Submitted	$167,098,736
Southeast Home Efficiency Rebate Total		**$1,328,206,444**

Currently, three states have had their application approved[2] and will be offering rebates ranging from 50-100% of project costs for energy efficiency upgrades depending on income level. The first state in the region to launch its efficiency rebate program is Georgia, where a limited pilot administered by the Georgia Environmental Finance Authority (GEFA) will allow the state to test processes and develop the participating contractor network. Program design and planning will continue throughout early 2025, with a full rollout expected by March 31, 2025. North Carolina's application was similarly approved in September 2024, and is expected to launch in early 2025. Florida's application has also been approved, though no further details are available at the time of writing this report.

Tennessee and Mississippi are two states that are in limbo for now. While each state agency has submitted its application and program design blueprints, they sometimes get feedback from the Department of Energy (DOE) and need to submit additional materials. Alabama and South Carolina have not yet submitted an application to receive funds. In general, it is difficult to tell what incentive levels or total project costs will be covered since those specifications are left up to each state and are not finalized until approved.

HOME ELECTRIFICATION AND APPLIANCE REBATES

Although not strictly designed to be an energy efficiency program, most states also plan on offering another separate rebate program that provides discounts for high efficiency home appliances and equipment. Because there is no requirement to model energy savings to receive the rebate, any energy savings that occur would not be attributable to the customer's utility company.

[2] U.S. Department of Energy, Office of State and Community Energy Programs. Home Energy Rebates Progress Tracker Status as of January 9, 2025.

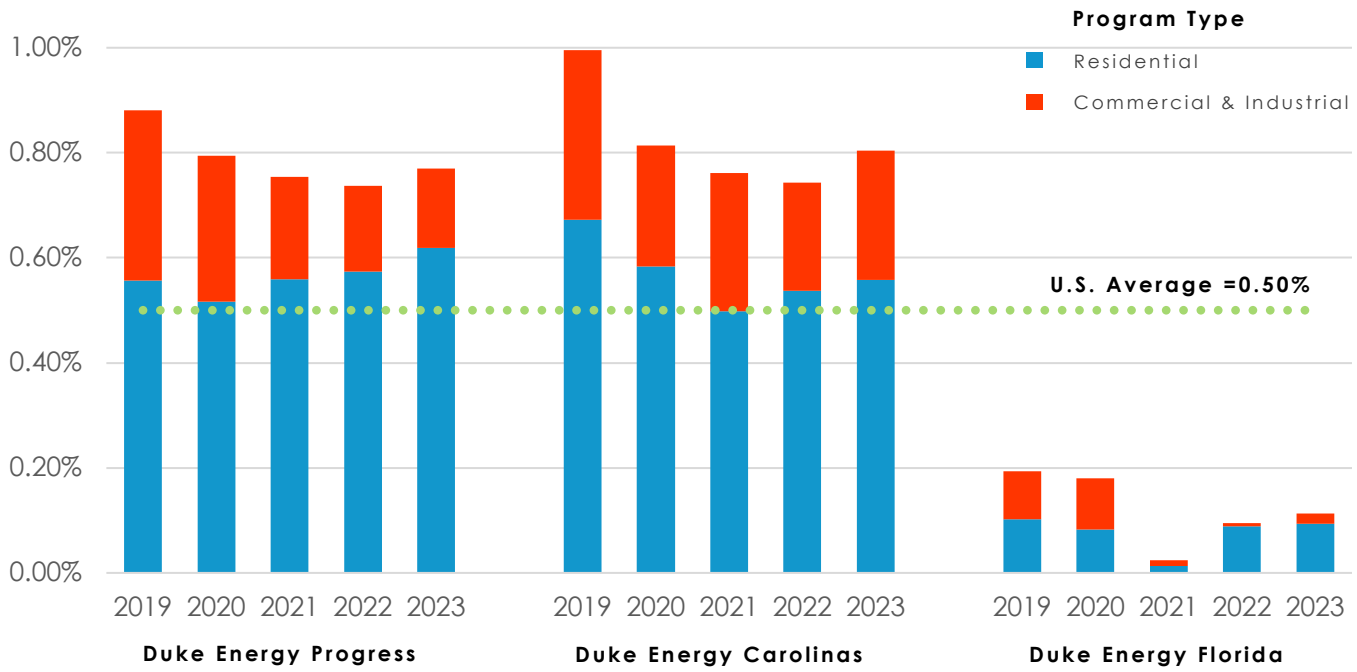
UTILITY COMPANY PROFILES

DUKE ENERGY

Duke Energy is one of the largest electric holding companies in the country. Duke Energy also has utilities in Indiana, Ohio, and Kentucky that are not included here. It operates three electric utilities in the region:

- **Duke Energy Carolinas** serves approximately 2.7 million customers in North and South Carolina.
- **Duke Energy Progress** serves approximately 1.6 million customers in North and South Carolina.
- **Duke Energy Florida** serves approximately 1.8 million customers in Florida.

DUKE ENERGY | ENERGY SAVINGS AS % OF RETAIL ELECTRIC SALES



NORTH CAROLINA SETS THE PACE

Most of Duke's energy efficiency performance in the Southeast is driven by regulatory activity in North Carolina, and to a lesser extent South Carolina. North Carolina is the only state in the Southeast to have formally committed to cutting carbon emissions from its electricity sector through its bipartisan state law that requires the power sector to reduce carbon pollution at least 70% below 2005 levels by 2030.

However, its latest approved plan sadly extends the timeline for carbon reduction past 2035 and continues to exclude significant energy efficiency opportunities in the industrial sector. This is in spite of the fact that Duke is one of many utilities that has reported high anticipated load growth, primarily coming from data centers that would be industrial or commercial customers.

A CHANGE IN UTILITY INCENTIVES TO ACHIEVE ENERGY EFFICIENCY?

Utilities typically cite financial disincentives as a reason not to pursue energy efficiency, because reducing the need for large expenditures like power plants and infrastructure is something that generates returns for shareholders. There are regulatory frameworks that can address this by creating incentives, and in North Carolina the DSM/EE mechanism allows Duke to share in the net benefits of energy efficiency programs, thus

encouraging them to implement and improve such programs despite their limited ability to generate shareholder returns.

In 2023, the North Carolina Utilities Commission (NCUC) ordered Duke to initiate a review of this mechanism in order to encourage further energy efficiency and demand-side management to meet its carbon plan targets. This process yielded many promising changes with the NCUC approving the revisions to the DSM/EE mechanisms in May 2024. Such changes include modifying incentives to encourage Duke's portfolio to programs with longer-lived measures that provide deeper savings, and to increase the percentage of annual electricity saved by residential programs that are derived from income-qualified weatherization programs. There are also tariff changes that expand *how* funds can be used to deliver more energy efficiency upgrades to income-qualified households. These changes are particularly impactful given that North Carolina is one of the few states in the Southeast to already have its application for Inflation Reduction Act (IRA) rebate programs approved, thus the federal investments in income-qualified energy efficiency and electrification have already been secured.

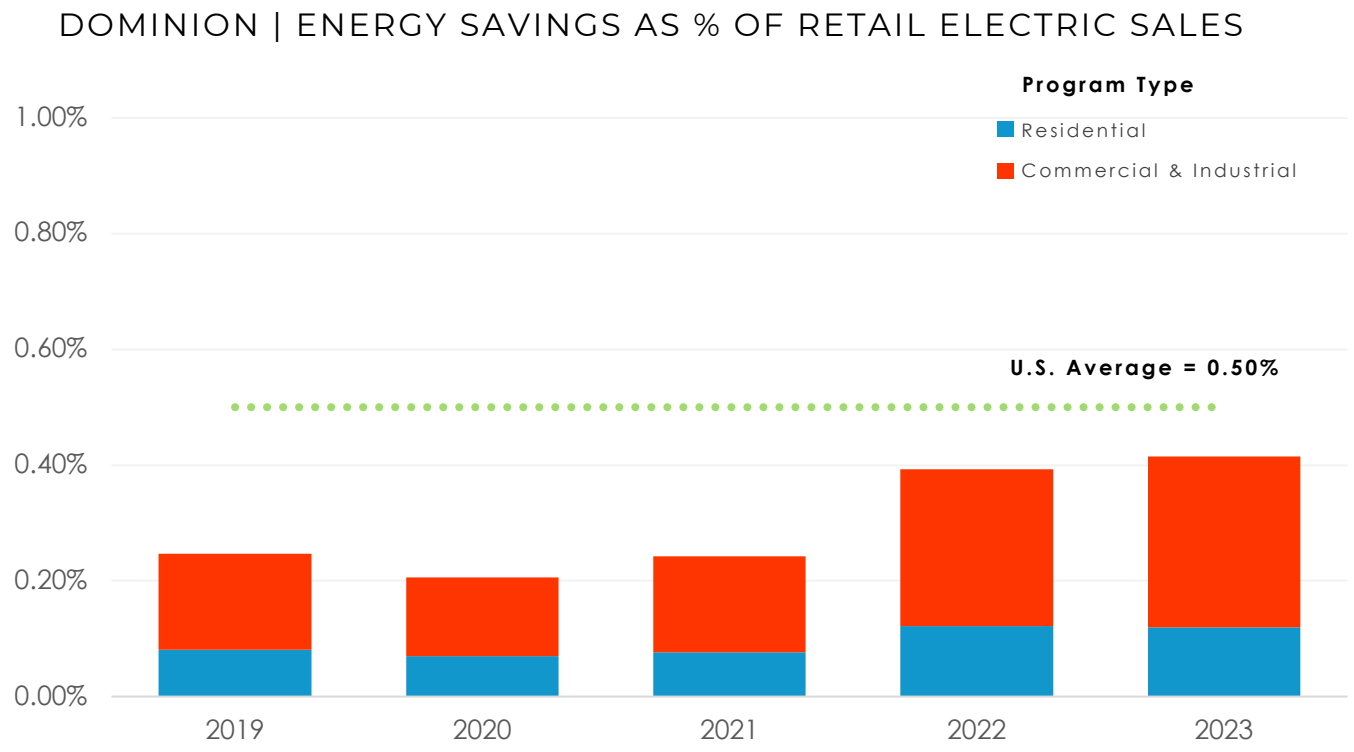
Another aspect of the proposed changes is the revision of the Residential New Construction (RNC) program, which includes modifications to enhance energy efficiency in new homes. Despite some opposition from gas distribution companies, the revised program is designed to improve whole-house building practices and is fuel-agnostic, meaning it does not mandate a switch to electric appliances. These efforts are especially crucial as delays in updating the state's Energy Conservation Code have resulted in setbacks to improving energy efficiency standards for new residential buildings, making the RNC program even more vital for reducing energy waste in new construction. However, since these changes won't go into effect until 2025, it will take time for any increase in energy savings to appear in reporting.

DUKE DIVIDE

Duke Energy's Florida subsidiary continues to trail behind its sister companies in the Carolinas. This is largely due to the differing regulatory environments. In Florida, the Florida Energy Efficiency Conservation Act (FEECA) drives utility energy efficiency savings targets since the state lacks a robust IRP process. Unfortunately, it has only received minor updates since it was initially enacted in 1980, and remains one of the only policies in the state that requires utilities to consider energy efficiency. Plus, the energy efficiency that is included in Florida's planning process equivalent, a Ten-Year Site Plan (TYSP), is often among the lowest in the nation for major electric utilities, and the TYSP process does not include analysis to determine whether higher levels of utility investment in energy efficiency would reduce total utility system costs for customers.

DOMINION ENERGY SOUTH CAROLINA

Dominion Energy operates electric utilities in Virginia and the Carolinas, but only the South Carolina utility is within the geographic region of this study. **Dominion Energy South Carolina** serves 771,620 customers. For years, Dominion has set only modest efficiency savings goals for itself, and yet it has still consistently fallen short of attaining them.



The divergence between the utility's efficiency savings forecast and its actual savings performance was previously raised before the South Carolina Public Service Commission by the Office of Regulatory Staff, who noted the problem it creates for the utility's load forecast during resource planning. In response, the Commission ordered the utility to better align its efficiency savings and load forecast, but unfortunately Dominion used this order not as a nudge to find solutions to actually achieve its savings targets, but instead as justification for lowering its savings goals going into the 2023 IRP. While Dominion has continued to argue that it can only help its customers achieve very modest energy efficiency savings levels, it has agreed in litigated proceedings to incremental improvements.

Also, as part of a settlement of Dominion's 2021 rate case, it also had major energy efficiency implications. In settlement negotiations, Dominion committed $15 million of shareholder funds for a new deep efficiency retrofit program for low-income customers. Dominion decided to use those funds for home repairs to enable federal Weatherization Assistance Program (WAP) grantees to weatherize more homes. More recently, in a subsequent rate case, Dominion agreed to implement a low-income energy efficiency pilot similar to the one being implemented by Duke.

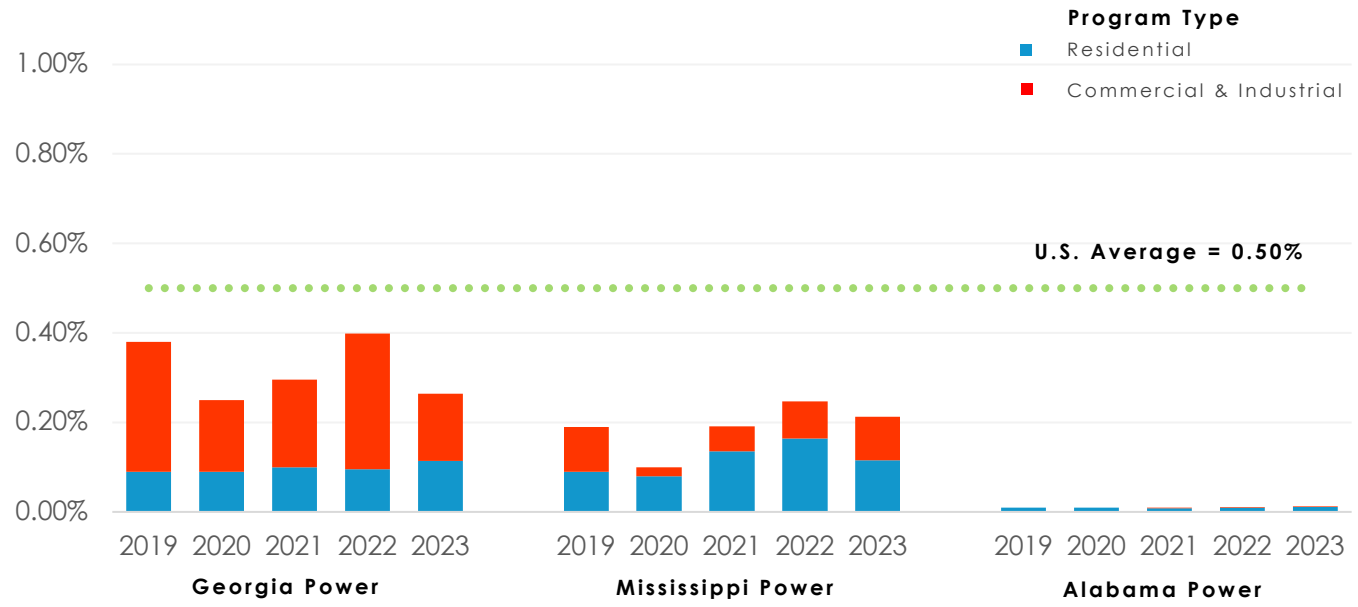
Overall, Dominion has gradually committed to small expansion in residential energy efficiency programming while maintaining a low level of overall program energy efficiency savings. Like Duke, Dominion's industrial efficiency offerings are sharply limited by an "opt out" policy that exempts much of the industrial load from utility-funded efficiency efforts. However, this may change in the future as the Consumer Advocate office recently requested Dominion to re-examine the order that allows industrial opt-outs.

SOUTHERN COMPANY

Southern Company has three electric utility subsidiaries, all within the geographic scope of the Southeast. Historically, there have been big differences in energy efficiency policies and the company's utility efficiency savings performance in these states.

- **Alabama Power** serves approximately 1.5 million homes, businesses, and industries in Alabama.
- **Georgia Power** serves approximately 2.6 million customers across Georgia.
- **Mississippi Power** serves approximately 190,000 customers in Mississippi.

SOUTHERN CO. | ENERGY SAVINGS AS % OF RETAIL ELECTRIC SALES



GEORGIA COMMISSION ORDERS HIGHER EFFICIENCY SAVINGS - AGAIN

Georgia Power has been ordered to increase its efficiency savings multiple times, yet there has been little movement in its performance. In both the 2019 and 2022 IRP proceedings, the PSC issued final orders that directed Georgia Power to increase their savings targets. Most recently as part of a settlement agreement following the construction of Plant Vogtle, Georgia Power agreed to a target of 0.75% energy efficiency savings, higher than it's been in years. Will this agreement be the one that finally sticks?

EFFICIENCY TO GO HEAD-TO-HEAD WITH POWER GENERATION

Georgia Power unexpectedly filed an updated IRP in 2023 outside its regular schedule due to unanticipated load growth, but it did not make substantial alterations to its treatment of energy efficiency yet. In the upcoming full IRP expected to be filed in late January 2025, demand side resources like energy efficiency will compete head-to-head against traditional power plants.

MISSISSIPPI POWER EFFICIENCY EXPANSION

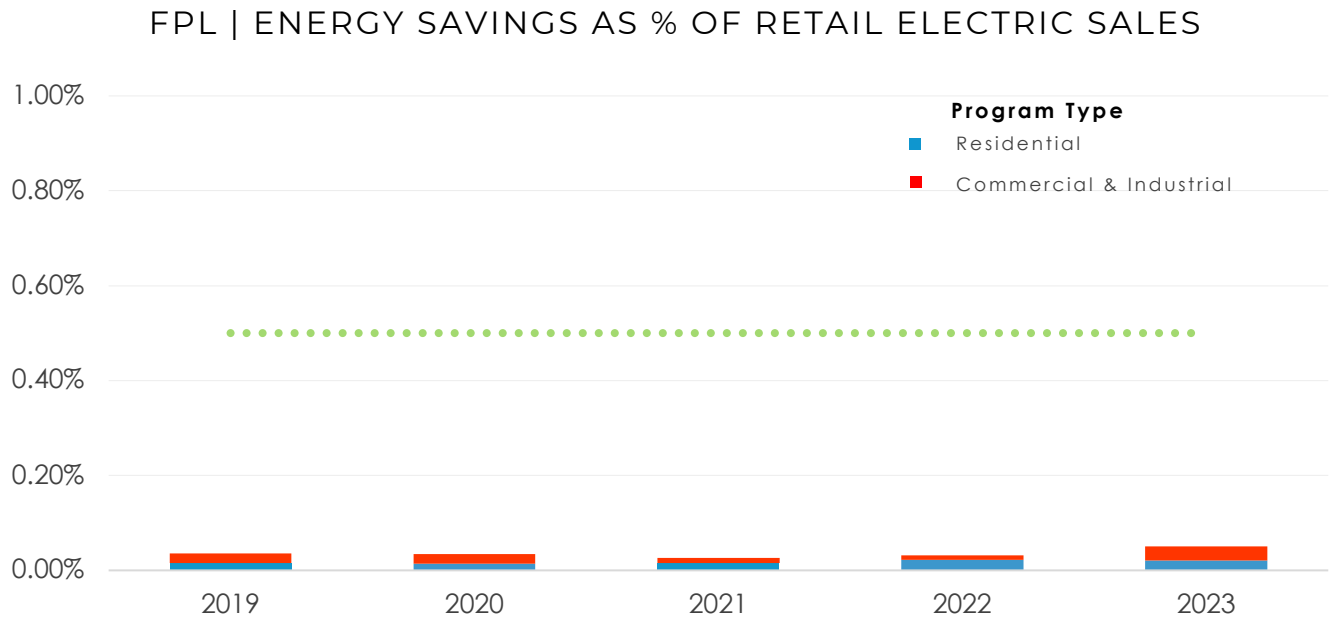
Mississippi Power developed a 7-year plan that is projected to double its annual efficiency savings to about 0.5% by 2028. However, it still has quite a way to go to attain this goal, especially after citing federal efficiency standards and labors shortages as potential barriers in its latest IRP. Even if successful it will still trail behind most major utilities, but it is a step in the right direction.

ALABAMA POWER ENERGY EFFICIENCY REMAINS LOW

The efficiency savings that Alabama Power does have come from the commercial and industrial sector. It is designed to assist with system load shape management, and it has allowed for the deferral of 1,102 MW of supply-side resource capacity in the winter.

FLORIDA POWER & LIGHT

Florida Power & Light (FPL) is a subsidiary of NextEra Energy. FPL serves more than 5.6 million customers in southern and eastern Florida. FPL generates over half of all electric sales in Florida, so its decisions surrounding energy efficiency have enormous repercussions for the entire state, and even the entire region. Unfortunately, FPL has consistently resisted expanding energy saving programs - both as a matter of policy and as a matter of company practice.



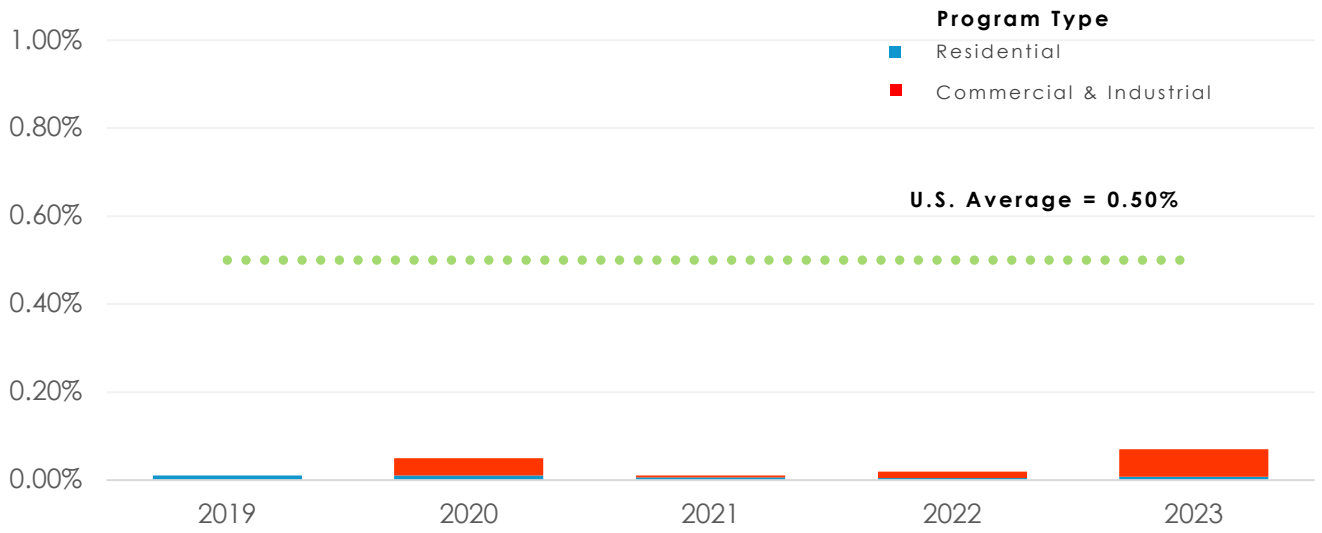
FPL's underperformance in energy efficiency risks undermining the company's decarbonization goals. In June 2022, FPL's parent company, NextEra, announced a commitment to achieve "Real Zero" carbon emissions by 2045, and distinguished its intentions from those of other utilities that rely on buying carbon offsets to justify continuing to use fossil fuels to generate power. While it cites solar, battery storage, green hydrogen, and other renewable sources as ways to achieve its goal, energy efficiency appears to still be missing from its decarbonization strategy.

One of the outcomes of the latest FEECA cycle was the expansion of Florida Power & Light's low-income energy efficiency program, which will now reach an additional 6,000 homes a year, increasing to 17,000 participants' total. This is a promising development that will bring long-lasting savings to FPL's portfolio. Currently, a lot of savings come from FPL's business lighting program, which has a short measure life that does not provide savings over a long period of time.

TENNESSEE VALLEY AUTHORITY

Federally-owned **Tennessee Valley Authority** (TVA) serves approximately 4.9 million customers in Tennessee, Alabama, Georgia, Kentucky, Mississippi, North Carolina, and Virginia. TVA once sought to be a leader on energy efficiency in resource planning, but its actions never lived up to its plans, and TVA's previous IRP essentially eliminated efficiency as a resource.

TVA | ENERGY SAVINGS AS % OF RETAIL ELECTRIC SALES



Based on SACE's estimates, TVA is planning to achieve first-year programmatic energy efficiency savings that are in line with roughly 0.20 – 0.50% of retail sales within the next several years depending on the final scenario selected in its latest IRP. The lower end may pale in comparison to some of the other benchmarks in this report but it is still notable that **if TVA were to achieve any energy efficiency performance within this range, it would represent a significant step forward for the region.**

In contrast, in past IRPs, TVA has modeled bundles of energy efficiency programs alongside supply-side resources. In its 2024 draft IRP, TVA again modeled energy efficiency programs as selectable resources, and also included two levels of promoting energy efficiency above the base for select strategies, which each required the model to select a certain amount of energy efficiency. Energy efficiency resources, however, were treated differently from supply-side resources (power plants) in TVA's modeling, because the model was not allowed to freely select energy efficiency program funding levels based upon the least cost measures to meet its full load. Thus, while the draft IRP seems to indicate that TVA does not *intend* to go back to doing essentially zero energy efficiency, there are still many remaining questions about whether and how TVA plans to sustain or even grow its portfolio of programs.

TVA's assumptions around energy efficiency costs and potential are based on an energy efficiency potential study that has not been released publicly, as is common practice for energy efficiency potential studies to serves as a foundational document for both demand-side management/energy efficiency programs and IRP planning. Based on a summary of that study provided by TVA, it appears that there are gaps in cost-effective energy efficiency that the draft IRP is missing. One of these is industrial energy efficiency. A large portion of TVA's load falls into the industrial category, and industrial energy efficiency can often be the most cost-effective to implement. Yet that category is surprisingly small in the IRP. Both its latest load growth forecast and new funding opportunities resulting from the IRA create the conditions for TVA to become the energy efficiency leader it once promised to be.

STATE PROFILES

ALABAMA

Alabama is home to many types of utilities: investor-owned giants like Alabama Power, electric cooperatives like PowerSouth, and even the federally-owned, multi-state Tennessee Valley Authority (TVA). However, only Alabama Power is regulated by the Alabama Public Service Commission, the state's three-person elected regulatory body. The Tennessee Valley Authority is regulated by a nine-member Board of Directors that are appointed by the U.S. President and confirmed by the U.S. Senate, while PowerSouth Energy Cooperative is managed by its board.

ALABAMA ENERGY EFFICIENCY PERFORMANCE IN 2023

UTILITY	% EE
Southeast Average	0.21%
PowerSouth	0.03%
Alabama Average	**0.02%**
Tennessee Valley	0.01%
Alabama Power	0.01%

In a state without the same level of policy and regulatory oversight as other states in the region, Alabama utilities are a mixed bag. Alabama's largest utilities, Alabama Power and TVA are regularly the worst performing in the region. Alabama Power does not perform integrated resource planning with stakeholder involvement or the kind of regulatory oversight that is standard practice in the industry for major utilities. When the utility does undergo resource planning at all, it is conducted behind closed doors, lacks meaningful regulatory oversight, and excludes key resources like energy efficiency.

FLORIDA

In Florida, the Florida Energy Efficiency Conservation Act (FEECA) drives utility energy efficiency savings targets. Unfortunately, it has only received minor updates since it was initially enacted in 1980 and remains one of the only regulatory policies that requires utilities to consider energy efficiency.

FLORIDA ENERGY EFFICIENCY PERFORMANCE IN 2023

UTILITY	% EE
Orlando Utilities Commission	0.31%
JEA	0.26%
Tampa Electric Company	0.23%
Southeast Average	0.21%
Duke Energy Florida	0.11%
Florida Average	**0.11%**
Florida Power & Light	0.05%
Florida Public Utilities Company	0.02%

When Florida utilities submitted their proposed plans for energy efficiency in April of 2024, SACE intervened in the FEECA dockets and eventually agreed to settlement terms with each utility that will increase the number of low-income people that the utilities will reach in home weatherization programs.

Utilities in Florida do not conduct formal integrated resource planning, instead they produce what is called a Ten-Year Site Plan each year. The only efficiency included in the TYSP are savings levels established in a separate efficiency goalsetting process that occurs once every five years. These savings levels are often among the lowest in the nation for major electric utilities, and the Ten-Year Site Plan process does not include analysis to determine whether higher levels of utility investment in energy efficiency would reduce total utility system costs for customers.

Without a robust IRP process in Florida, the FEECA dockets are one of the only avenues open to advocates working on energy efficiency. The Florida PSC had an opportunity to overhaul the FEECA process in a recent update to the rules on these proceedings, but failed to do so, electing to forego most substantive recommendations in favor of merely clarifying procedural changes. That leaves Florida customers unlikely to see major expansion in energy efficiency programs that could reduce all customer bills.

Florida utilities are also heavily reliant on fossil gas, which provides approximately 70% of the state's total power generation. Unfortunately, major Florida utilities like FPL have failed to make meaningful investments in energy efficiency resources, leading to more gas being burned, with higher costs passed on to all customers. Meanwhile, insufficient utility efficiency program offerings simultaneously deprive families of a valuable tool to save money on their power bills.

GEORGIA

The Georgia Public Service Commission is a five-person elected body that has authority over Georgia Power. Municipal utilities in Georgia have local authority over decision-making and cooperatives in the state – including Oglethorpe Power Corporation – are managed by their member-elected boards. The Tennessee Valley Authority is regulated by a nine-member Board of Directors. Since TVA is a federal agency, board members are appointed by the President and confirmed by the U.S. Senate.

Historically, Georgia Power used prescribed efficiency savings levels In the IRPs it files with the Georgia PSC every three years, but in 2022 the Commission ordered the utility to allow both demand response and energy efficiency to compete head-to-head against supply-side resources in the utility's next resource planning process in 2025. The aim is to identify economically optimal levels of efficiency investment.

GEORGIA ENERGY EFFICIENCY PERFORMANCE IN 2023

UTILITY	% EE
Georgia Power	0.26%
Southeast Average	0.21%
Georgia Average	**0.17%**
Southeast Average	0.21%
Oglethorpe	0.06%
Tennessee Valley Authority	0.01%
Municipal Utilities	0.00%

Georgia is the first state in the Southeast to make Inflation Reduction Act (IRA) home energy rebate funds available to consumers. Administered by the Georgia Environmental Finance Authority (GEFA), the Home Efficiency Rebates (HER) program will provide Georgians with rebates for whole-home energy efficient retrofits. The rebate amounts will be determined by the amount of energy saved through the upgrade and/or household income level.

Since each state has the opportunity to set the amounts covered for different levels of savings and household income, GEFA took a significant step towards addressing energy burdens in the state of Georgia by designing a program to cover 98% of the cost for low-moderate income customers. A limited pilot is already available and will allow the state to test processes and develop the participating contractor network. Program design and planning will continue throughout early 2025, with a full rollout expected by March 31, 2025.

MISSISSIPPI

The Mississippi Public Service Commission is a three-person elected body that has authority over Entergy Mississippi and Mississippi Power. The Tennessee Valley Authority is regulated by a nine-member Board of Directors. Since TVA is a federal agency, board members are appointed by the President and confirmed by the U.S. Senate.

IRP rules were established in Mississippi for the first time in 2019. After many years with energy efficiency programs in a "QuickStart" phase, the Commission rolled its efficiency policies into the new IRP rules. However, in the first cycle of resource planning under the new rules, both Entergy and Mississippi Power submitted resource plans that were demonstrably inferior to the plans submitted by their sister companies in other states. Their IRPs did not move the needle on efficiency, though the utilities indicated intentions to grow their efficiency savings after the plans were finalized. How or whether energy efficiency requirements in future IRPs will be strengthened remains to be seen.

MISSISSIPPI ENERGY EFFICIENCY PERFORMANCE IN 2023

UTILITY	% EE
Entergy Mississippi	0.22%
Southeast Average	0.21%
Mississippi Power	0.19%
Mississippi Average	**0.18%**
Tennessee Valley Authority	0.00%

Mississippi's recently established integrated resource planning rules, unfortunately, delivered no additional energy efficiency in its first planning cycle. But since then both Mississippi Power and Entergy Mississippi have indicated plans to increase efficiency savings in annual Energy Delivery Plans filed with the Commission.

After years of low performance, in 2021 Mississippi Power filed a plan with the Commission that would roughly double its efficiency savings over the next seven years to 0.5% of its 2020 retail sales. Because the pandemic reduced total retail sales in 2020, Mississippi Power's target makes its proposed savings appears higher than it would otherwise be if future efficiency savings were divided by the expected retail sales figures in a more typical year. And 0.5% is still far lower than most of its utility peers nationally. But Mississippi Power's plan to increase its efficiency savings is still a step in the right direction. In the near term, Mississippi Power is seeking additional savings by including large general service customers in its portfolio, expanding its behavioral energy efficiency program, and adding multifamily and manufactured housing efficiency offerings.

NORTH CAROLINA

North Carolina has combined its IRP process for Duke's two utilities into a single proceeding that covers both the IRP and the Carbon Plan, where Duke Energy Carolinas and Duke Energy Progress evaluate resources to meet future needs, reliability requirements, and carbon reduction targets. While the North Carolina regulations do not specify levels of energy efficiency, the North Carolina Utilities Commission has directed Duke to look at both its proposed level of energy efficiency and a higher level of energy efficiency.

NORTH CAROLINA ENERGY EFFICIENCY PERFORMANCE IN 2023

UTILITY	% EE
Duke Energy Carolinas	0.80%
Duke Energy Progress	0.76%
North Carolina Average	**0.59%**
North Carolina Cooperatives	0.21%
Southeast Average	0.21%
North Carolina Municipals	0.01%

The Inflation Reduction Act (IRA) has the potential to rapidly accelerate North Carolina's decarbonization efforts. It is one of few states in the region that has applied and been approved for funding for energy efficiency rebate programs. The state is receiving formula allocations for energy efficiency and high-efficiency electrification rebates totaling $209 million and nearly $90 million in expanded Weatherization Assistance Program funding. Individual residents and businesses can take advantage of generous federal tax credits, and local governments can compete for grants and loans worth billions of dollars. In short, these federal funds will further expand the impact of efficiency in the state while reducing the cost of complying with the state's greenhouse gas reduction targets.

If utilities leverage their own spending on efficiency with the federal funds, more customers will be served with deeper overall efficiency savings. In parts of the state where no utility efficiency programs are currently offered, delivery of federal funds could meet a long-underserved need – while hopefully setting the stage for local utilities to start offering their own programs soon. States that are proactive in their approach to efficiency are likely to see the greatest gains, and North Carolina is uniquely positioned for this once-in-a-generation opportunity.

SOUTH CAROLINA

There are three main utility systems in the state of South Carolina: Duke, Dominion, and the state-owned public utility Santee Cooper. The South Carolina Public Service Commission is a seven-member regulatory body that now has regulatory oversight for integrated resource planning for these utilities. The Commission has directed utilities to evaluate certain levels of energy efficiency savings, in particular requiring that Dominion evaluates savings levels up to 2% of annual retail sales in its 2023 IRP.

SOUTH CAROLINA ENERGY EFFICIENCY PERFORMANCE IN 2023

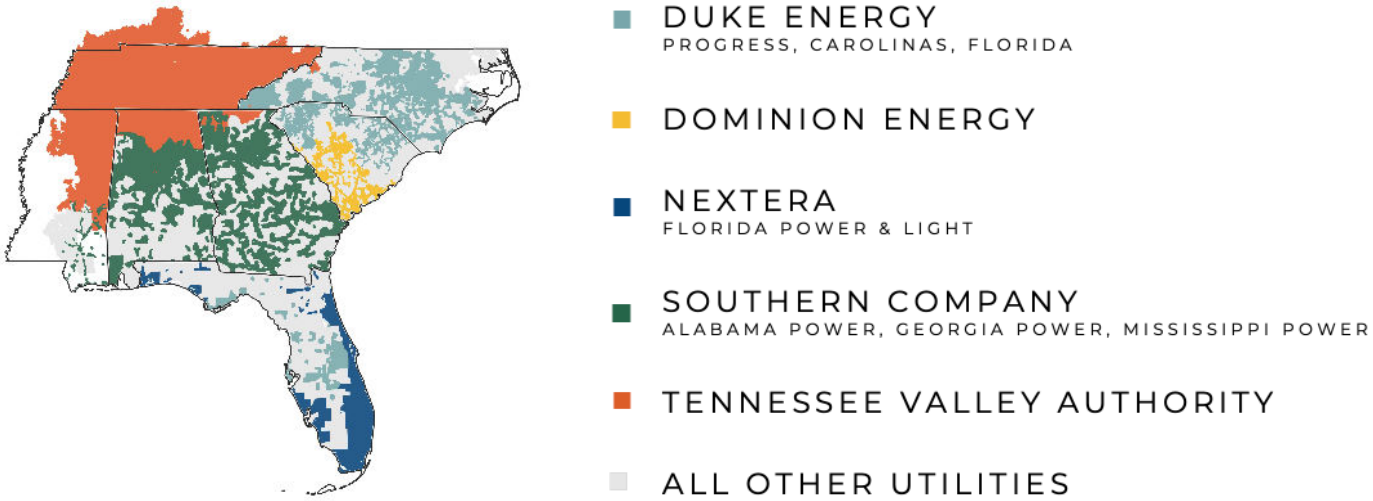
UTILITY	% EE
Duke Energy Carolinas	0.80%
Duke Energy Progress	0.77%
Dominion Energy South Carolina	0.42%
South Carolina Average	**0.37%**
Southeast Average	0.21%
Santee Cooper	0.03%

There are major differences in how energy efficiency is overseen in the state of South Carolina. Beyond resource planning, there are other key differences in how each utility's portfolio is regulated. Dominion submits a plan to the Commission every five years, detailing all of its proposed efficiency programs, along with forecasted spending and savings levels. Duke does not come before the Commission for approval of its efficiency portfolio, instead it submits individual program applications on a rolling basis. The Commission does not provide regulatory oversight for Santee Cooper's energy efficiency programs, savings, or spending, which is under the purview of the Santee Cooper board of directors.

APPENDICES

APPENDIX A: GEOGRAPHIC COVERAGE

The geographic coverage of data encompasses Southeastern utilities outside of the PJM/MISO regions. The states of Alabama, Florida, Georgia, and South Carolina are fully covered; relatively small portions of North Carolina and Tennessee are served by utilities that participate in PJM (thus while statewide reports for these states are relatively comprehensive, they may not align exactly with other data sources); only portions of Mississippi and Kentucky that are parts of TVA or the Southern Planning Area are included.



APPENDIX B: SOUTHEAST UTILITY RESULTS

Retail sales, annual savings from energy efficiency, and percentage savings as a percentage of current-year retail sales are available for download. Please note that appendices for previous reports in the series reflect slightly different methodology such as a lower net to gross ratio and were calculated using savings as a % of prior-year sales, rather than current-year. For utility system and individual utility data for 2019-2023, please visit our website to access the appendix.

APPENDIX C: METHODS, DATA SOURCES, AND ASSUMPTIONS

METHODS

The primary metric in this report is net energy savings as a percentage of current-year retail sales. SACE relies on two sources for historical efficiency savings, the first is annual energy efficiency reports that utilities are required to file by state regulators. In most cases, regulatory reporting requirements for investor-owned utilities allow SACE to gather detailed performance and budget data on specific programs on an annual basis. SACE also obtains energy efficiency savings data from EIA Form 861. For example, nearly all of our data for municipal and co-op utilities come from this data source. In most cases, we opt to use EIA data even when program-level data is available for the sake of consistency when it comes to the reporting year, which may reflect the fiscal year in utility filings or other types of reports, and to include savings from programs that are outside the utility's main portfolio of energy efficiency programs.

EIA's reporting instructions have clarified over the years to direct utilities to report data at the meter rather than at the generator, and to clarify who is responsible for reporting (utility or nonutility demand-side management administrators). As a result, there is greater confidence in the consistency and reliability of more recent data that primarily only requires adjustments to utilities that report gross savings. Due to the fact that some utilities report net savings reflecting technical adjustments to energy efficiency program impacts, while others do not, we apply a net-to-gross ratio of 80% where gross savings are reported.

For the comparison with other regions of the country, our Southeast regional average is compared to regional and national averages from data sources such as EIA. Our regional energy savings calculation distinguishes the Southeast from typical calculations of the U.S. 'South' region, which encompasses a much broader geography as defined by the U.S. Census Bureau.