



# Corporate Responsibility Report





# Contents

## **2 Letter from Tom Fanning**

## **5 Our Company**

- » At a glance
- » Business environment
- » Energy portfolio
- » Preparing for tomorrow
- » Investing in technology
- » Policy and engagement
- » Leadership oversight
- » Our Values

## **21 Our People**

- » Who we are

- » Embracing differences
- » Investing in employees
- » Developing people
- » Future workforce
- » Putting Safety First
- » Building supplier relationships

## **33 Our Community**

- » Charitable giving
- » Volunteering
- » Educational initiatives
- » Supporting customers
- » Economic development
- » Environmental stewardship

## **43 Our World**

- » Reducing GHG emissions
- » Reducing air emissions
- » Conserving water
- » Managing solid wastes

## **53 Appendix**

- » GRI index
- » Company metrics
- » Workforce metrics
- » Environmental metrics

### **About this report**

Our Corporate Responsibility Report for year ended 2017 highlights our efforts and progress on environmental, social and governance (ESG) topics. This report has been prepared in accordance with the Global Reporting Initiative (GRI) standards core option. The goal of this report is to provide insights into the inner workings of our corporate responsibility through the lens of our company, our people, our community and our world. To learn more, please visit the [Corporate Responsibility](#) section of our website where you can find additional information, reports and related news.

## **Letter from Tom Fanning**

For more than a century, the Southern Company system has been building the future of energy. We deliver the energy resources and solutions our customers and communities need to drive growth and prosperity. How we do our work is just as important as what we do.

Our uncompromising values – Safety First, Unquestionable Trust, Superior Performance and Total Commitment – are the key to our sustained success. They guide our behavior and ensure we put the needs of those we serve at the center of all we do.

We live Our Values every day by how we are governing our businesses, creating an inclusive workplace and prioritizing the well-being of our employees. Furthermore, we show our dedication by how our employees are engaging their communities and how our leaders are

making choices about our businesses that benefit our world.

In this report, we describe these activities and provide information on our ESG efforts. We augmented our reporting this year and are presenting a single, easy-to-reference document because we believe it is important to keep our stakeholders – including our customers, shareholders, employees, policymakers and neighbors – informed as we continue to evolve. The goal is for the information in this report to facilitate and inform a discussion about our company and the critical issues shaping the energy industry. It is our job, as an industry leader, to address these challenges, leverage opportunities and build the future of energy.

Our report is organized into four pillars of sustainability that collectively address

ESG topics: Our Company, Our People, Our Community and Our World.

- » **Our company** remains an industry leader committed to innovation and operational excellence.
- » **Our people** are talented, diverse, engaged and are the heart of our company.
- » **Our communities** are vital to our livelihood and inspire us to act on and off the job, every day.
- » **Our world** is the greatest legacy that will be passed on to future generations and conserving and protecting our environment is a way that we will help leave our world a better place.

The energy sector is rapidly evolving, driven by customer preferences, technology advancements, commodity prices, energy security and resiliency efforts and ESG initiatives. Southern Company

is committed to continuing our proactive approach for constructive engagement and dialogue with our customers, shareholders and other stakeholders on these issues. For example, we have established an intermediate goal to reduce carbon emissions from 2007 levels by 50 percent by 2030 and a long-term goal of low-to no-carbon operations by 2050. This aligns with our long-term business strategy and our commitment to a leadership role in developing solutions that make technological and economic sense.

On behalf of all the employees whose time and efforts are reflected in this report, thank you for taking the time to read about the Southern Company system.

*Tom Fanning*

May 1, 2018



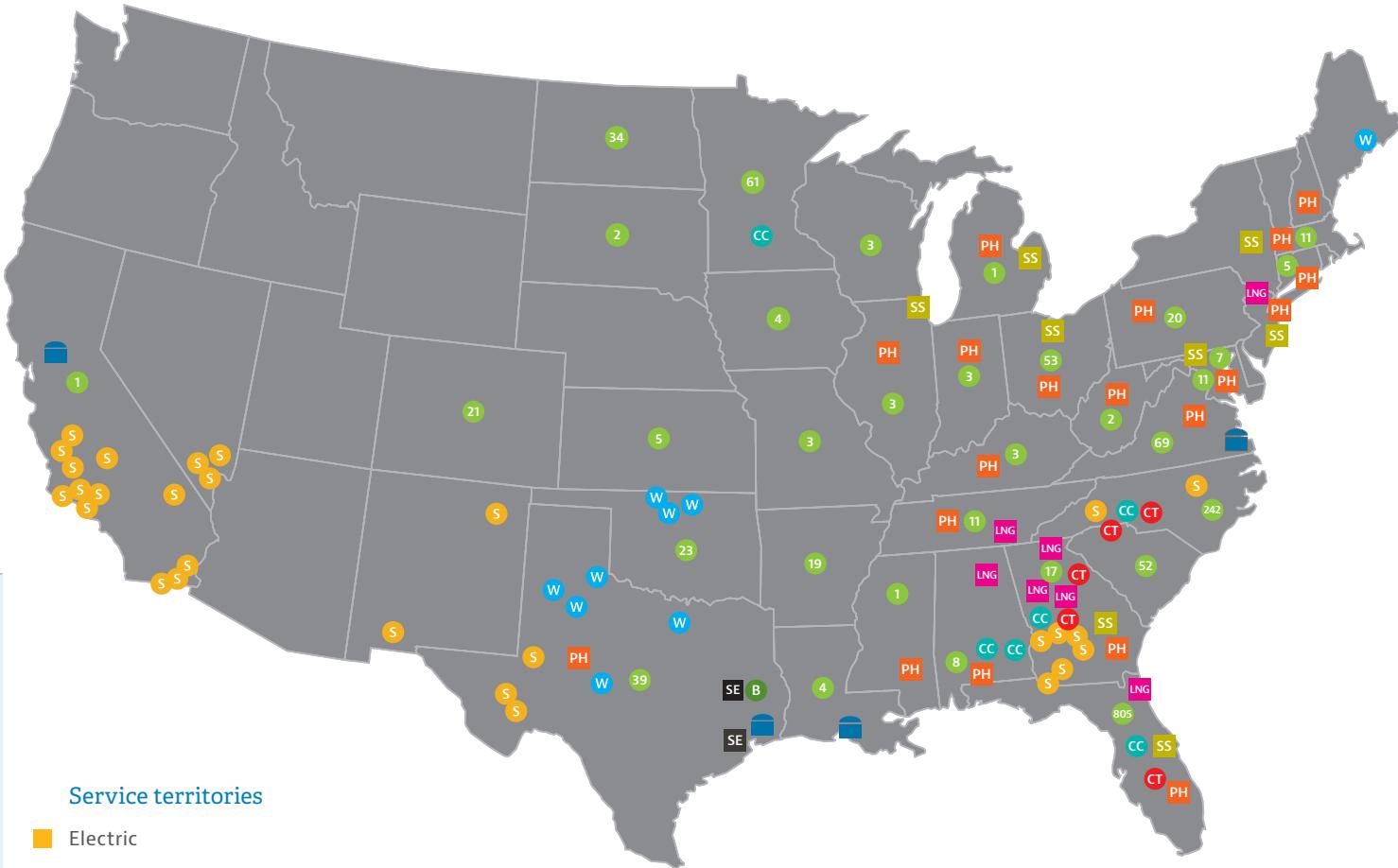
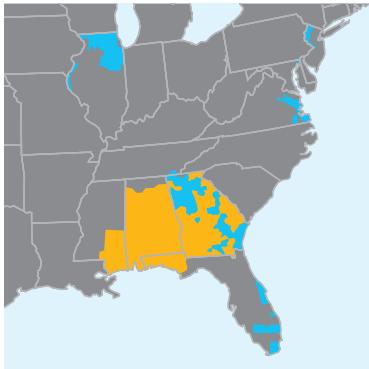
**Tom Fanning**

Chairman, President & CEO  
Southern Company

We are building the future of energy through an industry-leading commitment to innovation and operational excellence. But our goal is greater than that – we want to drive growth in communities and make lives better because we are there.



Our Company



#### Gas pipelines

- Southern Natural Gas
- Southern Company Gas
- Pipeline projects

#### Southern Power

*Facilities in operation or under development as of March 20, 2018*

- CC Combined-cycle facility
- CT Peaking facility
- B Biomass facility
- S Solar facility
- W Wind facility

#### Southern Company Gas

- LNG LNG facilities
- PH Pivotal Home Solutions
- SE Sequent Energy Management
- SS SouthStar
- Natural gas storage

#### PowerSecure

- # Owned and managed sites per state

*NOTE: On Apr. 11, 2018, Southern Company Gas announced the pending disposition of Pivotal Home Solutions.*

## At a glance

Southern Company is building the future of energy and delivering steady growth through a diversified fuel mix and a business model that evolves with customer expectations. We provide clean, safe, reliable and affordable energy through electric operating companies in four states, natural gas distribution companies

in seven states, a competitive generation company serving wholesale customers across America and a nationally recognized provider of energy solutions, as well as fiber optics and wireless communications.

Our portfolio of state-regulated electric and gas utilities supports an overall strong value proposition

for shareholders. In 2017, Southern Company's dividend yield was 4.78 percent, compared with 1.85 percent for the Standard & Poor's 500 index, and our dividend increased for the 16<sup>th</sup> consecutive year. We have paid shareholder dividends every quarter since 1948, reinforcing the strength and sustainability of our business over the long term.

**9 million**  
utility customers

**46,000 MW**  
of generating capacity

**170 billion**  
cubic feet of combined  
natural gas storage capacity

**11**  
electric and natural gas utilities

more than  
**80,000**  
miles of natural gas pipelines

**200,000**  
miles of electric transmission and  
distribution lines

over  
**31,000**  
employees

capabilities in  
**50 states**



We have seen new technologies, customer expectations and the regulatory environment associated with America's energy landscape continue to challenge conventional wisdom and traditional business models. This doesn't change our unwavering commitment to deliver clean, safe, reliable and affordable energy to customers.

### **Business environment**

Southern Company and its subsidiaries are engaged across the energy value chain as we make, move and sell energy to a wide customer base. We continue to diversify our electric generation options and have added regulated natural gas infrastructure to our business model.

We have also continued our industry-leading research and development efforts to drive technology innovation and advancements to meet the needs of our customers today and tomorrow.

As we seek opportunities to expand our business, we remain focused on our

customer-centric business model, combining state-regulated assets and other energy assets that were developed pursuant to long-term contracts with creditworthy counterparties. Our business model is designed to produce stable, predictable returns for our investors.



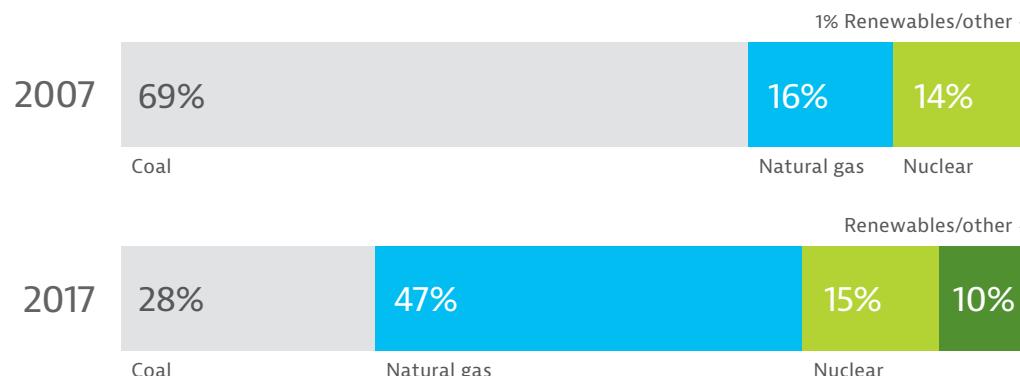
## Energy portfolio

Southern Company is one of only a few energy companies pursuing an "all of the above" energy strategy. We believe developing and maintaining a diversified energy portfolio is essential to reducing carbon emissions, while maintaining reliability and affordability. Over the last decade, we have significantly transformed our electricity generation mix.

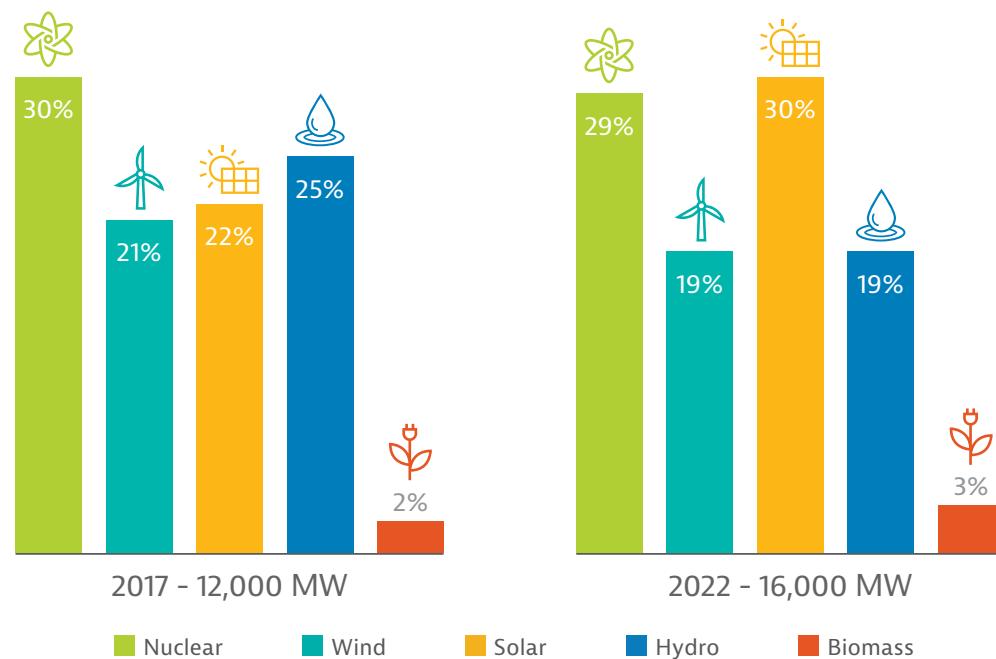
Since 2010, we have invested approximately \$20 billion in developing low-carbon and carbon-free resources, and more than 5,000 megawatts (MW) of renewable generating capacity has been added across the system since 2010. We expect to add an additional 4,000 MW of carbon-free and carbon-neutral resources, including 3,000 MW of renewable generating capacity, by 2022.

*In general, the owner of renewable energy credits (RECs) associated with the energy generated from renewable resources retains the ability to resell the RECs to third parties.*

## Electricity generation mix



## Growing portfolio of carbon-free and carbon-neutral energy sources



## Preparing for tomorrow

Southern Company and its subsidiaries are shaping tomorrow's energy industry by advancing and developing key technologies and initiatives. Over the past decade, we have leveraged research and

development investments that have returned benefits approaching \$5 billion.

Since the late 1960s, the Southern Company research and development team has led the creation, development

and demonstration of technologies to address business challenges and improve the production, delivery and end-use of energy.

## Partnering to provide state-of-the-art energy solutions

Southern Company subsidiary Georgia Power worked closely with design and construction consultant Darden & Company to help Mercedes-Benz Stadium become the only stadium in the U.S. to achieve LEED Platinum certification from the U.S. Green Building Council, the highest level of recognition for sustainability in building design. This was accomplished in part through the implementation of a 1 MW solar installation and 19 electric vehicle charging stations positioned throughout the campus. This helps the facility reach its sustainability goals by offsetting approximately 10 percent of the stadium's energy consumption with 1.6 million kilowatt hours per year coming from on-site solar generation.



A photograph of a woman from the side, wearing a blue shirt, sitting at a light-colored wooden desk. She is holding a white tablet in her hands, interacting with a complex user interface that includes sliders, buttons, and graphs, likely controlling a smart home system. In the background, there is a large flat-screen TV on a stand, a dark vase with long green leaves, a small white coffee cup on a saucer, and a small decorative object. A blue diagonal arrow points from the bottom left towards the text.

We are partnering with top homebuilders to develop Smart Neighborhoods™ that provide customers with state-of-the-art home construction, distributed energy resources and connected technology. This collaborative concept is the result of multiple groups across the enterprise focusing on how to utilize technology to best integrate high-performance homes into our electric grid.

## Investing in technology



### Grid modernization

Over the past decade we have heavily invested in smart grid technologies, including deploying nearly 4.6 million smart meters, to help customers better manage their energy use and save money.



### Liquefied natural gas (LNG)

Southern Company Gas subsidiary, Pivotal LNG, has more than four decades of experience in the production and delivery of LNG. Pivotal LNG operates seven LNG production facilities with the capacity to produce 554,000 gallons per day and the ability to store more than 96 million gallons.



### Carbon capture

At the National Carbon Capture Center, experts develop technologies to reduce emissions from natural gas- and coal-based power generation. In 2017, the center surpassed 100,000 hours of technology testing.



### Distributed energy resources (DERs)

Our history of incorporating renewable generation into our energy mix began in the late 1970s and continues today. We are exploring the integration of cost-effective energy storage with intermittent renewable generation to help lower carbon emissions.



### Advanced nuclear

We have been awarded up to \$40 million from the Department of Energy to explore, develop and demonstrate advanced nuclear reactor technologies like Generation IV reactors and small modular reactors.



### Energy storage

Our subsidiary, PowerSecure, formed a strategic venture with Bloom Energy where Bloom servers (fuels cells) are paired with our energy storage solution for a portfolio of customers including Home Depot and Kaiser Permanente.



### Compressed natural gas (CNG)

Southern Company Gas continues to add CNG vehicles to its fleet because they help reduce carbon dioxide (CO<sub>2</sub>) emissions and dependence on petroleum. Atlanta Gas Light builds and maintains CNG fueling stations to help fleet customers transition to CNG.



### Electric transportation

We are actively engaged in advancing electric transportation, which will lower costs for customers while reducing carbon emissions. We are taking a multifaceted approach to accelerate on- and off-road electric transportation growth.

The Southern Company system has installed 3,000 electric charging units since 2015 to serve the nearly 30,000 plug-in electric vehicles registered in our footprint.



## Providing energy solutions

Subsidiaries across the Southern Company system have specialized business units called Energy Services that help customers reduce their carbon footprint and provide strategic solutions for energy security. These teams determine the best energy-efficient solutions including lighting, HVAC, control systems, water conservation, combined heat and power, fuel conversion, distributed resources and renewable energy. Customized solutions like these are in high demand due to federal energy-efficiency executive orders and the Utility Energy Services Contracts funding mechanism.

For example, in 2016 Southern Company Services Energy Services (SCS Energy Services) partnered with the Centers for Disease Control and Prevention to install 439 kilowatts of solar photovoltaic

arrays, LED lighting upgrades, lighting sensor controls and sub-metering at an Atlanta-area campus. Overall, SCS

Energy Services has helped clients reduce their CO<sub>2</sub> emissions by approximately 57,000 metric tons.



## Policy and engagement

Southern Company engages with policymakers and stakeholders as part of our mission to serve customers and shareholders. In addition, we are actively involved in various trade associations, governmental agencies and research organizations, including:

### » Environmental Protection Agency

**(EPA):** We regularly engage with the EPA to provide feedback on potential regulation by having face-to-face meetings and submitting public comments.

### » Department of Energy (DOE):

We partner with the DOE to further action on several issues and challenges, including mitigation of carbon emissions.

### » Department of Defense:

We partner with all four branches of our military on innovative renewable generation projects totaling over 365 MW.

### » Electric Power Research Institute (EPRI):

We were instrumental in forming EPRI as the primary research

organization for more than 90 percent of the electricity generated and delivered in the U.S. We actively collaborate with EPRI on various research initiatives.

» **Edison Electric Institute (EEI):** We are a member of EEI, the association representing U.S. investor-owned electric companies.

» **American Gas Association (AGA):** Southern Company Gas has been an active partner with AGA since 1920 and maintains an active leadership position in the organization.

» **State Public Service Commissions (PSCs) and state environmental agencies:** Our electric operating companies and our natural gas local distribution companies are subject to the jurisdiction of their respective state PSCs and state environmental agencies. PSCs have broad regulatory authority over the companies, while environmental agencies are charged

with the enforcement of each state's environmental policies.

We place great importance on consistent dialogue with all of our stakeholders, including legislators, regulators and constituents interested in our views on national energy policy. We also have a long history of proactive, constructive engagement and dialogue with stakeholders who hold differing views, as well as those who are interested in ESG matters. Those interactions continue to educate, enhance and inform our decision-making.



A professional portrait of Veronica Hagen, a woman with short blonde hair, wearing a patterned blouse over a red collared shirt. She is smiling and looking slightly to her left. The background is a bright, possibly outdoor or well-lit office setting.

"We take our environmental, governance and social responsibilities very seriously. Our priority is to be a global citizen and take a balanced view of our obligations to our planet, our communities and our mission to serve customers the energy they need."

**Veronica Hagen**

Chair of the Southern Company Board of Director's Nominating, Governance and Corporate Responsibility Committee and member of the Operations, Environmental and Safety Committee

## Leadership oversight

Southern Company is governed by an annually-elected Board of Directors responsible for oversight of our overall strategy, including ESG issues.

The Board met 11 times in 2017, with an average attendance of 93 percent.

Diverse and highly-engaged, the Board is focused on Southern Company's strategy, including its key enterprise risks and business opportunities.

Independent Directors, who have an average tenure of 7.5 years, comprise each Board committee. The Board and its committees have both general and specific risk oversight responsibilities. Committees provide ongoing oversight for each of our most significant risks designated to it. Each committee has a designated

member of executive management as the primary responsible officer for providing information and updates to the Board committee related to significant risks. There is regular, open communication between management and the Board on these topics.

### Board independence

**93%** 14 of 15 director nominees are independent

### Diversity of director nominees

**33%** 3 Women  
3 Ethnic minorities

## Board committees

Audit	Compensation and Management Succession	Finance	Nominating, Governance and Corporate Responsibility (NG&CR)	Operations, Environmental and Safety (OE&S)
-------	--	---------	---	---

- NG&CR: Reviews risks and associated risk management activities related to state and federal regulatory and legislative environment, stockholder activism and environmental, sustainability and corporate social responsibility.
- OE&S: Reviews risks and associated risk management activities related to significant operations such as safety, system reliability, nuclear, gas, environmental regulation and policy.

## Our Values

At Southern Company, how we do our work is just as important as what we do. Our Values define our culture and are key to our sustained success.



### Value statements

#### Safety First

We believe the safety of our employees and customers is paramount. We will perform and maintain every job, every day, safely.

#### Unquestionable Trust

Honesty, respect, fairness and integrity drive our behavior. We keep our promises, and ethical behavior is our standard.

#### Superior Performance

We are dedicated to superior performance throughout our business. We will continue our strong focus on innovative solutions, improving how we run our business and our commitment to environmental stewardship.

#### Total Commitment

We are committed to the success of our employees, our customers, our shareholders and our communities. We fully embrace, respect, and value our differences and diversity.

*These tenets will continue to drive our future success as they guide us in defining who we are and how we operate as a business.*



## Code of Ethics

Our Code of Ethics sets the highest standards for all employees, officers and board members to act with honesty, fairness and respect. These ethical guidelines serve as the foundation for our conduct at work and in the community.

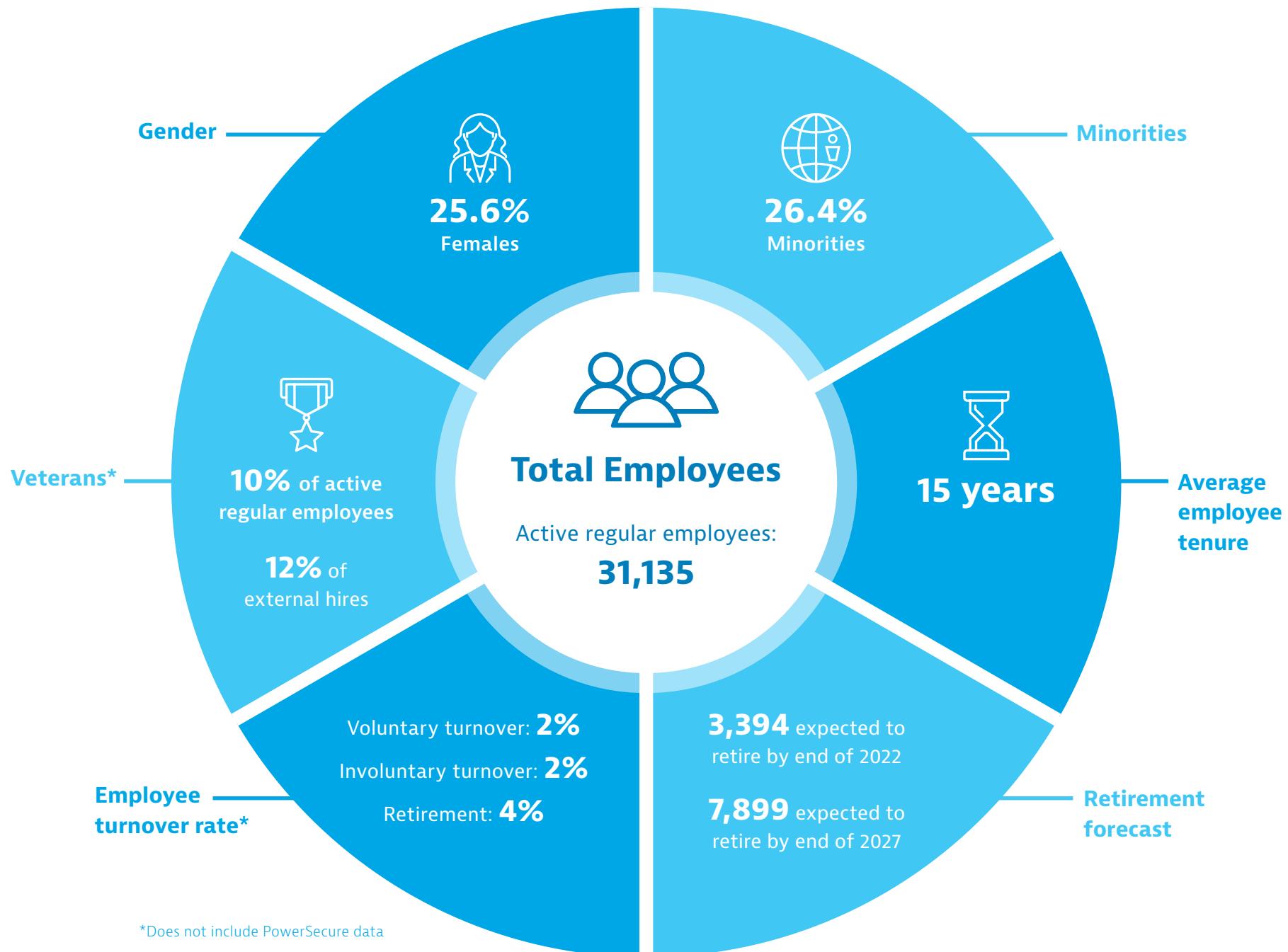
They challenge us and ensure we interact with our colleagues and our customers with the utmost integrity. Simply put: we mean what we say and do what we promise.

**Our people are the heart of  
Southern Company. They  
bring a strong sense of  
commitment to their work  
and are deeply rooted in  
the communities we serve.**



Our People

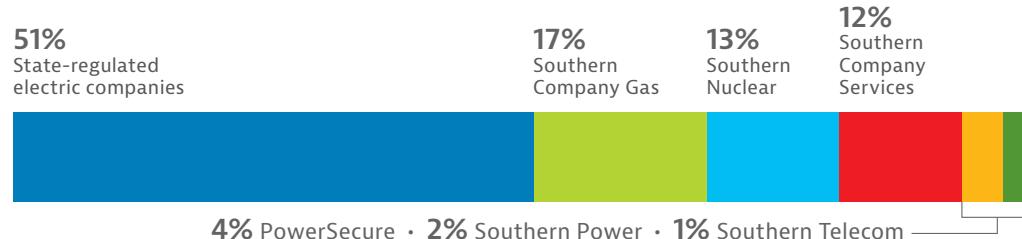
## Who we are



\*Does not include PowerSecure data

As the Southern Company system continues to grow, where our employees work continues to diversify across the energy value chain.

### Percentage of employees by business



### Voice of the Employee

We strive to promote and encourage open dialogue with our employees, welcoming employee feedback at any time for any reason. We understand that our employees are the most important aspect of our company, utilizing their talents and passions and working hard to produce unmatched service.

### 2017 accolades reflecting our culture

- » **American Association of People with Disabilities** – Disability Equality Index (Perfect Score)
- » **Black Enterprise** – Top 50 Best Companies for Diversity
- » **ComputerWorld** – 100 Best Places to Work in IT (#48)
- » **DiversityInc** – Top 50 Companies for Diversity (#44), Top 10 Companies for Veterans (#5) and Top 10 Companies for Progress (#1)
- » **Forbes** – America's Best Employers list and 50 Most Engaged Companies
- » **Fortune** – Fortune Magazine World's Most Admired Companies (#6 Energy/Utilities)
- » **G.I. Jobs** – Top 100 Military-Friendly Employer
- » **Human Rights Campaign** – Workplace Equality Index (Perfect Score) and Best Places to Work for LGBT Equality
- » **Military Times** – Military Times' Best for Vets: Employer (#17)
- » **U.S. Black Engineer** – Top Supporter of HBCU Engineering Programs

## Embracing differences

Southern Company subsidiaries are equal opportunity employers and do not discriminate based on race, color, religion, sex, national origin, age, disability, veteran status, genetic information, sexual orientation, gender identity or expression.

We believe in having a diverse workforce, including all facets of diversity – people, backgrounds, experiences, thoughts and perspectives – and fostering an inclusive workplace to leverage the strengths that diversity provides. This makes us stronger, more agile and provides a competitive advantage toward achieving our goals.

## Prioritizing inclusion

Southern Company Talent Acquisition and Diversity and Inclusion Director Chris Collier understands better than most the weight of his role. The son of a veteran, and a veteran himself, he spent most of his childhood and adult life on the move, something that required him to be adaptable. "As I think about diversity and inclusion at its purest, I was somebody that had to acclimate to new environments and different people every few years of my life. It impacted who I am today and how I respond to things," says Collier.

Collier understands that people are different, but to him respecting and valuing those differences is diversity and inclusion in action. This has guided him during his

11-year career with Southern Company and is among the reasons he was named to Black Enterprise's 2018 List of Top Executives in Corporate Diversity.

Collier believes the sustainability of Southern Company will not only be predicated on a diverse workforce, but also an inclusive one. This belief is now a system-wide focus that is helping Southern Company expand efforts to drive an inclusive workforce and workplace. "How can we make sure all of our workforce feels like part of the team? How can we make sure we are respecting and leveraging all our differences? That is how we are tackling inclusion. It's not a destination – it's a journey," Collier concluded.

## Pledging to advance diversity and inclusion efforts

In 2017, Tom Fanning demonstrated Southern Company's commitment to diversity and inclusion by signing the CEO Action for Diversity and Inclusion Pledge. The Pledge challenges business communities to advance their diversity and inclusion efforts by:

- 1.** Curating a safe workplace environment that welcomes complex, and sometimes difficult, conversations about diversity and inclusion
- 2.** Implementing and expanding unconscious bias education and awareness
- 3.** Sharing challenges and best practices



"We're an organization that cares for its people. We're on the leading edge of what we do – building the future of energy – because of our workforce."

**Chris Collier**

Southern Company  
Talent Acquisition and Diversity  
and Inclusion Director

## Investing in employees

We invest in the well-being of our employees through a comprehensive compensation and benefits strategy that includes a competitive salary, an annual bonus for nearly all employees and a pension and benefits plan designed to encourage physical, financial and emotional well-being.

### Physical well-being

- » Competitive medical and dental benefits
- » Long-term disability plan

### Financial well-being

- » Competitive compensation
- » Fully-funded pension plan and employee savings plan
- » Life insurance

### Emotional well-being

- » Competitive vacation, holidays and paid time off
- » Maternity, parental and adoption leave



## Developing people

Development of our talent is a top priority. We are fully committed to our employee's futures and demonstrate it through our strong history of attracting, developing and retaining the best talent. This happens through our focus on experiential development opportunities as well as purposeful people moves that are tied to individual development plans and our more formal succession planning processes.

In 2017 alone, we promoted nearly 600

employees to first-time supervisor roles and transferred over 350 employees between our subsidiaries.

We offer tools and resources to employees and leaders to help identify, grow and evolve the skills we need for the future. This is a key priority for the company and we deliver a number of training programs targeted towards all employees, high-potential employees, first-level managers, managers of managers and executives. We also offer

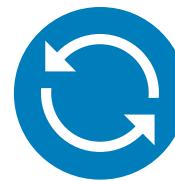
robust technical training focused on specific skills needed for our apprentices and journeyman linemen. We lead thousands of hours of safety, operations, maintenance, fuels and compliance training for employees to ensure we continue to expand our knowledge of business operations and the industry.

We are deliberate and intentional with our employee development strategy to ensure we have the skills we need for today and for the future of energy.

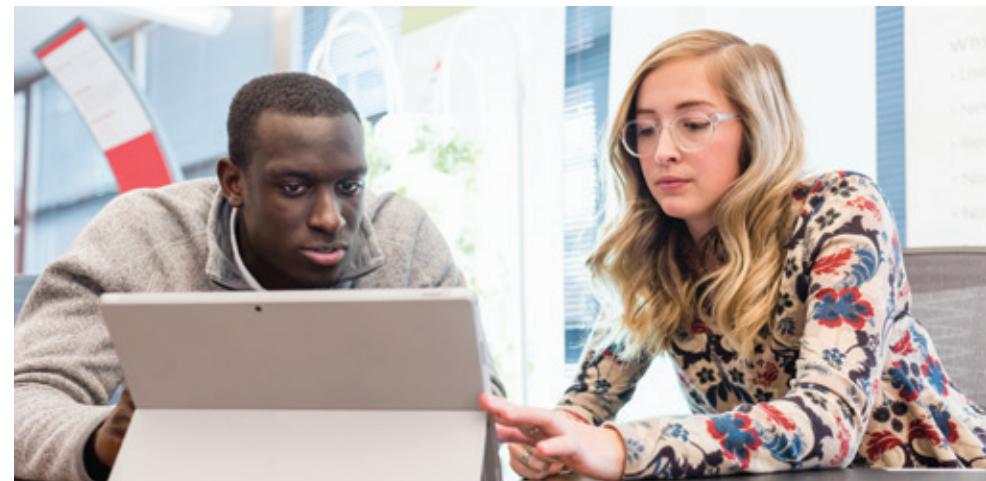


Nearly  
**600**  
employees promoted  
to first-time  
supervisory roles\*

\*Does not include PowerSecure data



Over  
**350**  
employees  
transferred  
between subsidiaries\*





Southern  
Company

building the  
future of energy

southerncompany.com

Of our 350 annual co-op students and interns, 80 percent work in the engineering function and 20 percent work in accounting, finance, supply chain and marketing functions.



Georgia  
Power

Building  
the future



CO-OP

## Future workforce

Southern Company's in-house Talent Acquisition organization utilizes a variety of strategies to attract top talent. Recruiting efforts draw from diverse talent opportunities such as college campuses, military installations, technical colleges, professional associations, conferences, job boards, social media outlets and networking events.

Modernization is decreasing the number of positions, which makes attracting, developing and retaining top talent even more important. Diverse hiring continues to outpace current representation.



**1,527 new hires\***

**29%**

**37%**

Women

Minorities

**33 years**

average age

\*Does not include PowerSecure data



## Recruiting students

Our co-op and internship programs are designed to attract top talent by providing challenging work, meaningful leadership and professional responsibilities. One hundred years of strong partnerships with universities and colleges have built our competitive student co-op and intern programs. We actively recruit at 16 core schools, including several historically black colleges and universities with engineering programs. We also partner with various engineering associations, including the National Society of Black Engineers, Society of Women Engineers, Society of Hispanic Professional Engineers and the INROADS program, when filling our co-op and intern positions.

## Putting Safety First

Safety First is a top priority across the Southern Company system, on and off the job. We strive to create an environment where our employees perform and maintain every job, every day, safely. The first of Our Values, Safety First is championed by our Safety and Health Council.

The council is comprised of senior health and safety leaders from across the system and provides strategic guidance and leadership on safety and health functions to our management and business units.

In 2017, the council developed a systematic approach to address critical risks and eliminate serious injuries and fatalities. The council's work will continue to put Safety First, leading by example and striving to protect the lives of our employees.



**9 members**

on the Safety and  
Health Council



**4**

meetings  
per year



**98.9%**

of employees worked  
injury free in 2017

## Building supplier relationships

The Southern Company system is committed to maintaining the highest ethical standards in all business practices, including relationships with suppliers.

Our supply chain organizations support our companies' competitive position by entering and maintaining relationships with suppliers and focusing on the total supply chain. This includes:

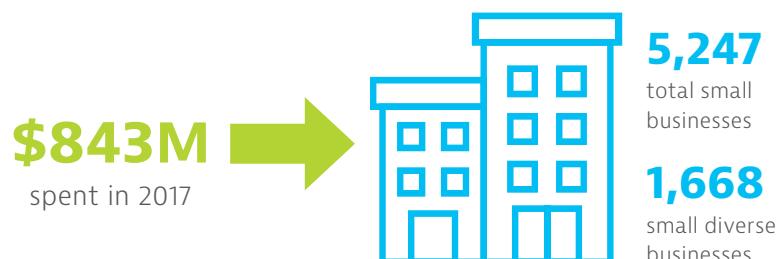
- » Making purchases based on best overall value
- » Working to balance low-cost, high-quality and superior service to

achieve the highest overall value for Southern Company

- » Developing and maintaining relationships with suppliers based on mutual respect
- » Working with our suppliers to further the success of both companies
- » Conducting business with honesty, integrity, fairness and with a commitment to legal compliance
- » Communicating common messages, expectations and standards of performance
- » Striving to provide clear and consistent feedback and measurements
- » Utilizing suppliers' abilities and capabilities to add value to our business
- » Striving to take advantage of best practices
- » Developing and utilizing diverse businesses
- » Establishing mutually beneficial relationships with diverse businesses to improve the communities in which we serve and to create a more competitive supplier base

## Supplier diversity

### Southern Company state-regulated electric companies



### Southern Company Gas



**We are committed to the success of our employees, customers, shareholders and communities. We believe in being a citizen wherever we serve, a sentiment our employees put into action on and off the job, every day.**



Our Community

## Charitable giving

As part of our Total Commitment to customers and communities, we make an effort across the Southern Company system to contribute to independent funds, non-profit organizations and foundations that impact arts and culture, health and human services, civic and community projects, safety, education and the environment.

Corporate giving from Southern Company and its subsidiaries for 2017 totaled \$51,687,244. In addition, employees across the system raised more than \$1,746,000. Funds support organizations identified by employees as programs that best address our local community needs such as United Way, the American Cancer Society, the American Heart Association and Salvation Army to name a few.

## Helping communities recover after disaster

In August 2017, tragedy struck Texas when Hurricane Harvey displaced more than 32,000 residents in Houston, Texas. As citizens wherever we serve, Southern Company and its subsidiaries were committed to coming to the aid and supporting the communities devastated by this catastrophe.

As part of the response to the storm, Southern Company donated \$100,000 to the American Red Cross to help communities rebuild and recover. Employees and retirees from across the system were also encouraged to donate and gave more than \$100,000 to the American Red Cross. In addition, Southern Company matched these employee contributions.

Weeks after Harvey, Hurricane Maria devastated Puerto Rico, the

home to family and friends of many Southern Company system employees. Employees again made monetary donations as well as food and clothing. Along with donations, crews from PowerSecure and other operating companies traveled for Puerto Rico where they remained to restore power to the island.



## Volunteering

Along with charitable giving, Southern Company system employees do not hesitate to lend a helping hand in our communities. Southern Company subsidiaries offer opportunities for employees to volunteer for community outreach, including hurricane relief, Relay for Life and the Heart Walk.

Employees and retirees freely give more than 260,000 hours annually to improve the surrounding communities where we serve. Community service groups for employees and retirees administered by our subsidiaries include the Alabama Power Service Organization, Alabama Power Energizers, Georgia Power Ambassadors, Citizens of Georgia Power, Gulf Power Transformers, Mississippi Power Community Connection and Southern Company Gas V-Force. These volunteers work in areas that include education, the



environment, community and economic development, and they support hospitals,

libraries, shelters, food banks, nursing homes, children's homes and more.



**\$51.7M**

total given by  
Southern Company system



**\$1.75M**

total raised by Southern  
Company system employees



**260K**

total hours volunteered by  
employees system-wide



"The success of our youth begins with preparing them today. If their dreams are to be fulfilled, it is our responsibility to show them the opportunities and provide a passport to the future."

- Gary D. Gray  
Team leader at Plant Daniel



## Educational initiatives

Our employees are woven into the communities we are privileged to serve. By actively engaging in our communities, we are making a visible impact for those we serve and beyond.

### Educating the next generation through STEM

Teaching kids about energy and responsible use of resources is part of Southern Company's commitment to support education. Our For Inspiration and Recognition of Science and Technology (FIRST) Robotics program is just one example of how employees are woven into local educational programs, teaching our future leaders about the future of energy.

FIRST Robotics is a program that allows students of all grade levels to be engaged with science, technology, engineering and math (STEM) in a unique and exciting way. Since 2006, employees from our subsidiaries have volunteered their time to visiting classrooms, assisting with robotic teams and helping their

9<sup>th</sup>- through 12<sup>th</sup>-graders in regional competitions.

Every year for the regional competitions, a new challenge is announced and a kit of parts is provided to each team. Each team has six weeks to strategize, design and fabricate a competitive robot for the regional championship.

In 2017 alone: Southern Company was the presenting sponsor of South Super-Regional Championship in Athens, Georgia; both Mississippi Power and Georgia Power started the first all-girls teams and Mississippi Power held its inaugural FIRST Robotics Competition in the state called Beach Bot Battle.

Our employees are passionate about teaching and mentoring diverse students in our communities and are committed to providing students with the resources they need to compete.



## **Supporting customers**

The Southern Company system is a leader in offering innovative electric and natural gas energy efficiency programs that help customers use energy more wisely. Energy efficiency programs play an important role in helping the Southern Company system maintain enough power generation capability and natural gas system capacity to serve the energy needs of all of our customers.

Our subsidiaries offer energy efficiency programs and assistance to help customers save money.

» **My Power Usage** helps customers monitor how much electricity they use each day and projects the amount of their monthly bill.

### » **Low-income assistance programs**

are federally-funded and help qualified low-income households with their energy bills.

### » **Senior citizen programs**

assist customers that are 65 years of age and older. Eligible customers receive a monthly discount on their base charge.

## **Winning the trust of customers**

Nicor Gas and Virginia Natural Gas (VNG) earned Most Trusted Brand recognition in 2017 based on results from Market Strategies International's Cogent Report™ study, Utility Trusted Brand & Customer Engagement: Residential. The annual study recognized Nicor Gas and VNG among 44 gas, electric or combination utilities that were honored based on a utility's Brand Trust Index including customer focus, community support, effective communications and environmental dedication.

Our subsidiaries have also been recognized for honesty and transparency including the World's Most Admired Electric and Gas Utilities, Most Trusted Residential Electric Utility in America, America's Top 100 Public Companies and the highest ranking on the 2017 Gas Utility Residential Customer Satisfaction Study.

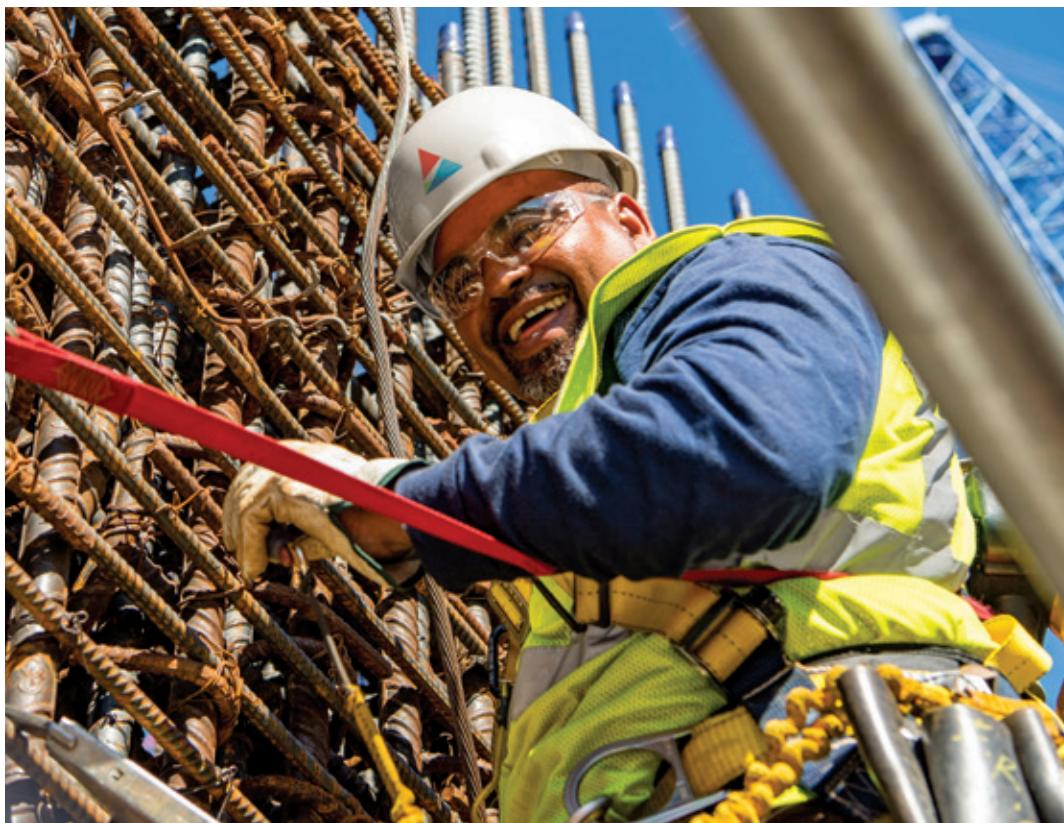
## Economic development

The Southern Company system's economic commitment includes serving the best interests of our shareholders and communities.

Overall, our economic development efforts have brought an average of 18,000 new jobs and \$6 billion in capital investment each year for the last five years to the Southeastern U.S. The

construction of two new units at the Vogtle nuclear power plant is currently employing more than 8,000 people and is expected to create 800 permanent jobs upon operation.

Through 2017, our state-regulated electric companies have invested approximately \$12.9 billion in environmental capital retrofit projects to comply with environmental requirements.



Our current compliance strategy estimates capital expenditures of \$2.8 billion from 2018 to 2022 to comply with environmental requirements.



**18,000**

new jobs on average each year over the last 5 years



**\$6 billion**

in capital investments on average each year over the last 5 years



**\$12.9 billion**

in environmental capital retrofit expenditures (1990 – 2017)



Since  
2003,  
we have  
invested more than  
\$14.2 million in 306 grants,  
restoring or enhancing  
over 1.7 million acres.

## **Environmental stewardship**

The Southern Company system is a leader in environmental stewardship. In addition to maintaining environmental compliance in our operations, we work to protect wildlife by conserving their natural habitats. We are also improving the overall ecosystem through partnerships with public and private

organizations, like the National Fish and Wildlife Foundation (NFWF).

Our partnership with NFWF began more than 15 years ago with a focus on restoring and reviving the populations and habitats of southern birds. Since then, the partnership has developed into a portfolio of efforts addressing

critical conservation needs including long-term restoration of the longleaf pine ecosystem, recovery of imperiled species and community-based stewardship of forests, rivers, coastal areas and wetlands. This alliance is a successful model of collaborative conservation that has generated 15 years of measurable outcomes and accelerated results.

## **Conserving wildlife and habitats**

**Longleaf Stewardship Fund:** Invested nearly \$7.4 million to restore or enhance over 1.2 million acres of longleaf pines.

**Power of Flight:** Translocated 379 red-cockaded woodpeckers, which are on a trajectory for potential down listing from endangered status within the next decade.

**Five Star and Urban Waters Restoration:** Invested nearly \$2.8 million in 118 projects improving 1,300 acres and 26 miles of stream bank.

**Bats for the Future Fund:** First in our industry to support research by investing \$100,000 in the NFWF program to find a cure for a deadly disease that threatens North America's bat population.

**Renew Our Rivers:** Removed 15 million pounds of trash and debris since 2000 with the help of 110,000 volunteers.





Our World

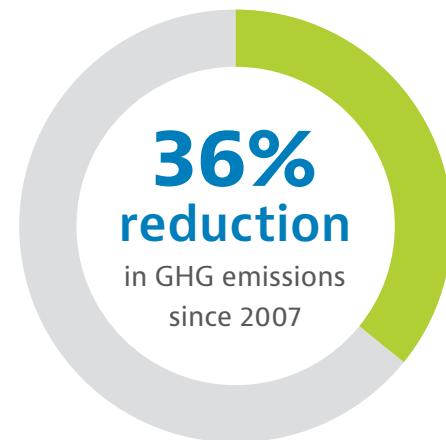
We are reducing our GHG and air emissions, responsibly using natural resources and managing byproducts and waste, all while meeting or surpassing environmental laws and regulations. We do this because we want to leave our world a better place.

### Reducing GHG emissions

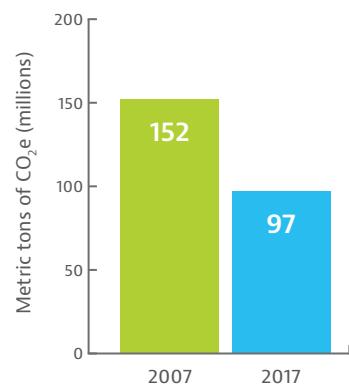
The Southern Company system is committed to providing clean, safe, reliable and affordable energy, while setting a long-term goal to transition to low-to no-carbon operations by 2050. We have already made significant progress with an "all of the above" approach to

electric generation resource diversity.

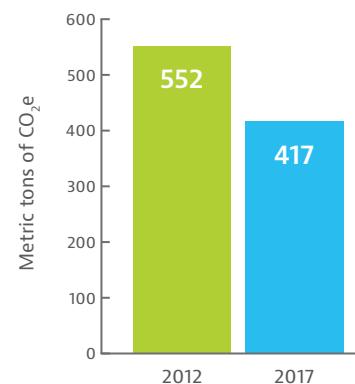
Without any regulatory mandates, our system's total annual GHG emissions in 2017 of 97 million metric tons of CO<sub>2</sub> equivalent (CO<sub>2</sub>e), were approximately 36 percent (55 million metric tons) lower than 2007 levels.



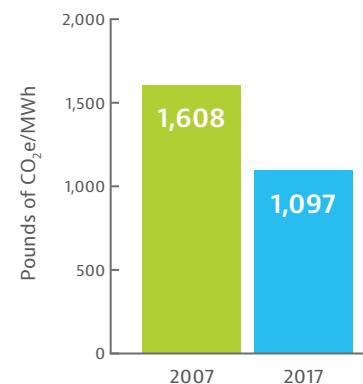
**Total GHG emissions**  
(based on financial control)



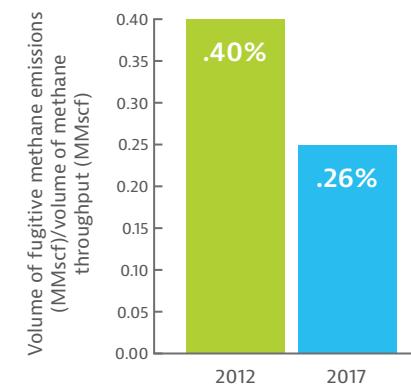
**Gas distribution total CO<sub>2</sub>e emissions**  
(based on financial control)



**Electricity GHG intensity**  
(based on financial control)



**Gas distribution methane emissions intensity rate**  
(based on financial control)



## GHG reduction activities

- » **GHG emission reduction** is a major focus of our research and development organization, which has a historic record of technology advancement since the 1960s. We lead the industry in conducting robust research and development of new innovative energy technologies – and in deploying those technologies to reduce GHG emissions.
- » **We consider retirement options** for generating units as a part of our overall resource strategy. In fact, this has led to approximately 4,200 MW of coal- and oil-related retirements since 2010 and approximately 3,300 MW of natural gas fuel switches since 2015.
- » **Since 1998**, Southern Company Gas has replaced over 5,600 miles of bare steel and cast iron pipe and,

as a result, has removed 2.5 million metric tons of CO<sub>2</sub> equivalent from its natural gas distribution system.

- » **We've exceeded** emissions intensity reduction goals established by the Our Nation's Future Energy Program (ONE Future) for our natural gas distribution operations. Our current intensity rate of 0.26 percent is less

than ONE Future goals for 2020 (0.48 percent) and 2025 (0.44 percent).

- » **For more than two decades**, Southern Company Gas has spearheaded several projects that reduce methane emissions, served as a trusted education source for consumers and participated in federal emissions reduction programs.



We have, for the first time, set emission reduction goals that are aligned with our long-term business strategy and our commitment to a leadership role in developing solutions that make technological and economic sense.

We have established an intermediate goal to reduce carbon emissions from 2007 levels by 50 percent by 2030 and a long-term goal of low- to no-carbon operations by 2050.

In addition, we aim to maintain the fugitive methane emissions for our natural gas distribution operations to 1 percent or less of our total volume of methane throughput.

To achieve these goals, the Southern Company system expects to continue growing its renewable energy portfolio, optimize technology advancements to modernize its transmission and distribution systems, increase the use of natural gas for generation, complete construction of Plant Vogtle Units 3 and 4, invest in energy efficiency and continue research and development efforts

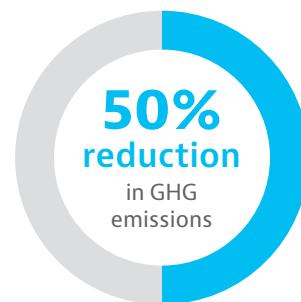
focused on technologies to lower GHG emissions. The Southern Company system's ability to achieve these goals will be dependent on many external factors, including supportive national energy policies, low natural gas prices, and the development, deployment and advancement of relevant energy technologies.

## GHG metrics and goals

(based on 2007 GHG levels)



2017



2030



2050



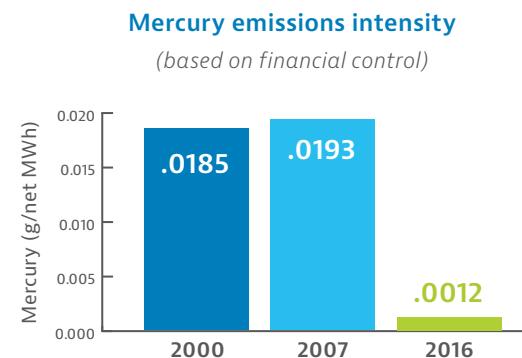
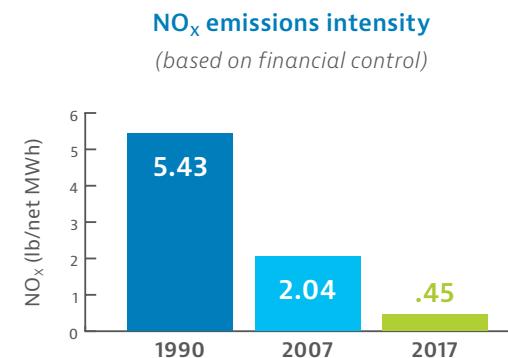
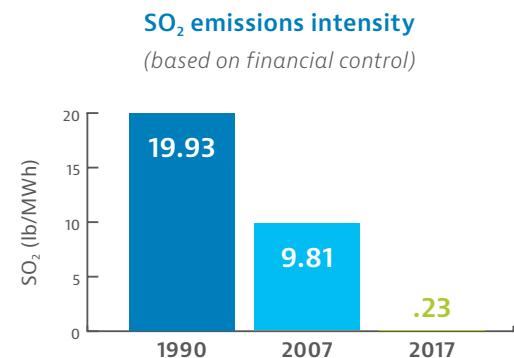
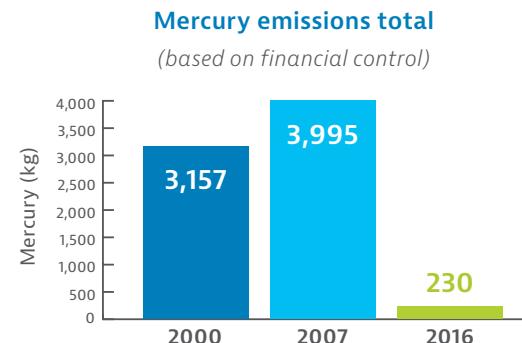
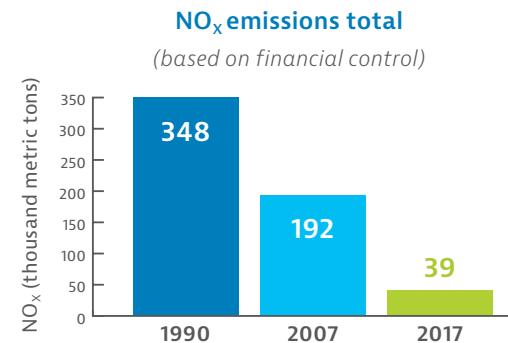
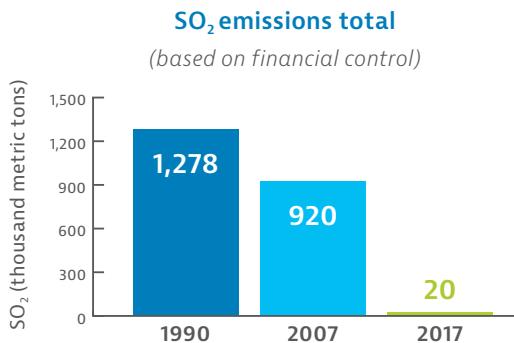
Southern  
Power is a  
leading U.S. wholesale  
energy provider with clean  
generation facilities from coast  
to coast. The company is currently  
constructing its most recent renewable project,  
the Cactus Flats Wind Facility in Texas.

## Reducing air emissions

The Southern Company system addresses emissions like nitrogen oxides ( $\text{NO}_x$ ), sulfur dioxide ( $\text{SO}_2$ ) and mercury as part of our commitment to

environmental responsibility. Since 1990, we've reduced  $\text{NO}_x$  emissions by 89 percent and  $\text{SO}_2$  emissions by 98 percent. During the same period, electricity generation has increased about 30 percent

to serve growing demand. In addition, since 2007, the system has reduced mercury emissions by over 90 percent.



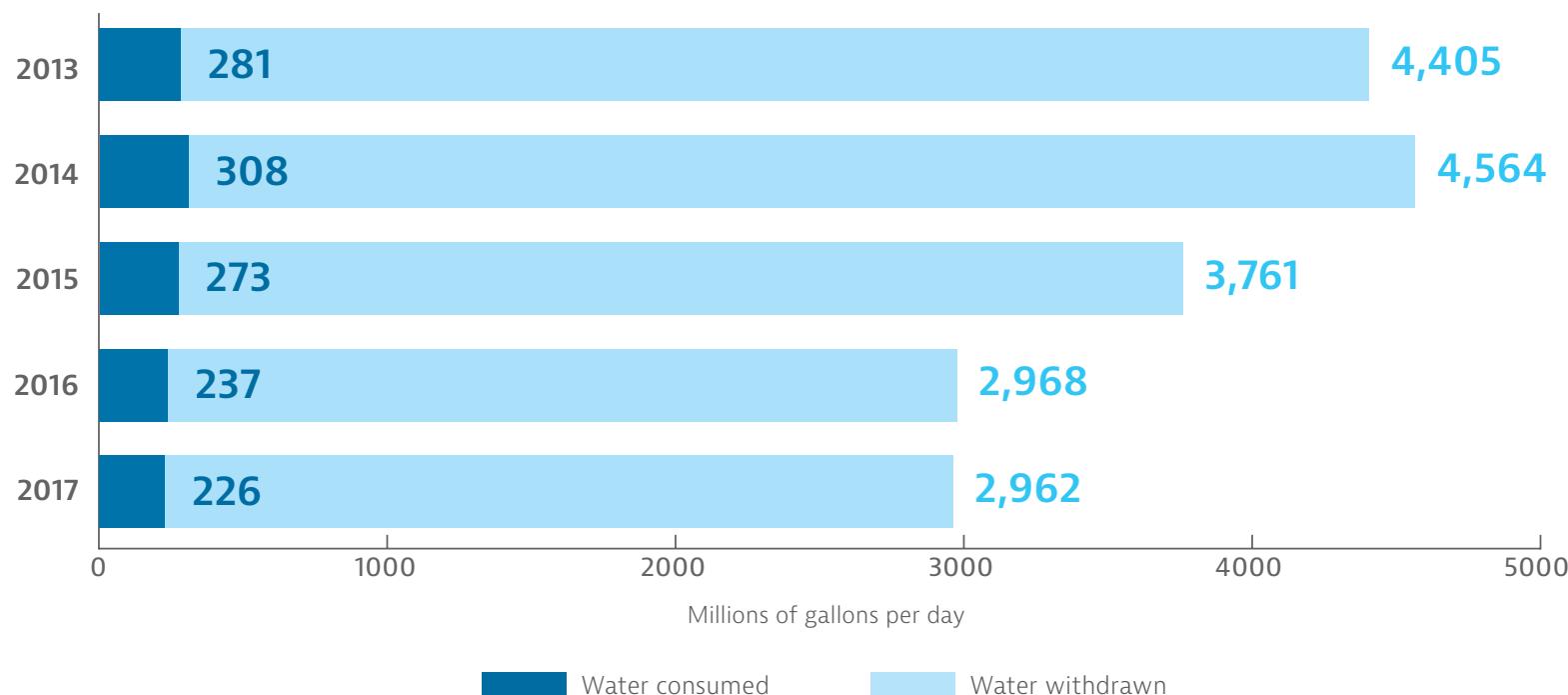
## Conserving water

Southern Company system operations rely heavily on water supply. Our state-regulated electric companies' draw from a variety of abundant surface waters including rivers and streams, lakes and reservoirs, coastal water and groundwater sources. Each

source presents unique and valuable differences and challenges in the process of power production. Between 2013 and 2017, the system's thermoelectric plants withdrew on average a total of 3.7 billion gallons of water per day, returning 93 percent to the source – rivers or lakes. Over the same period,

surface water withdrawal has reduced nearly 33 percent. In addition, our 33 hydroelectric facilities make up about 6 percent of the system's generating capacity and provide more than 200,000 acres of lakes and more than 5,000 miles of shoreline for public use.

**Southern Company system surface water withdrawal and consumption**



We operate rigorous programs with the goal to safely and effectively manage coal ash and other waste resulting from power generation.

### Managing solid wastes

The Southern Company system operates a rigorous Coal Combustion Residuals (CCR) compliance program that complies with applicable laws and regulations to safely, effectively and responsibly manage CCR.

Our state-regulated electric companies have established groundwater monitoring systems around CCR units that meet

the EPA's monitoring requirements. We are also moving aggressively to divert ash and wastewater from ash ponds, including the construction of dry ash handling equipment and wastewater treatment systems.

We made a commitment to close all ash ponds and we continue to be proactive in our approach to ash ponds. We are

closing inactive ponds, have put a schedule in place for all ponds in the system to stop receiving ash by 2019 and, thereafter, will close every remaining ash pond in our system.

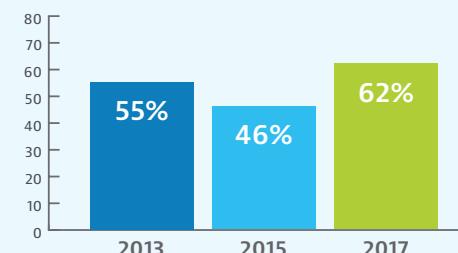
Additionally, the Southern Company system currently avoids CCR disposal by beneficially using 62 percent of produced ash and gypsum.

### Ash and gypsum sold for beneficial use

Percent ash sold



Percent gypsum sold



The Southern Company system has reduced hazardous waste generation in routine electric utility work by employing simple measures like replacing hazardous materials with safer options such as non-chlorinated cleaners and water-based paints.

Nuclear power plants produce two levels of radioactive waste, high-level and low-level. High-level waste is used fuel. Used fuel is handled by remote control and safely stored inside the most highly secured area of the plant in steel-lined,

concrete pools filled with water or on the plant property in steel-lined, concrete containers. A thimble-sized nuclear fuel pellet produces the equivalent energy of 1 ton of coal. An average nuclear plant unit retires about 20 tons of fuel each year that, in volume, could fit in a small room. Low-level waste includes protective clothing, tools and equipment that may contain small amounts of radioactive material. Low-level waste can be shipped to a licensed disposal facility or stored at the plant.

Southern Company, through its subsidiaries, operates three nuclear power plants. At plants Vogtle, Hatch and Farley, on-site dry storage facilities are being used to house spent fuel once it reaches a lower level of radioactivity and can be expanded to accommodate used fuel through the life of each plant. The casks are constructed of steel-reinforced concrete, proven to safely protect the fuel under extreme conditions such as earthquakes, tornadoes, hurricanes, floods and explosions.





## Appendix

Southern Company is a holding company that conducts its business through its subsidiaries; accordingly, references to Southern Company's operations, investments, employees and communities refer to the operations, investments, employees and communities of its subsidiaries. Additionally, Southern Company's strategies are implemented by its subsidiaries.

## GRI index

Southern Company's 2017 Corporate Responsibility Report has been prepared in accordance with the GRI standards core option. It was developed based on issues related to performance that we have identified as material or important to stakeholders. The table below provides the location to find information reported that completely or partially relates to the indicators published by GRI.

Section	Subsection	GRI indicator
About This Report		102-47, 102-50, 102-52, 102-54
Letter from CEO		102-14, 102-16, 102-47, 102-49, 103-1
Our Company	At a glance • Business environment • Energy portfolio • Policy and engagement • Preparing for tomorrow • Investing in technology • Policy and engagement • Leadership oversight • Our Values	102-1, 102-2, 102-4, 102-6, 102-7, 102-13, 102-16, 102-17, 102-18, 102-19, 102-20, 102-22, 102-29, 102-30, 102-33, 102-43, 405-1
Our People	Who we are • Embracing differences • Investing in employees • Developing people • Future workforce • Putting Safety First • Building supplier relationships	102-8, 102-9, 401-1, 401-2, 401-3, 403-1, 403-2, 404-2, 405-1
Our Communities	Charitable giving • Volunteering • Educational initiatives • Supporting customers • Economic development • Environmental stewardship	102-12, 304-1, 203-1, 304-3
Our World	Reducing GHG emissions • Reducing air emissions • Conserving water • Managing solid wastes	102-15, 201-2, 303-1, 305-1, 305-4, 305-5, 305-7, 306-1
Appendix	GRI index • Company metrics • Workforce metrics • Environmental metrics	102-7, 102-8, 102-54, 102-55

## Company metrics

Financial summary	2015	2016	2017
Operating revenues (millions)	\$17,489	\$19,896	\$23,031
Earnings (millions)	\$2,367	\$2,448	\$842
Diluted earnings per share	\$2.59	\$2.55	\$0.84
Dividends per share (amount paid)	\$2.15	\$2.22	\$2.30
Dividend yield (year-end, percent)	4.6	4.5	4.8
Total assets (millions)	\$78,318	\$109,697	\$111,005
Utility customers (thousands, year end)	2015	2016	2017
Electric operations	4,546	4,593	4,640
Gas distribution operations	-	4,586	4,623
<b>Total</b>	<b>4,546</b>	<b>9,179</b>	<b>9,263</b>
Generation capacity (owned nameplate MW, year end)	2015	2016	2017
Coal	18,023	17,513	16,890
Natural gas	18,518	18,744	19,514
Nuclear	3,680	3,680	3,680
Biomass/biogas	116	116	116
Geothermal	3	3	3
Hydroelectric	2,756	2,756	2,756
Solar	829	2,282	2,504
Wind	299	1,198	1,474
<b>Total</b>	<b>44,223</b>	<b>46,291</b>	<b>46,937</b>
Sources of electricity generation	2015	2016	2017
Coal	32%	30%	28%
Natural gas	47%	49%	47%
Nuclear	16%	15%	15%
Renewables/other	5%	6%	10%

In general, to the extent a retail operating company receives renewable energy credits (RECs) associated with energy generated by renewable resources, the company retains the right to use the RECs to serve its customers with renewable energy or to sell the RECs, either bundled with energy or separately, to third parties for the benefit of customers.

## Workforce metrics\*

### Southern Company continues to transform its workforce

- » Southern Company's 10-year trend demonstrates increases in both racial and gender diversity throughout the organization
- » We have significant racial and gender diversity at our officer level and above
- » Over the past three years, 14 percent of our new hires have been veterans or active military, who now comprise 10 percent of our total workforce

Workforce	2015	2016	2017
Full-time employees	31,480	30,595	31,056
Part-time employees	89	78	79
<b>Total employees</b>	<b>31,569</b>	<b>30,673</b>	<b>31,135</b>
Workforce demographics	2015	2016	2017
Women as a percent of workforce	26%	26%	26%
Women as a percent of management	20%	23%	22%
Minorities as a percent of workforce	26%	26%	26%
Minorities as a percent of management	16%	19%	19%
Employee turnover (2017 data does not include PowerSecure)	2015	2016	2017
Voluntary as a percent of workforce	2%	2%	2%
Involuntary as a percent of workforce	2%	3%	2%
Retirement as a percent of workforce	3%	4%	4%
Employees readying for retirement (based on Attrition Projection Model rather than retirement eligibility)	2015	2016	2017
Employees expected to retire in next 5 years	3,309	3,740	3,394
Employees expected to retire in next 10 years	7,266	8,027	7,899
Safety and health program	2015	2016	2017
Percentage of employees that worked injury free	99%	99%	99%
Percent reduction in rate of employee injuries since introducing safety programs in 2005	59%	46%	28%

\*2015 and 2016 data does not include PowerSecure

## Environmental metrics

Emissions	2015	2016	2017
CO <sub>2</sub> emissions (metric tons)	102,000,000	99,000,000	96,000,000
CO <sub>2</sub> emissions intensity (metric tons/net MWh)	0.547	0.529	0.495
Generation CO <sub>2</sub> e emissions (metric tons)	102,000,000	100,000,000	97,000,000
CO <sub>2</sub> e emissions intensity (metric tons/net MWh)	0.547	0.532	0.502
Fugitive CO <sub>2</sub> emissions of sulfur hexafluoride (metric tons)	39,827	37,919	72,051
Fugitive CO <sub>2</sub> emissions of natural gas distribution (metric tons)	-	464,970	416,894
NO <sub>x</sub> emissions (metric tons)	57,169	41,263	38,669
NO <sub>x</sub> emissions Intensity (lb/net MWh)	0.67	0.48	0.45
SO <sub>2</sub> emissions (metric tons)	111,329	30,162	19,670
SO <sub>2</sub> emissions intensity (lb/net MWh)	1.31	0.35	0.23
Mercury emissions (kg)	835	230	-
Mercury emissions intensity (g/net MWh)	0.004	0.001	-
Water withdrawn and consumed for electric generation	2015	2016	2017
Withdrawn (million gallons/day)	3761	2968	2962
Consumed (million gallons/day)	273	237	226
Fresh water resources	2015	2016	2017
Water withdrawals - consumptive (millions of gallons/net MWh)	0.0005	0.0005	0.0004
Water withdrawals - non-consumptive (millions of gallons/net MWh)	0.007	0.005	0.005
Waste products	2015	2016	2017
Hazardous waste disposal (lb)	459,432	416,968	793,108
Coal combustion products beneficially used (percent)	49%	53%	62%

## **Cautionary note regarding forward-looking statements**

Certain information contained in this report is forward-looking information based on current expectations and plans that involve risks and uncertainties. Forward-looking information includes, among other things, statements concerning future energy mix, GHG reduction strategies, expected future cost and benefit analyses, employee retirements, job growth and estimated capital expenditures to comply with current and proposed environmental regulations. Southern Company cautions that there are certain factors that can cause actual results to differ materially from the forward-looking information that has been provided. The reader is cautioned not to put undue reliance on this forward-looking information, which is not a guarantee of future performance and is subject to a number of uncertainties and other factors, many of which are outside the control of Southern Company and its subsidiaries; accordingly, there can be no assurance that such suggested results will be realized. The following factors, in addition to those discussed in Southern Company's and its

subsidiaries' Annual Reports on Form 10-K for the year ended December 31, 2017, and subsequent securities filings, could cause actual results to differ materially from management expectations as suggested by such forward-looking information: the impact of recent and future federal and state regulatory changes, including environmental laws and regulations governing air, water, land, and protection of other natural resources, as well as changes in application of existing laws and regulations; current and future litigation or regulatory investigations, proceedings, or inquiries; the effects, extent, and timing of the entry of additional competition in the markets in which Southern Company's subsidiaries operate; variations in demand for electricity and natural gas, including those relating to weather, the general economy, population and business growth (and declines), the effects of energy conservation and efficiency measures, including from the development and deployment of alternative energy sources such as self-generation and distributed generation

technologies; available sources and costs of natural gas and other fuels; limits on pipeline capacity; transmission constraints; advances in technology; ongoing renewable energy partnerships and development agreements; state and federal rate regulations and the impact of pending and future rate cases and negotiations, including rate actions relating to fuel and other cost recovery mechanisms; the ability of Southern Company's electric utilities to obtain additional generating capacity (or sell excess generating capacity) at competitive prices; catastrophic events such as fires, earthquakes, explosions, floods, tornadoes, hurricanes and other storms, droughts, pandemic health events such as influenza, or other similar occurrences; and the direct or indirect effects on the Southern Company system's business resulting from incidents affecting the U.S. electric grid, natural gas pipeline infrastructure, or operation of generating or storage resources. Southern Company and its subsidiaries expressly disclaim any obligation to update any forward-looking information.

