GEORGIA ENVIRONMENTAL FINANCE AUTHORITY

Georgia Energy Report 2025

GEFA

Georgia Environmental Finance Authority

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Founded in 1986, the **Georgia Environmental Finance Authority (GEFA)** directs programs that improve Georgia's environment, protect natural resources, and promote economic development. GEFA provides loans for water, wastewater, and solid waste infrastructure; manages energy efficiency and renewable energy programs; administers land conservation loans; and monitors state-owned fuel storage tanks.

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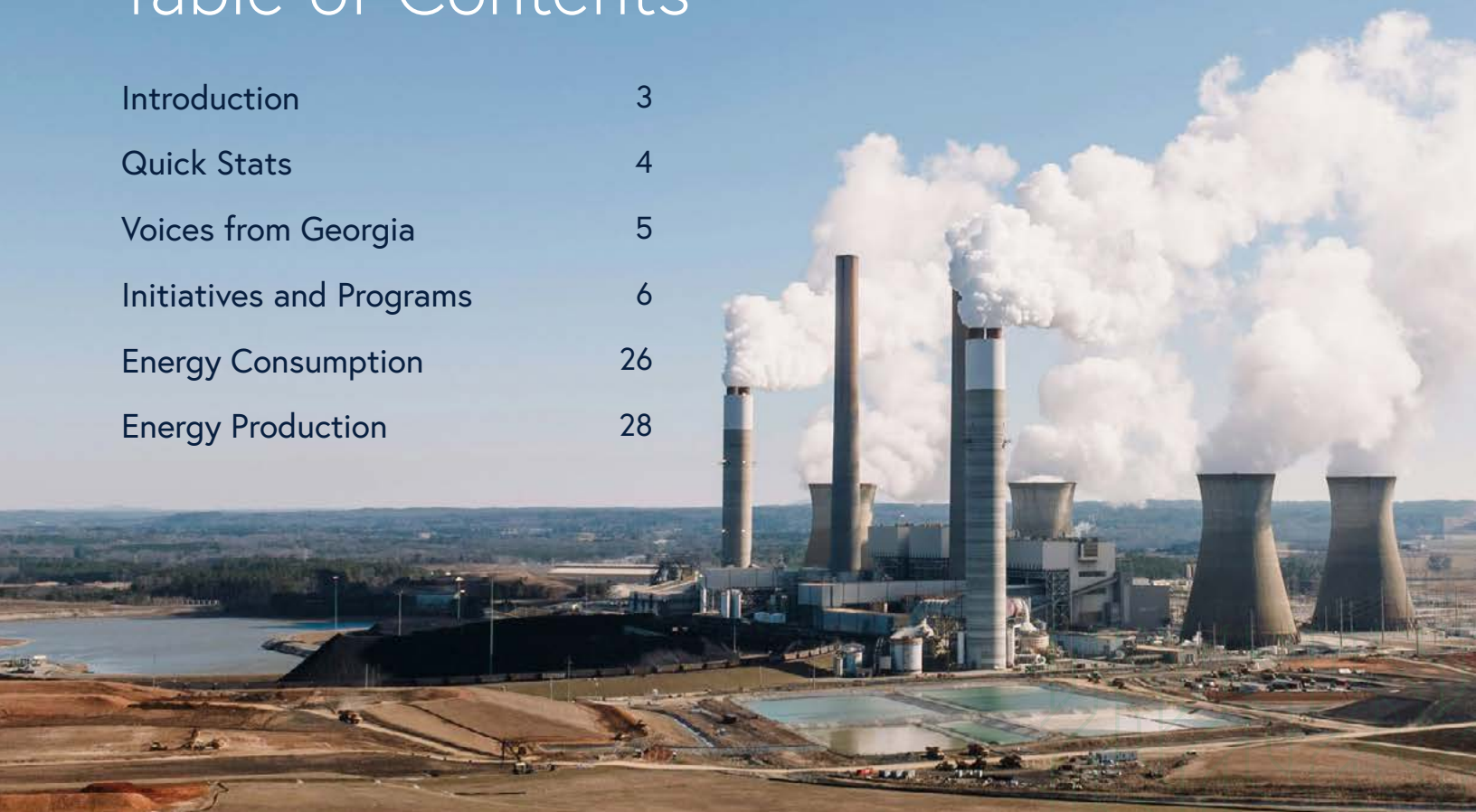


Introduction

To the people of Georgia: We are proud to present the 2025 Georgia Energy Report.

The Georgia Environmental Finance Authority's (GEFA) Energy Resources Division, under the leadership of Kristofor Anderson, has compiled this report to provide a high-level overview of Georgia's energy sector.

The report is a valuable resource for policymakers and other stakeholders interested in Georgia's energy future. I hope you enjoy reading and learning about Georgia's energy programs, usage, resources, and related trends at a state and national level.

As energy demands increase due to Georgia's growing population and economy, energy efficiency and a diversified energy portfolio are more significant than ever. The 2025 Georgia Energy Report highlights the growth of energy efficiency and renewable energy, the future of energy, and changes in American energy policy and production. The report also summarizes GEFA programs that support Georgia's energy goals to conserve and improve energy resources. The report contains an overview of Georgia's energy data, including production and consumption statistics.

GEFA is responsible for funding energy efficiency projects and grid resilience improvements, providing scholarships for energy education and workforce development, weatherizing homes, and aiding in critical events throughout Georgia.

For Georgia,

Trey Bennett, Executive Director, Georgia Environmental Finance Authority

Quick Stats
Georgia Rankings

6th
in the nation for transportation energy consumption

8th
in the nation for net electricity generation (129,221,513 MWh) in 2023

15th
in nation for most affordable price for residential electricity at 14cents/kWh, as of October 2024

32%
All-electric households

4,530 MW
Capacity of Plant Vogtle (Units 1-4)

5,246 MW
Capacity of all operational solar in Georgia

1 MW
is enough to supply 650 homes

Source: U.S. Energy Information Administration

Voices from Georgia

"As demand rises, the Grid Resilience Grant Program ensures that our systems can provide reliable energy for our residents."
— North Georgia Utility

"The Weatherization Assistance Program has helped me tremendously. I had no means to make any updates to my home. I had no heating or air. My roof was so bad off animals had begun trying to nest inside. The organization gave me what I could not give myself. The weatherization program made my home healthier for myself and family."
— Ophelia, Retiree in Augusta

"This scholarship has allowed me to pave a career for myself with the most up-to-date technologies."
— Dave, Technical College System of Georgia Student

"Since June 2020, the generators [provided by GEFA] have been a tremendous resource for water and wastewater utilities across the state of Georgia as well as the southeastern states during natural disasters through mutual aid support."
— Jay Matthews, Georgia Rural Water Association

We Strengthen Georgia

Responding to Crisis—Hurricane Helene and the Role of ESF-12

When disaster strikes, GEFA acts as a liaison between utility companies and state, local, and federal emergency response teams.

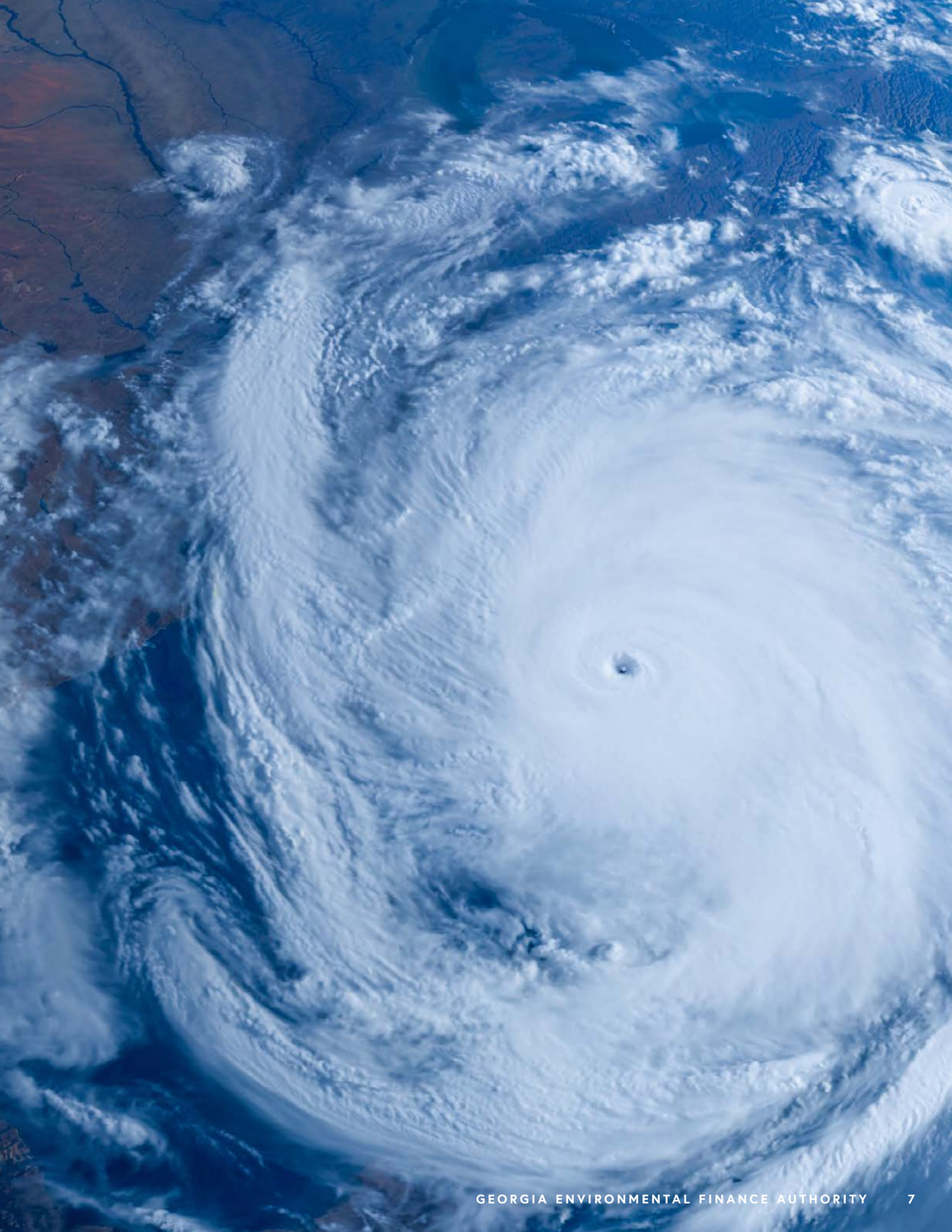
In the early hours of September 27, 2024, Hurricane Helene tore across Georgia, leaving a trail of destruction from high winds and more than 12 inches of rain. Nearly one-third of Georgia's population lost power, and 230 lives were lost across the Southeast. The storm inflicted more than $6 billion in damage to Georgia's agriculture industry alone.

Utilities faced staggering losses: Georgia Power reported damage to 11,800 utility poles and 5,800 transformers. Some Electric Membership Corporations (EMCs) had to rebuild as much as 100 percent of their distribution systems. Fallen trees, impassable roads, and heavy debris delayed restoration efforts, even with mutual aid crews arriving from across the country.

During this crisis, GEFA took a leading role in the state's emergency response. Working in close partnership with the Georgia Emergency Management Agency (GEMA), GEFA leads Emergency Support Function #12 (ESF-12)—the state's coordinated effort to manage energy-related disruptions during major events.

ESF-12 plays a vital role in energy emergency response by communicating with public and private-sector partners to convey power outages, responding to resource requests, and providing event updates on outages and restoration times in affected areas.

During Hurricane Helene, GEFA staffed the State Operations Center for 16 consecutive days, monitoring a record number of outages and coordinating with partners. GEFA deployed nine emergency generators to critical facilities, including hospitals, 911 centers, and water treatment plants to maintain essential services.



Powering Forward: Georgia's Commitment to a Resilient Grid

Georgia must continue investing in modern, adaptive infrastructure that can withstand the storms ahead.

The widespread impact of Hurricane Helene underscores the urgent need for infrastructure improvements. Georgia is not only planning for the next storm but actively strengthening its grid through targeted investments that increase resilience statewide.

In 2025, the Georgia Environmental Finance Authority (GEFA) awarded $23.9 million in federal funding to nine utilities across the state through the Georgia Grid Resilience Grant Program.

These grants, made possible through the Section 40101(d) Formula Grant Program of the Infrastructure Investment and Jobs Act (IIJA), represent a significant investment in modernizing Georgia's electric grid to better withstand disruptions caused by severe weather events.

One of the awardees, the city of Albany, is using its $1.34 million grant to modernize three substations with advanced reclosers, flood protection, and automated switching—critical upgrades for outage prevention and faster service restoration. In the city of LaFayette, a $778,706 grant is funding pole replacements, vegetation management, and the deployment of real-time grid monitoring technologies to reduce outages and improve operational efficiency. Cobb Electric Membership Corporation (EMC), with a total project investment of $8,617,929, will use the grant funding to upgrade aged equipment, such as changing solid blade switches to smart vacuum switches, to significantly improve system reliability. Of the total project investment, GEFA awarded $5.7 million of federal funds to assist with the upgrades.

Looking ahead, GEFA plans to open a second round of grant funding in 2026, pending the release of U.S. Department of Energy grid resilience funding, to continue its efforts to support community-led grid resilience projects across the state.

In addition to these local initiatives, GEFA and its partners—Oglethorpe Power, Georgia Transmission Corporation, Georgia System Operations, and Green Power EMC—secured $250 million in 2023 through the U.S. Department of Energy's Grid Resilience and Innovation Partnerships (GRIP) Program. This large-scale investment supports battery storage deployment, localized microgrids, and expanded transmission infrastructure, all aimed at improving reliability for millions of Georgians, particularly in rural and underserved areas.

$23.9M

in federal funding awarded in 2025 to nine utilities across the state

$1.34M

grant to the city of Albany to modernize substations and make critical upgrades

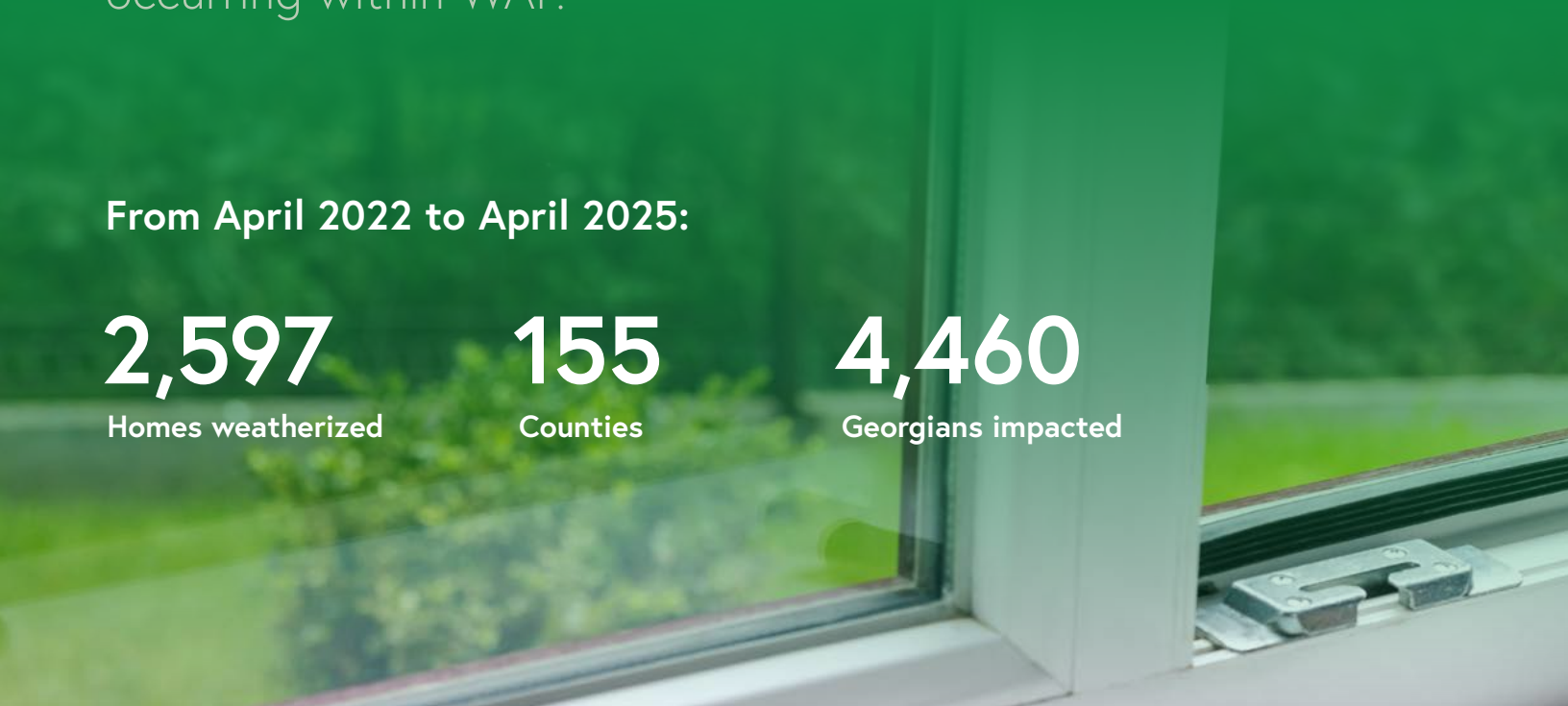
$5.7M

to Cobb EMC to upgrade aged equipment including smart vacuum switches to significantly improve system reliability

Weatherization

The Weatherization Assistance Program (WAP) increases energy efficiency and decreases energy costs for low-income households. In partnership with 14 Community Action Agencies, GEFA provides free energy auditing and efficient solutions for single family, multifamily, and mobile units. Energy efficient upgrades through the program can include air and duct sealing, wall and attic insulation, heating and ventilation improvements, and hot water tank installations.

Homes may get deferred because they have too many problems to be fixed by energy efficiency solutions. Historically, GEFA has been unable to fix those homes. As of 2022, the Weatherization Readiness Fund (WRF) provides funds to fix these problems first (roofing, flooring, and plumbing repairs) and reduce the number of deferrals occurring within WAP.



From April 2022 to April 2025:

2,597
Homes weatherized

155
Counties

4,460
Georgians impacted

Ms. Cusseta's Journey: A Heartfelt Appreciation for Weatherization Contractors

Montezuma, Georgia · West Central Community Action Council

Ms. Cusseta had been struggling with high energy bills and uncomfortable temperatures in her home. No matter the season, she found it challenging to keep her house warm in the winter or cool in the summer. Realizing she needed help, she discovered the weatherization program.

From the moment the contractors arrived, Ms. Cusseta was impressed by their professionalism. They took the time to assess her home, explain the process, and answer all her questions. Their knowledge and expertise reassured her that she was in good hands.

What amazed Ms. Cusseta most was the efficiency of their work. In what felt like no time at all, they sealed air leaks, added insulation, and upgraded her home's energy efficiency—all with minimal disruption to her daily life. Their quick and precise efforts left her home feeling more comfortable than ever. "[The contractors] were professional, fast, and truly cared about making my home better," she shared. "I can't thank them enough for their dedication and expertise."

After the project was completed, Ms. Cusseta immediately noticed a difference. Her home maintained a steady temperature, and her energy bills began to drop. She couldn't believe the significant impact the weatherization improvements had made.

Ms. Cusseta's experience is a testament to the incredible work of weatherization contractors. Thanks to their quick and professional service, she now enjoys a more energy-efficient home and greater peace of mind.

Home Energy Rebates

Georgia's Home Energy Rebates represent a critical step in Georgia's commitment to reducing energy burden and increasing economic advancement across the state. Through the rebate programs, residents can take advantage of incentives that upgrade their homes' energy efficiency while decreasing their energy bills. Small businesses who provide energy efficiency upgrades across the state can also boost their customer base and foster expanded skillsets through participation in the program.

Georgia's Home Energy Rebates is funded by the Inflation Reduction Act and administered by the U.S. Department of Energy. The state of Georgia has been allocated $220 million for this effort to reduce the cost of various energy saving upgrades and expand the state's network of certified energy efficiency contractors.

The program offers increased rebate incentives to help low- to moderate-income households afford energy-efficiency upgrades that are typically expensive.

By reducing upfront costs for these energy-efficient technologies, the program helps residents lower their energy bills and increase the comfort of their homes. Given the scope and scale of the program, participation will also help reduce strain on Georgia's energy resources, particularly in areas and homes that may see increasing demand because the status of the home, e.g., improper insulation, out of date appliances.

"Our customers end up having a little extra money at the end of the month to spend on other necessities and it is heartwarming to hear these types of stories."

— David Cravey, Dyes Heating & Cooling

Georgia residents can participate in two initiatives:

HEAR

Home Electrification and Appliance Rebates (HEAR) provide point-of-sale rebates to households with income less than 150 percent of the area median income (AMI) in their county. Households could be eligible to receive up to $14,000 across upgrading appliances and measures such as at heat pumps; heat pump water heaters; heat pump clothes dryers; electric stoves, cooktops, ranges, or ovens; electric load service center (breaker box/electrical panel); electric wiring; and insulation, air sealing, and ventilation.

HER

Home Efficiency Rebates (HER) address whole-home energy efficiency improvements, where rebate amounts increase up to $16,000 depending on the amount of energy saved and the income eligibility of the household occupants.

To help encourage adoption of these programs, the state of Georgia decided to introduce higher rebates for households with lower incomes. This will help expand the market for energy efficiency in the state, while driving considerable savings to households that would benefit from whole home improvements or efficient appliances. To date, GEFA has been able to serve hundreds of Georgia residents. Here are some key program highlights as of December 2, 2025

854
Households Served

$9M
Total Rebates Paid

$9,216
Average Household Rebate Amount

Home Energy Rebates

Georgia's Home Energy Rebates launched with a limited pilot in November 2024, which was designed to test operational processes, assess the participant/contractor experience, and build the state's certified contractor network.

The program has continued to evolve, expanding access across the state through a growing network of contractors. These contractors are trained in the program guidelines and have several responsibilities including helping participants build a compliant project and/or understand their eligibility for the program.

Program administrators will continue to build out the state's contractor network to not only increase coverage, but to intentionally increase the state's capacity and workforce for delivering residential energy efficiency upgrades.

In March 2025, the program opened its contractor network to a new batch of interested businesses, and introduced the Do-It-Yourself (DIY) Pathway for the purchase and installation of select ENERGY STAR® certified kitchen appliances. In May 2025, the Midstream and Multifamily Pathways were added, further expanding access to more residents and boosting opportunities for businesses to take advantage of these rebates. The Multifamily Pathway is currently under a pilot geared towards low-income multifamily buildings.

Georgia remains focused on expanding accessibility statewide, working closely with strategic partners across energy, retail, and local communities, and ensuring that the benefits of this program reach communities most in need.

To deliver upgrades, GEFA is building a network of trained, program-approved contractors. Once approved, contractors will be able to unlock up to $16,000 in incentives for customers and have a unique opportunity for additional upskilling and expanded market reach. Since program inception, Georgia's contractor network provides access to highly skilled contractors for residents across the state. The contractor network now includes more than 100 contractors, many of whom are Building Performance Institute (BPI)-certified.

GEFA is targeting program expansion throughout the state, including Georgia's rural areas, where homeowners may previously have had difficulty finding the right contractor to provide energy efficiency upgrades that increase their home's value and comfort.

As Georgia's Home Energy Rebates grow, GEFA will closely monitor the impact of these rebates, collect customer feedback, and work to improve program processes so that energy efficiency becomes accessible to all interested and eligible residents. Together with Georgia residents, GEFA will support Georgia's future energy security, enabling reliable access to and affordable supply of energy to all.

Energy Efficiency and Energy Planning

In the past two years, GEFA has launched two new grant programs designed to assist state and local governments with energy efficiency and energy planning projects.

Through the Infrastructure Investment and Jobs Act (IIJA) Energy Efficiency and Conservation Block Grant (EECGB) Program, GEFA awarded 17 communities $150,000 in grant funding totaling almost $2.6 million. More than half of the funding was provided to disadvantaged communities.

Highlighted Projects:

Chatham County

The county will create an energy plan to address aging infrastructure, population and industrial growth, and rising energy costs.

City of Covington

The city plans to install Level 2 electric vehicle charging pedestals across several locations, including the Welcome Center, downtown, and multiple parks.

City of Moultrie

The city conducted an energy audit and plans to implement upgrades at its municipal building.

In May 2025, GEFA launched the Georgia Energy Grant Program. This program is available to state and local governments, public colleges and universities, K-12 schools, and nonprofit organizations through annual State Energy Program (SEP) funding from the U.S. Department of Energy. For this first round of competitive funding, GEFA allocated more than $500,000 in funding for eligible applicants to initiate and accelerate energy projects focused on energy planning, energy efficiency, and energy resilience.

Did You Know?

Energy efficiency jobs can be found in every county in Georgia. Small businesses lead the way, with more than 70 percent of energy efficiency companies in Georgia having fewer than 20 employees. Additionally, 11 percent of the workers in Georgia's energy efficiency industry are veterans.

Providing more than 50,000 jobs, energy efficiency stands as the largest energy sector in the state of Georgia.

Fuel Storage Tank Program

The Fuel Storage Tank Program (FSTP) is the centralized management and monitoring office for fuel storage tanks owned by state agencies and institutions. The FSTP assists state agencies with running tank operations and ensuring fuel delivery companies are taking necessary safety measures to prevent leaks and spills. Currently, there are more than 600 active underground storage tanks (USTs) and aboveground storage tanks (ASTs) at more than 300 state-owned sites.

The Georgia Environmental Protection Division (EPD) enforces state and federal rules and regulations for USTs, while local fire marshals regulate ASTs.

EPD inspects USTs at state facilities every three years. Violations found during inspections can lead to hefty fines and, in severe cases, the closing of the facility. If a leak has occurred or clean up is needed, the FSTP will coordinate with EPD, the site, and contractors to ensure proper protocols are in place and clean up ensues in a timely manner.

The FSTP contracts with petroleum equipment and service companies to perform annual inspections, provide site maintenance when requested, and remediate environmental petroleum contamination when necessary. The FSTP also approves work scopes and manages invoices.

GEFA has begun upgrading tank monitors to new touchscreen smart models. Software upgrades can now be downloaded instead of having a contractor come out and install them. Of the 153 sites that need upgrades, 58 have been upgraded thus far.

600
Active USTs and ASTs

300
State-owned sites

58
Of 153 sites upgraded

Conservation

GEFA has several loan programs for local governments to finance a wide range of energy production, energy conservation, and energy management projects at water and wastewater facilities and publicly-owned landfills. GEFA provides a 1 percent interest rate reduction on loans for energy efficient and conservation-focused projects. Many local governments and nonprofit organizations have taken advantage of these loans to save money and energy and to preserve the environment.

Energy production and conservation eligible projects can include landfill gas collection, inflow/infiltration detection projects, providing SCADA equipment, and the installation of energy efficient treatment equipment and processes. Eligible energy production or conservation projects may be funded as part of a larger infrastructure project or as a stand-alone project. GEFA works with borrowers to identify which portion(s) of the project are eligible for the energy conservation designation.

Energy Performance Contracting (EPC) Program

GEFA manages the Energy Performance Contracting (EPC) Program for the state. This program is a voluntary initiative to help state agencies, local governments, schools, and other public-sector organizations modernize buildings, address deferred maintenance, and save on energy and water bills using performance contracting.

In an energy performance contract, the energy services company (ESCO) guarantees the state will save an agreed-upon amount of money with the installation of energy- and water-efficient equipment and systems. Rather than appropriating the funds to pay for the work, the state uses a loan from a third-party financial institution. The guaranteed savings allow the agency to pay off the loan in a budget-neutral manner.

Agencies can enter contracts for up to 20 years. Each year the ESCO performs measurement and verification (M&V) to ensure the project is achieving the guaranteed savings. Energy performance contracts are a proven, budget-neutral way for agencies to fund efficiency and operational improvements.

Georgia's EPC Program has generated more than $60 million in realized savings. In 2024, EPC projects generated more than $6 million in energy, water, and operations and maintenance savings. GEFA will continue to work with state agencies to implement energy performance contracts as an important method for saving energy and money while improving facilities.

Brasstown Valley Resort & Spa

Nestled in the breathtaking Blue Ridge Mountains, Brasstown Valley Resort & Spa is the ultimate retreat. But there's more than meets the eye—Brasstown Valley is also leading the way in energy savings. Through Georgia's Energy Performance Contracting Program, the resort has saved nearly $1,000,000. The North Georgia Mountains Authority, which operates Brasstown Valley, began its journey toward energy efficiency in 2014. Installed solutions include lighting system upgrades, a new energy management control system, building envelope improvements, solar pool heating, and more, swiftly generating more than $100,000 in annual electricity savings and more than $30,000 in propane savings.

BRASSTOWN VALLEY RESORT & SPA // PHOTO BY HARRISON KEELY

Building Operator Certification

Since 2022, 162 K–12, higher education, and state building operators and facility managers have received scholarships to complete the Building Operator Certification.

The Building Operator Certification (BOC®) is a nationally recognized, competency-based training and certification program for facility managers, building engineers, and maintenance technicians to improve energy efficiency within their buildings. Upon BOC® certification, state buildings have reported annual utility savings per building ranging from $2,000 to $10,000.

GEFA and Gwinnett Technical College (GTC) have partnered together to train facility personnel from various state and local government institutions including Augusta University, Georgia Public Library Service, Henry County Schools, and MARTA. Through the partnership, GEFA provides a scholarship of $1,599 to selected individuals to complete BOC® courses at GTC.

The courses provide training and technical assistance for state building operators and facility managers on how to operate and maintain their facilities in an efficient manner. As scholarship recipients, students will provide utility data from one facility prior to completing the course and utility data after implementing what they learned. This data allows GEFA to track energy savings and report on the program's effectiveness.

The BOC program yields an average annual electricity savings of approximately **96,240 kWh per credentialed operator**, translating to an estimated **$12,655 in annual utility cost savings** over a five-year period.

"Building Operator Certification is a great way for employees of all levels of facilities and maintenance to identify energy-saving opportunities in their buildings."

John Welch

Bowtie Engineering

"The Building Operator Certification program has been an insightful and thought-provoking experience, equipping me with the skills to enhance building performance and sustainability."

Michael Hollimon

Director, Facilities, Gwinnett Technical College

Beyond electricity reductions, BOC-credentialed operators also achieve meaningful decreases in overall energy demand and fuel consumption, saving an average of **14.5 kW in electric demand and 1,400 therms annually.**

Institutions

West Georgia Technical College
MARTA
Atlanta Technical College
Georgia Tech
Atlanta Public Schools
Augusta University
Gwinnett Technical College Facilities
Wiregrass Technical College
Georgia Public Library Service
DeKalb County Board of Education
Georgia Tech Athletics Association
Georgia Northwestern Technical College
Georgia Institute of Technology
Southern Regional Technical College
Central Georgia Technical College
City Schools of Decatur
South Georgia Technical College
Oconee County Schools
Dalton State College
Butts County Public Schools
Liberty County School System
Henry County Board of Commissioners
Gwinnett County Water Resources
Henry County Schools
City of Atlanta
Ogeechee Technical College
DeKalb County Schools
Georgia World Congress Center

Workforce Development for the Battery Belt

With more than $31 billion in electric vehicle-related investments supporting 38,700 jobs, Georgia has established itself as a national hub in the electric vehicle (EV) industry.

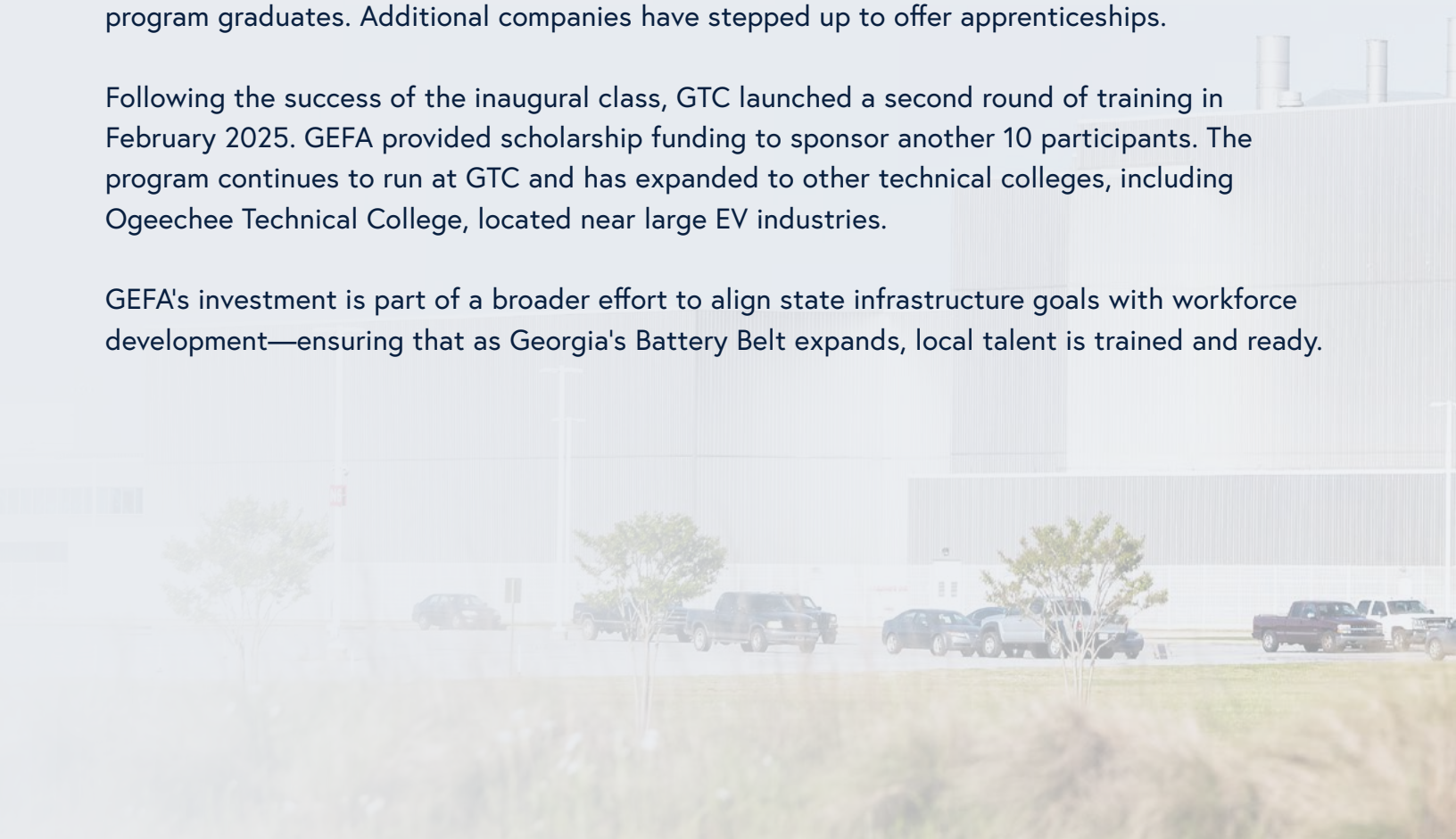
Amid this rapid industrial expansion, the need for a trained workforce has become critical. In response, Gwinnett Technical College (GTC) launched the EV Charging Equipment Technician course in Fall 2024. The 38-hour course equips students with the technical skills needed for EV charger installation and maintenance, including residential and commercial systems, commissioning, diagnostics, safety protocols, and networking requirements.

As a key partner, GEFA awarded 10 scholarships to the inaugural class, covering tuition and personal protective equipment (PPE).

Industry collaboration further strengthened the initiative. Siemens contributed to curriculum development, provided 16 EV chargers for GTC's new Charger Lab, and committed to hiring program graduates. Additional companies have stepped up to offer apprenticeships.

Following the success of the inaugural class, GTC launched a second round of training in February 2025. GEFA provided scholarship funding to sponsor another 10 participants. The program continues to run at GTC and has expanded to other technical colleges, including Ogeechee Technical College, located near large EV industries.

GEFA's investment is part of a broader effort to align state infrastructure goals with workforce development—ensuring that as Georgia's Battery Belt expands, local talent is trained and ready.



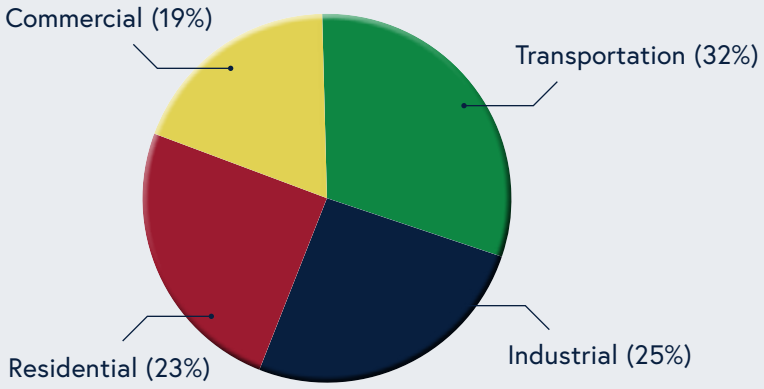
Georgia EV Milestones

- **In 2024**, the state surpassed **100,000 registered electric vehicles**, now accounting for **1.5 percent** of all registered vehicles statewide.
- **May 2024** marked a major milestone as the **first EV manufactured in Georgia** rolled off the production line at **Kia's West Point plant**.
- As of **June 2024,** Georgia leads the Southeast with the highest per capita availability of public EV charging ports—boasting **1,251 fast chargers and 3,825 Level 2 ports across the state.**
- In a major economic and manufacturing leap, Hyundai opened its **$7.6 billion EV factory in March 2025**, solidifying Georgia's role as an EV hub.
- **In November 2025**, Georgia Department of Transportation (DOT), announced the awarding of more than $24.4 million in National Electric Vehicle Infrastructure (NEVI) funds, to 26 locations through public-private partnerships that will support the construction and operation of new, federally compliant fast-charging stations along the state's Alternative Fuel Corridors.

Georgia's Energy Consumption

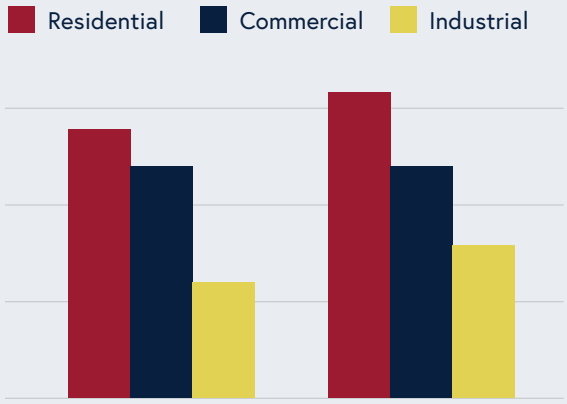
Georgia ranks ninth in the nation for total energy consumption (2,838.8 trillion Btu). Major highways and the world's busiest airport consistently keep Georgia in the top 10 in the nation for transportation sector energy consumption.

Georgia Energy Consumption by Sector, 2023

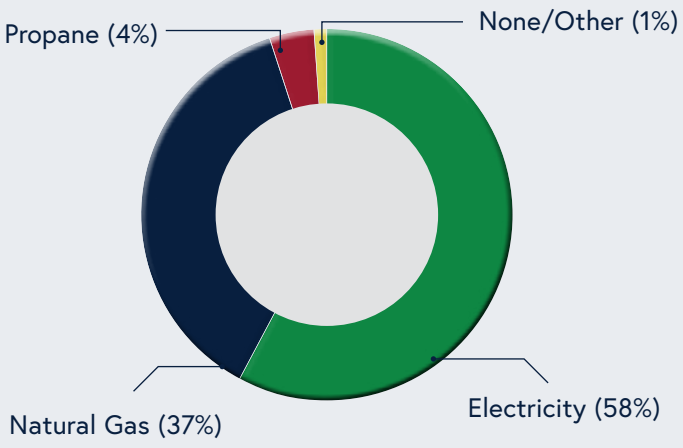


Source: U.S. EIA, Table F35: Total energy consumption, price, and expenditure estimates, 2023

Cost of Electricty by Sector



Energy Source Used for Home Heating in Georgia



9th

Georgia ranks 9th in the nation for total energy consumption

Top 10

Transportation sector energy consumption in nation due to major highways and world's busiest airport

The industrial sector accounts for the second-largest share of state energy use (25 percent, 712.3 Trillion Btu) followed closely by the residential sector (23 percent, 663.9 Trillion Btu). Georgia has the 15th most affordable price for residential electricity, at 14cents/kWh, as of November 2024.

What About Data Centers?

Atlanta's data center market is the fastest growing in the nation.

Atlanta has the most data center capacity under construction in the U.S., nearly 2,160 MW. In 2024, Atlanta became the first market to surpass Northern Virginia for net amount of leased data center space, exceeding Northern Virginia by 250 MW. As of October 2024, there are 52 data centers and 33 proposed data centers in the Metro Atlanta region. Since the beginning of 2023, the amount of data center capacity under construction in the Atlanta area has roughly doubled every six months, according to CBRE.

To meet escalating energy needs, Georgia Power plans to expand capacity through investments in new natural gas units, battery storage systems, and additional solar energy capacity. Georgia Power has also reconsidered plans to retire certain coal plants and extended operations of coal-fired units at Plant Bowen and Scherer through 2034.

Since 2018, Georgia has given data center operators an exemption from the state's sales tax. Companies receive a tax break if they hit certain thresholds relating to investment and job creation.

In September 2024, the Atlanta City Council voted to ban data centers along and near the Atlanta Beltline and within a half mile of MARTA stations, citing prioritization of housing development and green space. In February 2025, the Georgia Public Service Commission (PSC) approved new rates for data centers to address their significant energy usage, ensuring that these facilities contribute fairly to the energy grid and protect residential and business customers from potential rate hikes.

Energy Production

In 2024, Georgia ranked 8th in the nation for net electricity generation (129,221,513 MWh).

Georgia's Total Electricity Net Generation in 2024 :

41%
Natural gas

34%
Nuclear

13%
Coal

12%
Renewable energy
Solar power, biomass, and hydropower

Natural Gas

Despite not having any natural gas reserves, Georgia consumes more natural gas than any other source.

Natural gas supply arrives in Georgia largely through four interstate pipelines: The Southern Gas (SNG) Pipeline, the Transco Pipeline, the East Tennessee Natural Gas (ENTG) Pipeline, and the Elba Express Pipeline. In February 2025, Kinder Morgan and Southern Natural Gas Company proposed the $3 billion South System Expansion 4 Project, which would expand natural gas pipelines across Georgia, Alabama, and Mississippi. If approved, the project will begin construction in 2027.

In the past, Georgia also received natural gas through the Elba Island Liquefied Natural Gas (LNG) Terminal. Due to the rise in U.S. natural gas production, however, Elba Island has ceased imports since 2021 and shifted its focus to exporting. In 2024, the Federal Energy Regulatory Commission (FERC) approved the request for Elba Island LNG terminal to increase its capacity from 2.5 million tonnes per annum (MTPA) to 2.9 mtpa.

Nuclear

The Vogtle nuclear plant in Waynesboro, Georgia, is the nation's largest nuclear power plant, with four reactors totaling a combined generating capacity of 4,500 megawatts (MW).

Vogtle unit 3 began commercial operations in July 2023, while Vogtle unit 4 became commercially operable in April 2024. In the 2025 Integrated Resource Plan (IRP), Georgia Power proposed an additional 112 MW of capacity by upgrading existing units at both Plant Vogtle and Plant Hatch: 27 MW each at Vogtle units 1 and 2, 30 MW at Hatch nuclear plant unit 1, and 28 MW at Hatch unit 2. Plant Vogtle and Plant Hatch currently provide about 29 percent of the electricity used in Georgia.

Coal

Plant Scherer in Juliette is the largest coal-fired power plant in the U.S.

In its 2022 Integrated Resource Plan, Georgia Power planned to retire 12 coal units by 2028. However, due to increased electricity demand in Georgia, mostly from data centers, Georgia Power now plans to delay retirement for coal-fired Plant Bowen and Plant Scherer.

In April 2025, the U.S. Environmental Protection Agency approved a two-year exemption allowing Georgia Power's Plant Bowen and Plant Scherer to bypass federal emission regulations for mercury and other air pollutants.

Harnessing the Sun

In 2020, GEFA awarded more than $500,000 in U.S. Department of Energy funding through the Georgia Solar Program and Solar Resiliency Program to expand renewable energy sources in schools and local municipalities.

Last year, GEFA's Energy Resources Division travelled across Georgia to evaluate the impact of these solar power systems. In Liberty County, elementary schools are using 35kW ground PV systems to reduce energy consumption and provide opportunities for students to learn how energy works. A recreational center operated by the city of Tucker experiences seamless operation of emergency lighting during outages. In North Georgia, the city of Calhoun has been able to cut energy costs with their grid-connected solar system. All funded systems are operational, reducing taxpayer costs and improving Georgia's energy resilience.

Looking ahead, GEFA plans to re-launch the Solar Resiliency Program in 2026. This grant initiative will provide funding for solar panels and battery storage systems for state and local governments, K–12 schools, nonprofit organizations, and critical facilities. These systems increase energy reliability, allowing recipients to continue serving their communities when it matters most.

Hydro Spotlight

Georgia has 27 conventional hydroelectric power plants and four hydroelectric pumped-storage facilities. In 2024, conventional hydroelectric power accounted for almost one-fifth of Georgia's electricity generation from renewable resources and 2 percent of the state's total generation.

The Rocky Mountain Hydroelectric Plant is Georgia's largest hydropower plant and its 9th largest generator plant. Operated by Oglethorpe Power Corporation and located in Floyd County near Rome, this plant provides power to 39 electric membership co-operatives.

Biomass

Biomass is a form of energy generated by burning organic matter to generate steam, which is used to produce electricity. Georgia ranks second in the nation for biomass generation.

Biomass is derived from wood pellets made from low-grade wood waste, but it can also be produced from agricultural or animal waste. As one of the largest timber producers in the country, Georgia is uniquely suited to biomass operations. Georgia's landscape has 24.6 million acres of forest, and 23.9 million of those acres are available for commercial usage. Forestry byproducts, such as discarded tree branches, sawdust, mill waste, and even shells of pecans and peanuts can be harvested for biomass energy production.

Georgia is a leading source of biomass in the U.S, ranking second nationwide. Biomass supplies 37 percent of Georgia's in-state renewable electricity net generation. In 2024, Georgia's net generation from biomass was 5,214,000 MWh, mostly from wood and wood-derived fuels. Nearly 70 percent of Georgia's biomass electricity generation comes from the industrial sector, such as wood processing mills, wood pellet manufacturers, and paper mills.

In 2024, the Georgia PSC approved 77.9 MW of additional biomass generation to Georgia Power's energy portfolio. To achieve this, Altamaha Green Energy will build a new biomass facility in Wayne County. Two smaller deals with International Paper expand existing facilities that burn byproducts from paper mills to make electricity.

Georgia is one of the nation's top wood pellet exporters with a combined production capacity of more than 1.7 million tons of pellets per year. In fact, the world's largest biomass pellet facility, Georgia Biomass, is in Waycross. These pellets are largely exported to Europe and used as an alternative to coal.

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