



Corporate  
Responsibility  
Report 2018

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### About this report

Our Corporate Responsibility Report for 2018 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 annual 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.

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## LETTER FROM TOM FANNING

Southern Company is privileged to provide the clean, safe, reliable and affordable energy customers depend on to live, work and play. For more than a century, we have been building the future of energy and developing the full portfolio of energy resources required to drive growth and prosperity.

Southern Company and our subsidiaries recognize the responsibility that comes with our privilege to develop energy solutions and are steadfast in our commitment to our customers, our neighbors and our communities. Energy done right gives us a near-unassailable advantage in a worldwide, competitive economy to sustain growth, create jobs, grow personal incomes and make lives better for so many.

We have been entrusted with an enormous responsibility and operate our business accordingly. That is why Southern Company brands are known for excellent customer service, high reliability and affordable prices.

At Southern Company, we operate every day knowing *how* we do our jobs – the behaviors we exhibit with customers and each other – is just as important as *what* we do. Our uncompromising values ensure we put the needs of those we serve at the center of everything we do and govern our business to the benefit of all. Across Southern Company, the values at the core of how we do business include Safety First, Unquestionable Trust, Superior Performance and Total Commitment.

Even in the face of an evolving future, Southern Company will continue to emphasize that our culture is the key to meeting our challenges. As we shape what the future holds for this industry and our company, we will continue to develop and promote a corporate culture that is inclusive, provides a sense of purpose and guides our behaviors to the benefit of customers, communities, employees, stockholders and stakeholders alike. Not only because they demand as much and deserve no less; but because it is the right thing to do.

To address environmental, social and governance (ESG) topics in an open and honest way, this report is organized into four pillars:

- Our company sets the standard for delivering clean, safe, reliable and affordable energy to the customers and communities we are privileged to serve.
- Our people are the energy behind our energy. Our talented, engaged and diverse workforce knows that how we do our job is just as important as what we do.
- Our communities must be better off because we are there. Our responsibility is to preserve and protect our environment and our neighbors.
- Our world is rapidly evolving while presenting new opportunities to enhance the value we provide.

On behalf of the thousands of people making thousands of good decisions every day at Southern Company, thank you for your interest in our company. We will continue our hard work on your behalf.





**Tom Fanning**

Chairman, President & CEO  
Southern Company

## CARBON REDUCTION GOALS

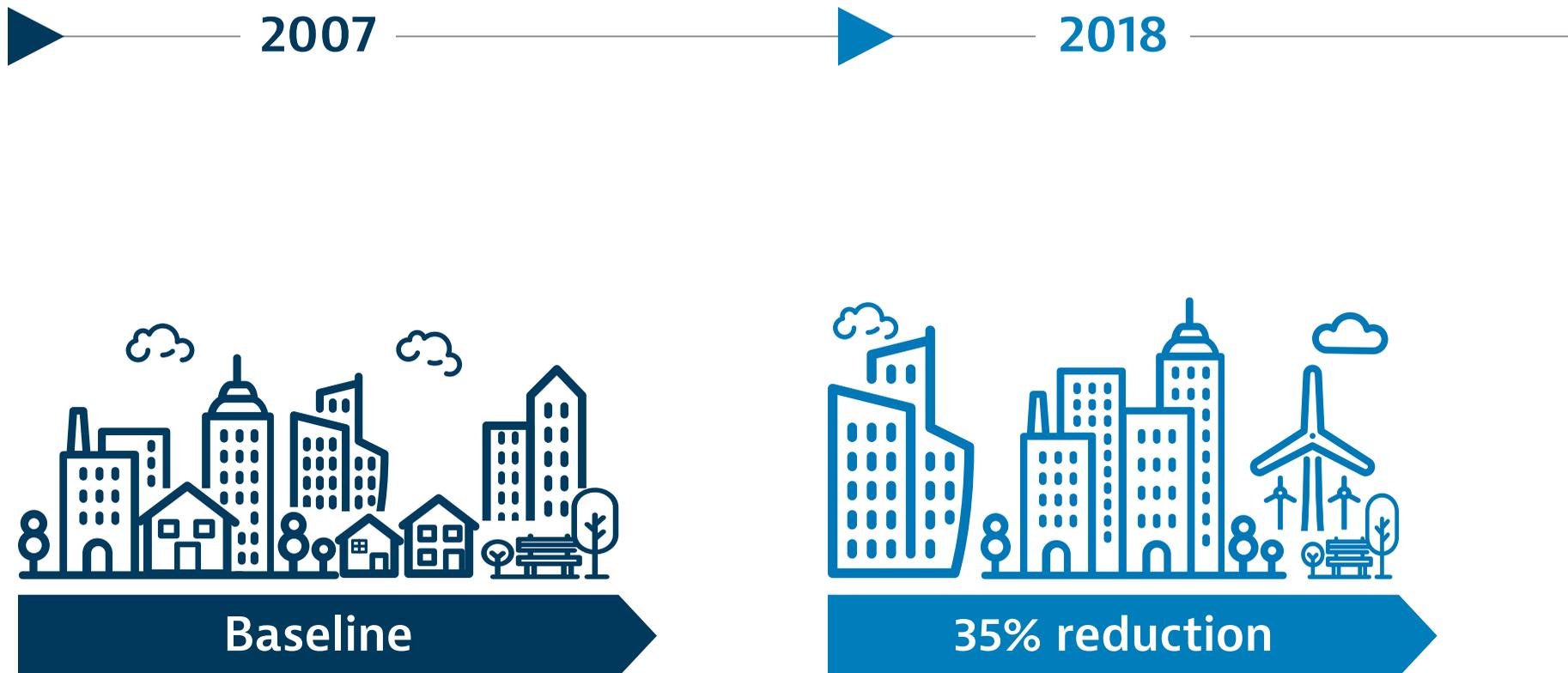
Southern Company is transitioning our energy generation fleet for a low-carbon future. In doing so, we have established an intermediate goal of a 50 percent reduction in carbon emissions from 2007 levels by 2030 and

a long-term goal of low- to no-carbon operations by 2050.

These goals are a continuation of our trajectory of lower carbon emissions over the past decade-plus, which have resulted in a 35 percent

reduction since 2007. Notably, generation from coal plants continues to trend downward, in line with our stated carbon reduction objectives. For 2018, coal represented only 27 percent of our energy mix as compared to 69 percent in 2007.

## Greenhouse gas (GHG) emissions

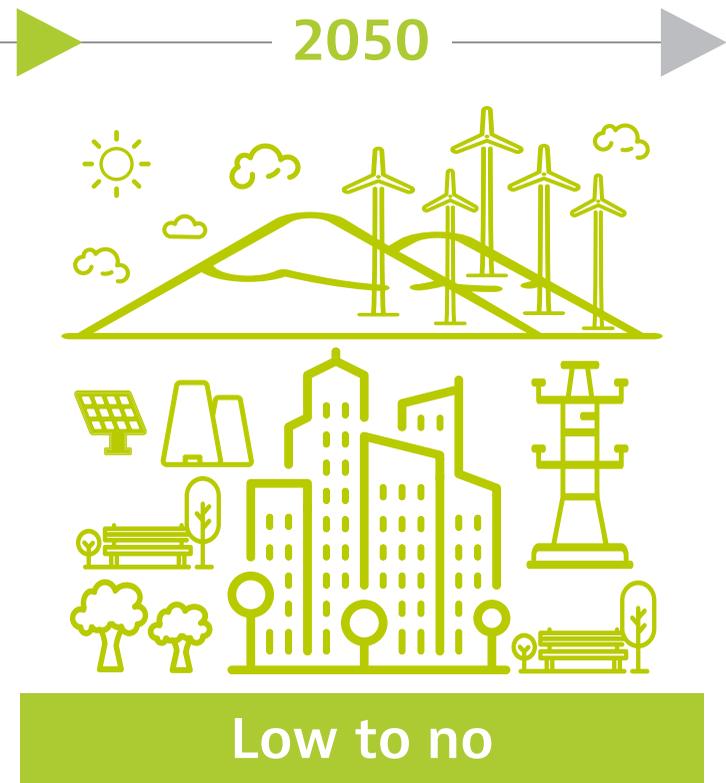
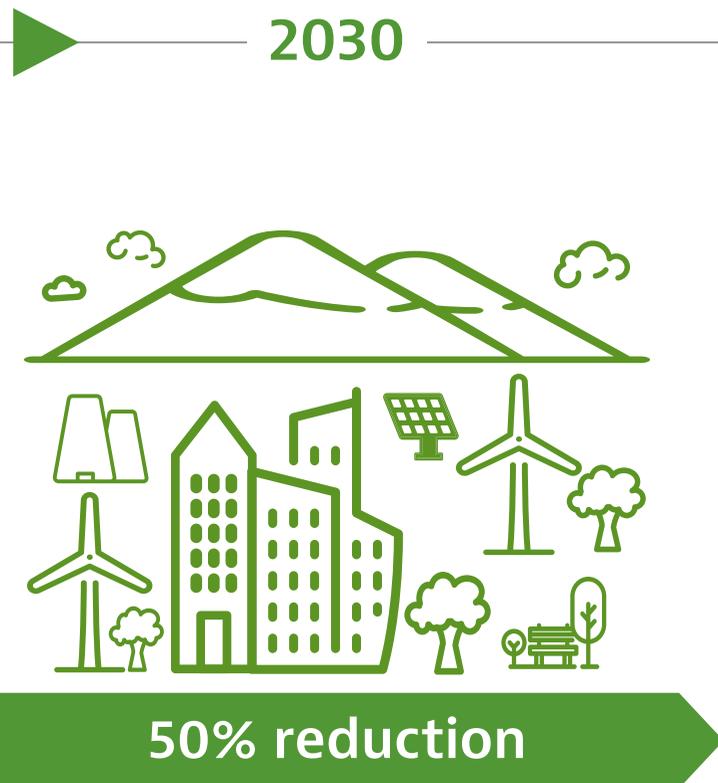


Our strategy to achieve these goals includes the continued development and deployment of a diverse portfolio of energy resources to reliably and affordably serve our customers and communities with a focus on reducing carbon emissions.

To do this, we are growing our investment in renewable energy, modernizing the grid to optimize technology advancements, increasing the use of natural gas, building new nuclear generating units, continuing our industry-leading, robust research and development (R&D) efforts,

and investing in energy efficiency for savings on both sides of the meter.

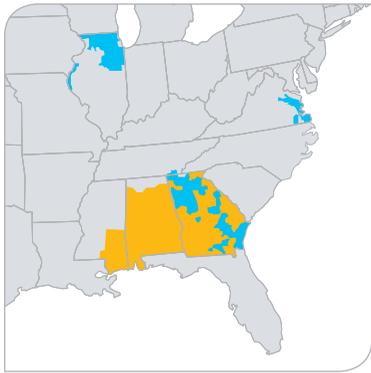
We will work within the regulatory framework in each of our states to ensure that our carbon reduction efforts support customers' needs and preferences.





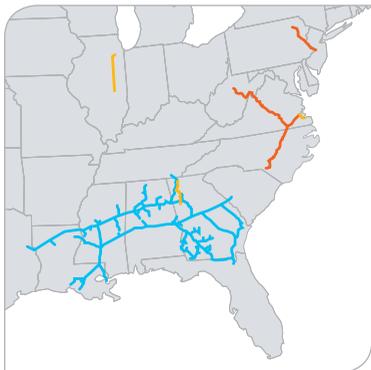
## OUR COMPANY

Our uncompromising values guide us in keeping those we serve at the center of everything we do and govern how we do business to improve our world.



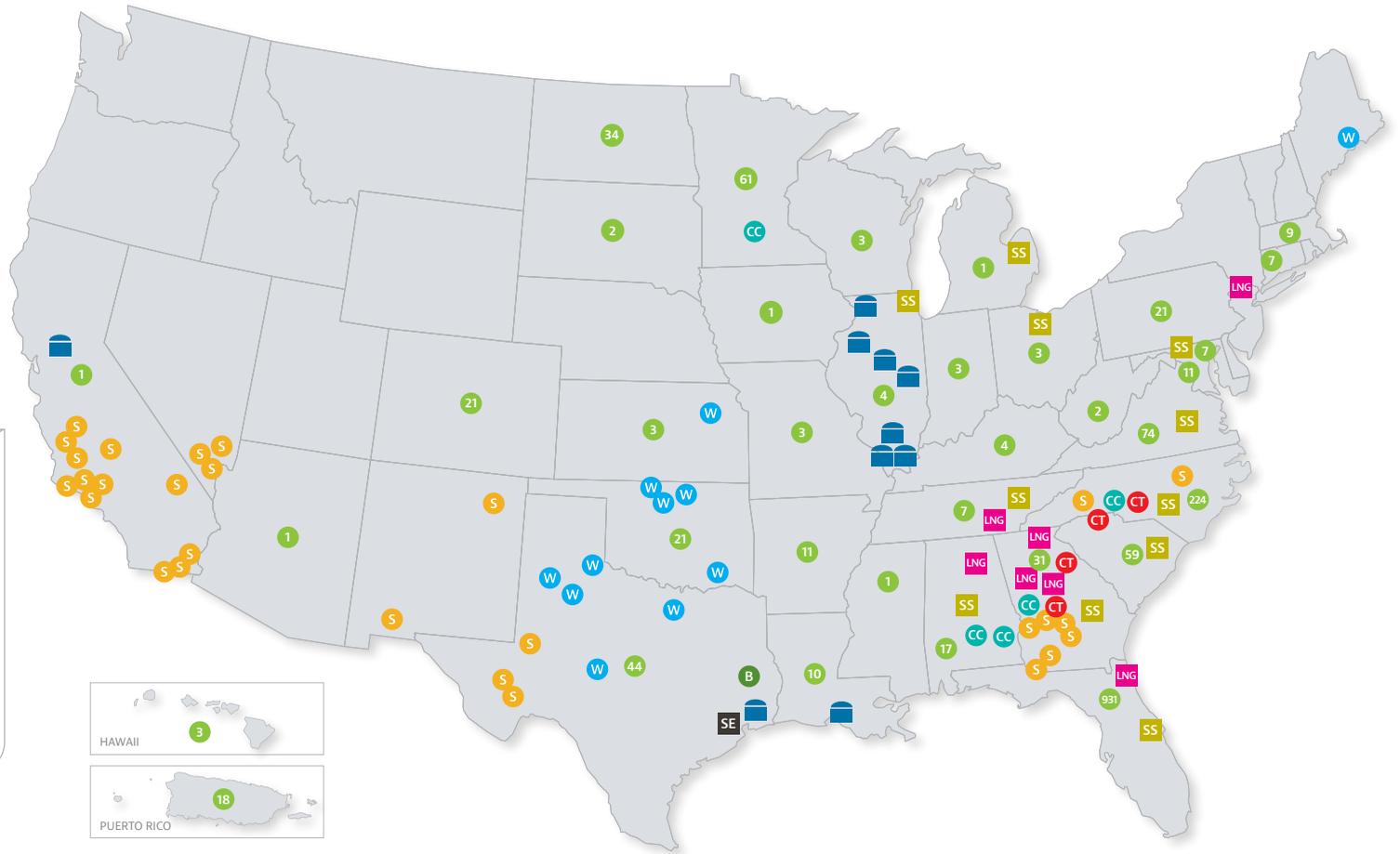
**Service territories**

- Electric
- Gas



**Gas pipelines**

- Southern Natural Gas
- Southern Company Gas
- Pipeline projects



**Southern Power**

- Combined-cycle facility\*
- Peaking facility
- Biomass facility\*\*
- Solar facility
- Wind facility

**Southern Company Gas**

- LNG facilities
- Sequent Energy Management
- SouthStar
- Natural gas storage

**PowerSecure**

- # Owned and managed sites per state

\* In November 2018, Southern Power agreed to sell its Plant Mankato combined-cycle facility.  
 \*\* In April 2019, Southern Power agreed to sell its Nacogdoches biomass facility.

As of Jan. 1, 2019

Through our longstanding focus on innovation, Southern Company is building the future of energy. We are committed to reducing our carbon emissions and to our goal of transitioning over time to low- to no-carbon operations. Our uncompromising values guide us in keeping those we serve at the center of everything we do and govern how we do business to improve our world.

**OVERVIEW**

Southern Company is delivering steady growth through a diversified fuel mix and a business model that keeps pace with evolving customer expectations and needs.

As a recognized energy leader, we provide clean, safe, reliable and affordable energy for 9 million customers through our subsidiaries. Our premier state-regulated electric

operating companies in three states and natural gas distribution businesses in four states are known for excellent customer service, high reliability and affordable prices below the national average. We serve wholesale customers across America through a nationally recognized competitive generation business, are the leading distributed energy infrastructure company, operate a fiber optics network and

are a telecommunications provider.

Dividends are a significant part of our value proposition and our dividend increased for the 17<sup>th</sup> consecutive year in 2018. For 70 years, we have paid a dividend that was equal to or greater than the previous year, and at year-end, Southern Company's dividend yield was 5.4 percent.

<p>capabilities in <b>50 states</b></p>	<p><b>9 million</b> customers</p>	<p><b>7</b> electric and natural gas utilities</p>
<p>Approximately <b>29,000</b> employees</p>	<p><b>44,000 MW</b> of generating capacity</p>	<p>more than <b>80,000</b> miles of natural gas pipelines</p>

As of Jan. 1, 2019

## HARDENING PUERTO RICO'S ELECTRIC GRID AFTER HURRICANE MARIA

In October 2017, Southern Company partnered with the Department of Defense to restore power to Puerto Rico after the island's electrical infrastructure was destroyed by Hurricane Maria. Over a seven-month period, more than 1,000 people from across the entire Southern Company system worked tirelessly to restore power and hope to the people of Puerto Rico.

Damage assessment teams from our subsidiary PowerSecure were among the first energy company personnel on the island. Additionally, Southern Company shipped hundreds of trucks – bucket trucks, digger derricks, pickups and more – to the island via barge and replaced thousands of power poles in extremely challenging conditions over difficult terrain.

The job didn't end there. Southern Company continues to work hard to provide distributed energy resources

to help ensure Puerto Rico's energy infrastructure is more resilient for when the next storm strikes.



## **BUSINESS ENVIRONMENT**

We are developing a full portfolio of energy resources to maintain and increase reliability and affordability. This strategy enables us to effectively manage the variable nature of renewables, while efficiently balancing fuel sources and providing clean energy solutions.

We continue to modernize our business and are diligent in our approach to emerging opportunities in the energy production and delivery model as we plan for a low-carbon future. We remain steadfast in our commitment to improving life for our customers and communities by delivering the energy that powers growth, prosperity and wellness.

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 deliver



vital customer value through our regulated natural gas infrastructure. We also recognize the potential of energy solutions that reside behind customers' meters.

As we seek opportunities to expand our business, we continue to focus on

our customer-centric model, combining state-regulated businesses and other assets where energy is sold on long-term contracts with creditworthy counterparties. This asset mix is designed to produce stable, predictable revenue streams while managing carbon risks.

## ENERGY PORTFOLIO

We are one of the only energy companies pursuing an “all of the above” energy strategy.

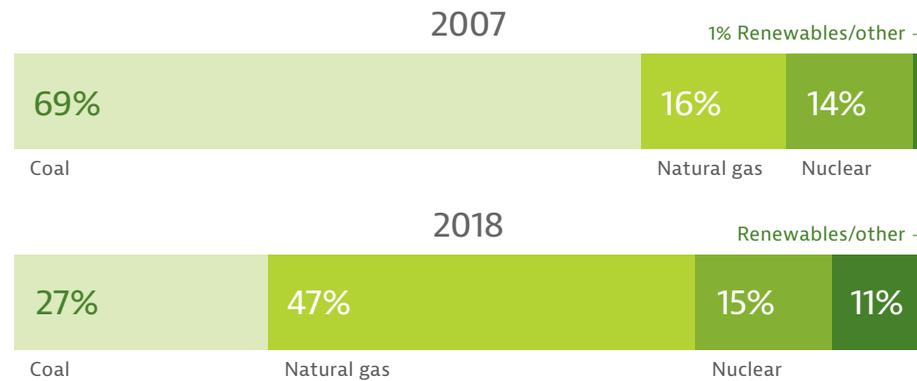
We believe developing and maintaining a diversified energy portfolio is essential to successfully reducing carbon emissions while maintaining reliability and affordability.

Over the past decade, we have significantly transformed our electricity generation mix.

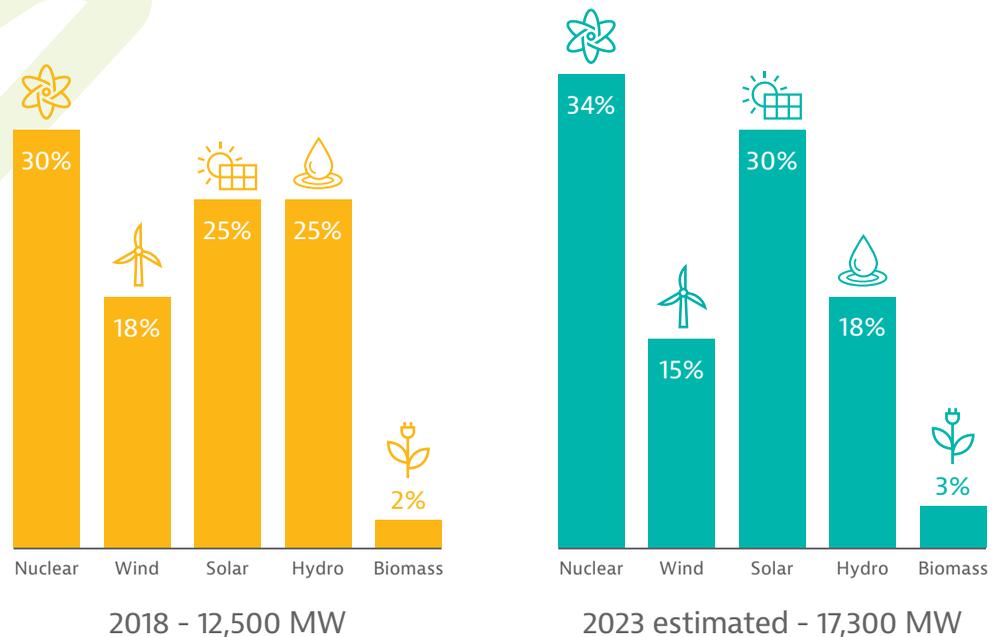
Since 2010, we have invested \$20 billion in developing low-carbon and carbon-free resources, and we have added more than 5,000 megawatts (MW) of renewable generating capacity through our subsidiaries. We expect to add an additional 3,000 MW of renewable generating capacity by 2023.

Our subsidiaries are focused on strategically increasing the role of renewables in our energy mix. We have numerous R&D projects underway to determine the potential of emerging cost-effective renewable resources and technologies.

## Electricity generation mix



## Portfolio of carbon-free and carbon-neutral energy sources



## CELEBRATING 50 YEARS OF R&D

Southern Company's R&D organization has been setting the standard in technology development for energy production, delivery and use for half a century.

Through a diverse research portfolio, we meet customers' energy needs today by addressing the latest technology challenges and trends. And we anticipate tomorrow.

Southern Company's R&D portfolio over the past decade has returned benefits exceeding 10 times our investment.

Our renewable, storage and distributed generation R&D program is advancing a full spectrum of distributed energy solutions to benefit customers.

Our many pilot projects explore and evaluate fuel cells, battery storage and micro-grids, as well as renewable technologies to advance the industry.

Demonstrations in varying sizes and locations focus on evaluating the performance, operational needs and costs for deploying this type of technology.

The overall focus of this research is to provide a variety of future technology options for commercial, industrial and residential customers.



Bloom Energy servers, shown here, power about one-third of a high-quality business office.

## ADVANCING TECHNOLOGY



### Fuel cells

Our advancement of distributed energy resources includes the demonstration of a Bloom Energy fuel cell in a landfill gas operation, helping pave the way for the large-scale use of a new clean energy solution.



### Advanced nuclear

We are developing next-generation nuclear technologies that could produce carbon-free, sustainable energy at low cost with superior safety and new business opportunities.



### Carbon capture

At the National Carbon Capture Center, we have tested more than 60 technologies and helped reduce the projected cost of carbon capture by one-third. We are building new infrastructure to expand carbon capture testing for natural gas power plants.



### Energy storage

We began commissioning the first test systems at the Energy Storage Research Center, an industrywide resource where third-party innovators can accelerate the development and deployment of a full spectrum of energy storage systems.



### Grid modernization

We have installed approximately 700 pole-mounted edge-of-network grid optimization (ENGO) devices to demonstrate significant grid efficiency from the resulting tighter voltage control.



### Electric transportation

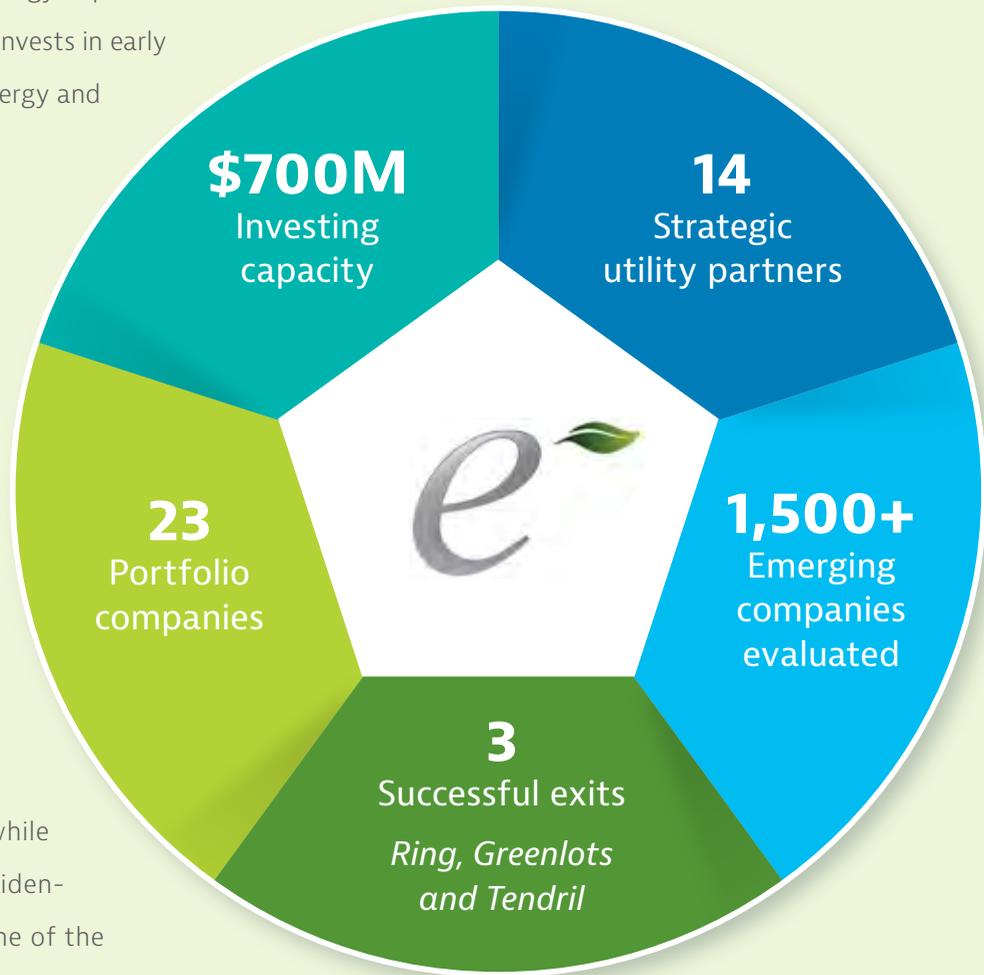
We work with industry leaders and manufacturers to drive electric transportation growth on the road and in industry. We are actively engaged in bringing more direct current fast-charging infrastructure to our service territory.

## INVESTING IN INNOVATION: ENERGY IMPACT PARTNERS

Southern Company is a founding partner of Energy Impact Partners (EIP), a \$700 million venture capital fund that invests in early stage technology companies impacting the energy and utility industries.

EIP has invested in 23 portfolio companies since its inception in 2016 and already has achieved several successful exits. These successes include **Ring**, the smart doorbell maker acquired in 2018 by Amazon, and **Greenlots**, the leading electric vehicle charging infrastructure company, acquired by Shell in 2019.

Collaborating with the EIP portfolio companies helps Southern Company remain on the cutting edge of disruptive technology while uncovering new revenue opportunities and identifying potential partnerships. This is just one of the ways we are working to shape the future of energy.



## POLICY AND ENGAGEMENT

We actively engage in proactive, constructive dialogue with stakeholders who hold differing views, including those with an interest in ESG topics. These discussions help inform our decisions and make us better.

### Engaging our states

Certain of our operating companies are subject to the jurisdiction of state Public Service Commissions (PSCs) and environmental agencies. PSCs have broad regulatory authority of these operating companies, and environmental agencies are charged with enforcing each state's environmental policies.

### Supporting national energy policy

We engage with legislators and regulators to support an energy policy that promotes innovation. As an advocate for future energy policies that improve the lives of customers, we engage proactively and constructively with several

government entities, including, but not limited to:

- Department of Defense
- Department of Energy
- Environmental Protection Agency
- Federal Energy Regulatory Commission
- Nuclear Regulatory Commission
- United States Congress

### Partnering with trade associations

Our mission to serve customers and stockholders includes partnering with various trade associations and research organizations, and working with numerous stakeholders to help meet the needs of our customers and communities. Some of the many organizations we partner with include:

- American Gas Association
- Electric Power Research Institute
- Edison Electric Institute
- Interstate Natural Gas Association of America
- Nuclear Energy Institute



“ *Our efforts to shape national energy policy go beyond building a better business. Good public policy makes American lives better.* ”

– *Christopher Womack, Executive Vice President and President of External Affairs*

## LEADERSHIP OVERSIGHT

Southern Company is governed by an annually elected Board of Directors that provides oversight of our overall strategy, including ESG issues. The Board serves as a prudent fiduciary for stockholders and oversees the management of the company's business, including key enterprise risk and business opportunities.

Our diverse and highly engaged Board – which met 14 times in 2018, with an average attendance of 94 percent – seeks to maximize long-term investment value for stockholders.

Independent Directors, who have an average tenure of 6.2 years, chair each Board committee. The Board and its committees have both general and specific risk oversight responsibility. Each committee provides oversight for each of our most significant risks assigned to it. A designated member of executive management serves as the primary responsible officer for providing information and updates to the Board committees related to significant risks. There is regular, open communication between management and the Board on these topics.

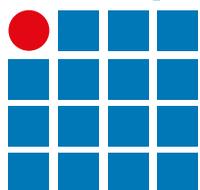
## Key Board committees addressing ESG topics

- **Nominating, Governance and Corporate Responsibility**  
Reviews state and federal regulatory and legislative environment, stockholder activism, environmental, sustainability and corporate social responsibility.
- **Operations, Environment and Safety**  
Reviews significant operations such as safety, system reliability, nuclear and other operations, environmental regulation and policy, fuel cost and availability.

### Director independence

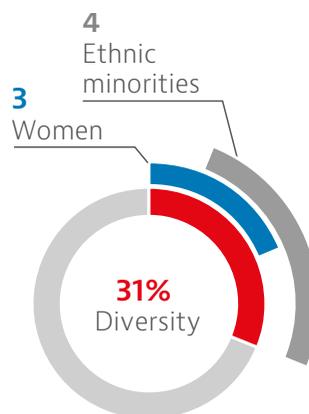
All Directors are independent except the CEO

94% Independent



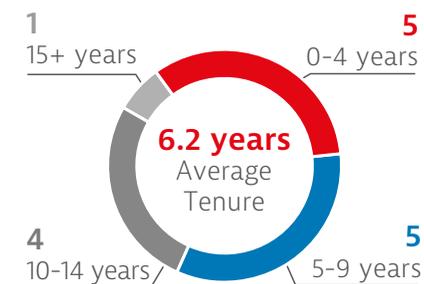
15 Independent Directors

### Director diversity



### Independent Director tenure

Years of consecutive service



As of April 5, 2019

## MEET OUR NEW BOARD MEMBERS



**Dr. Janaki Akella**

- **Operations, Environmental and Safety Committee**

Dr. Akella has served as Digital Transformation Leader at Google LLC since 2017. A renowned business leader, her problem-solving skills address challenges arising from new technologies and new business models. A trusted advisor and coach for executives across a number of business functions and disciplines, Dr. Akella has a reputation for understanding complex technical issues.



**Mr. Anthony "Tony" F. Earley Jr.**

- **Operations, Environmental and Safety Committee**
- **Compensation and Management Succession Committee**

Mr. Earley was chairman, CEO and president of PG&E Corporation from late 2011 to 2017. At PG&E, he led major initiatives on safety, operational excellence, long-term integrated planning and workforce development. A former chair of the Edison Electric Institute, he was directly involved in developing national policies on energy, the environment and climate change. He also served as chair of the Nuclear Energy Institute.



**Dr. Ernest J. Moniz**

- **Operations, Environmental and Safety Committee**
- **Nominating, Governance and Corporate Responsibility Committee**

Dr. Moniz is a renowned physicist and professor of Physics and Engineering Systems at the Massachusetts Institute of Technology. He served as United States Secretary of Energy from 2013 to early 2017. As Secretary, he advanced energy technology innovation, nuclear security and strategic stability, cutting-edge capabilities for the American scientific research community and environmental stewardship.

During 2018, we announced the addition of three new independent Directors as part of Southern Company's commitment to effective Board refreshment and good corporate governance. These new Board members bring a diverse perspective to the technological advancements and evolving dynamics that are reshaping the energy industry.

**Dr. Akella's** knowledge of disruptive technologies and their power to reshape our world helps us navigate our evolving industry.

**Mr. Earley's** deep experience in regulated industries, along with his nuclear generation, technology and environmental expertise, enhances Southern Company's ability to operate our premier regulated utilities.

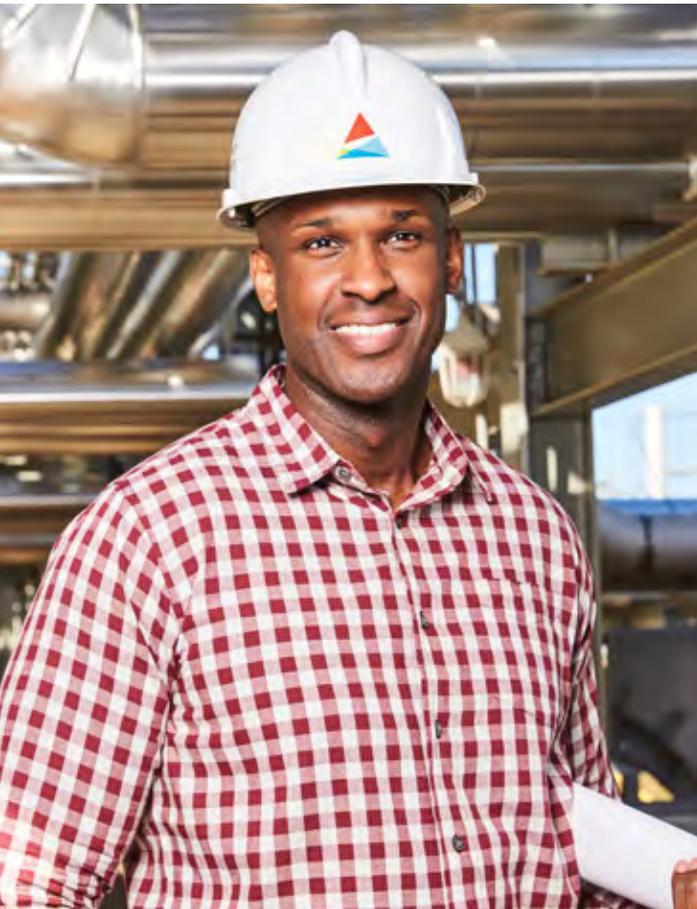
**Dr. Moniz** brings a strong energy science background as well as environmental policy expertise, which is invaluable as we develop solutions to address climate change, environmental matters and emerging technologies.

**“ With the support of a highly engaged Board of Directors, Southern Company fully embraces our environmental, social and governance responsibilities that help our customers and communities thrive. ”**

**– Tom Fanning**

## OUR VALUES

At Southern Company, *how* we do our work is just as important as *what* we do. Our uncompromising 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 each other and our customers with the utmost integrity. Simply put: we mean what we say and do what we promise.



## OUR PEOPLE

Our people are the power of Southern Company. Their energy enables us to build a brighter future for our customers and the communities we call home.

# WHO WE ARE\*



\* As of Dec. 31, 2018.  
Excludes PowerSecure.

From innovating our industry to making strides in sustainable energy, Southern Company and our businesses are recognized

as leaders by customers, partners, investors, employees and the broader business, science and technology communities.

## WE'RE RECOGNIZED AS A GREAT PLACE THAT DOES GREAT WORK

### Culture

- **Black Enterprise magazine** - 50 Best Companies for Diversity
- **The Disability Equality Index (DEI)** - Best Places to Work for Disability Inclusion
- **DiversityInc** - Top 50 Companies for Diversity
- **Forbes** - Named as one of America's Best Employers (No. 17)
- **G.I. Jobs** - Top Military Employer
- **Hispanic Network** - Top Employer for Hispanics
- **Human Rights Campaign Corporate Equality Index** - One of the Best Places to Work for LGBTQ Equality
- **Military Times** - Top 10 Best for Vets Employer
- **Women's Choice Award** - Best Companies for Millennials

### Dedication to customers

- **Cogent Energy Reports** - Most Trusted Utility (Georgia Power, Nicor Gas)
- **Edison Electric Institute** - Emergency Assistance Award for Puerto Rico Power Restoration (Alabama Power, Georgia Power and Mississippi Power)
- **Edison Electric Institute** - Emergency Recovery Award (Alabama Power, Georgia Power and Gulf Power)
- **J.D. Power** - Residential Customer Satisfaction Award (Georgia Power No. 1, second year in a row. Mississippi Power No. 5)
- **J.D. Power** - Business Customer Satisfaction Award (Georgia Power No. 1)

### Business leadership

- **Drucker Institute** - Management Top 250 list
- **Emerging Technology Program (ETP)** - Illinois Sustainability Award (Nicor Gas)
- **Edison Electric Institute** - Distinguished Leadership Award (Tom Fanning)
- **National Association of Corporate Board Directors** - 2018 Directorship 100 (Veronica Hagen)
- **S&P Global Platts Global Energy Awards** - CEO of the Year (Tom Fanning)

## LISTENING TO OUR EMPLOYEES

We believe we are all better when we openly discuss what is working well and where we have an opportunity to improve. We continuously assess our culture and look for ways to strengthen it.

Southern Company actively works to foster an environment that encourages

employees to share feedback and help identify opportunities for us to do even better. We work to build mutual trust by making sure employees know they are heard and valued.

We regularly gather employee feedback via both formal and informal mechanisms. Along with frequent, less formal topical surveys to solicit ideas and thoughts, we conduct a formal company

wide Voice of the Employee survey every two years. Formal action plans are developed based on results of the Voice of the Employee survey.

These initiatives help us build on our strengths and capitalize on improvement opportunities. The superior results for which our companies are known are a result of our strong culture and our shared pride in our work.



# Be Heard.

## Voice of the Employee

We listen to employees to ensure a safe, engaging work environment.

## DIVERSITY AND INCLUSION

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 or gender identity or expression.



*At Southern Company, we drive results by valuing different opinions, backgrounds and experiences, and by welcoming diverse points of view. We celebrate our progress and are committed to a diverse and inclusive organization.*



*– Sloane Drake, senior vice president of Human Resources*



Sloane Drake

We work hard to ensure a diverse workforce and an inclusive workplace. We believe in the strength of diversity in all its facets – people, backgrounds, experiences,

thoughts and perspectives. The diversity of our people makes us stronger, more agile and provides a competitive advantage that helps us achieve our goals.

## INVESTING IN EMPLOYEES

Our Total Rewards approach invests in the well-being of our employees through a comprehensive compensation and benefits strategy. This includes a competitive salary, an annual bonus for nearly all employees and pension and benefits plans that offers physical, emotional and financial security.

### Physical well-being

- Competitive medical, pharmacy and dental benefits
- Health Savings Accounts including company contributions and Flexible Spending Accounts
- Robust wellness and preventive programs

- Resources such as Sleep Medicine and digital physical therapy tools that help employees maintain healthy routines

### Financial well-being

- Competitive compensation
- Fully-funded pension plan and employee savings plan
- Life and disability insurance that provides income protection and peace of mind
- Financial planning education and resources to help employees meet short-term and long-term goals

### Emotional well-being

- Competitive vacation, holidays and paid time off to provide work life balance
- Maternity, parental and adoption leave to encourage a family-forward culture
- Tools that address our employee emotional needs at various stages of life
- Improved and cost-efficient mental health plans to improve access to care and reduce stigma



## RECRUITMENT

Southern Company's Talent Acquisition organization uses a variety of strategies to attract top talent. We join forces with high schools, technical schools and universities to recruit and prepare students to pursue careers across the energy value chain – including power generation, power delivery and nuclear energy.

Our military recruitment efforts have had a significant impact on our hiring. Veterans, National Guard and reserve members currently comprise approximately 10 percent of our systemwide workforce and comprised 16 percent of our new hires in 2018.

Diverse hiring continues to outpace current representation.



### HIRING STATS FOR 2018\*



**1,769**  
New hires



**24%**  
Women



**39%**  
Minorities



**33**  
Average age

\*As of Dec. 31, 2018. Excludes PowerSecure.

## DEVELOPING PEOPLE

Our people make Southern Company who we are. We are committed to developing our talent and helping our employees succeed in every phase of their careers.



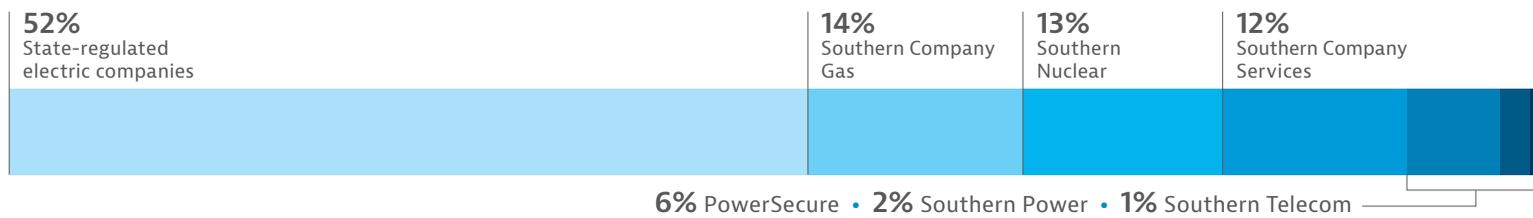
Our long history of attracting, developing and retaining the best talent is a testament to our commitment to our people. We provide experiential development opportunities along with purposeful people moves as part of individual development plans and our more formal succession planning processes. In 2018 alone, we promoted nearly 500 employees to first-time supervisor roles and transferred almost 750 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 several training programs targeted toward 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.

## Percentage of employees by business



## HIGH-TECH TRAINING FACILITIES

As the energy industry and our business evolve, new skillset requirements are emerging. We strive to ensure our training offerings keep pace.

State-of-the-art training facilities at Alabama Power and Nicor Gas are helping develop the skills employees need to succeed in today's jobs and preparing them for those being created by technology innovations. The learning centers help the next generation experience more about energy and explore the industry's career opportunities.

Innovative training methods at these high-tech facilities incorporate the latest tools to

teach employees to work safely and to develop diverse skills.

**Alabama Power's Varnons Training Center** in Calera, Alabama, trains employees in power delivery. A renovated 50,000-square-foot teaching center utilizes sophisticated technology labs and pioneering 3-D simulator applications in hands-on outdoor facilities and traditional classrooms.



Nicor Gas Training Center

The 50-acre site continues to expand with plans to add another 30 acres of fully equipped training fields and facilities that will provide training in transmission and distribution, using both overhead and underground lines.

Nicor Gas' 22,000-square-foot **Technical Training Center** in Naperville, Illinois, provides team members with the proper training, tools and resources to help effectively respond to any potential situation. Instructors at the facility, completed in June 2018, hone critical skills to help ensure the safety of our employees, customers and communities.

## DIVERSE CAREER OPTIONS

Attracting, developing and retaining top talent is more important than ever as our work to modernize our business and become more efficient impacts the number of available positions. We take pride in our ability to retain talent. One way we develop our people and provide chances to learn and grow is by encouraging opportunities for employee movement between our operating companies and functional areas.

The continued evolution of Southern Company's business across the entire energy value chain is creating many opportunities for employees to enjoy a well-rounded, diverse career within the system.

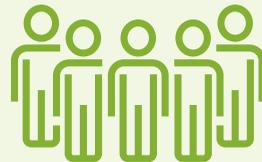
Freddie Carmichael, executive communications manager at Southern

Company Gas, is one such example.

Carmichael began his career at Mississippi Power before relocating to Atlanta. His career has included roles communicating about Georgia Power's Vogtle 3 & 4 nuclear expansion project and managing executive and

**498\***

employees promoted to first-time supervisory roles



**746\***

employees transferred between subsidiaries

internal communications for Southern Company. Most recently, Carmichael transitioned in 2018 to a new role at Southern Company Gas where he helps executives, including CEO Kim Greene, effectively engage employees.

“ **Southern Company**

**has given me a chance to develop by learning about and working on an incredible variety of topics. That I have been able to do that all within the same company feels pretty special.** ”

– Freddie Carmichael

\*Does not include PowerSecure data.

## SAFETY

We put Safety First in our goal to complete “every job, every day, safely.” As our primary shared core value, Safety First governs everything we do. Our Safety and Health Council, a group of leaders from across the system, provides strategic guidance and leadership on safety and health.

We ensure safety is the top priority in every action we take. We empower employees to be safe through our culture of caring, by embracing learning and by encouraging a more proactive safety approach.



**In 2018, the council members oversaw the implementation of Critical Risk Management (CRM), a proactive process that ensures critical safety controls are in place during high-risk work. These field verifications aid both workers and those overseeing work in reinforcing use of lifesaving controls to properly manage risk.**



**1.37**

2018 Recordable  
Incidence Rate



**0.13**

2018 Serious Injury  
Incidence Rate



**98.5%**

of employees worked  
injury free in 2018



**197**

locations conducted  
CRM observations



**58,621**

critical controls  
verifications completed

## EXCEPTIONAL WOMEN LEAD EXTRAORDINARY RESPONSE

Employees and resources from across the entire Southern Company system came together to respond to the historic devastation of Hurricane Michael.

Adrienne Collins, who was Gulf Power's vice president of Power Delivery at the time, and Shelley Scarborough, its Eastern District operations manager, led teams to restore power for customers in the Florida Panhandle ahead of schedule. Most importantly – they made sure teams were able to respond safely.

Collins and Scarborough had worked closely together before, partnering in 2017 during restoration efforts in Puerto Rico after Hurricane Maria. This time, though, it was closer to home. Scarborough's own home was damaged by Michael.

The two women knew diligent planning was required. They also understood that Michael's unprecedented nature meant teams would need to adapt to changing, extraordinary conditions.



***I started every day with a plan of action, but I knew that we would have to be able to deviate from the plan and be flexible. It's about identifying obstacles and continuing to push though.***



***– Shelley Scarborough***

Collins and Scarborough, who embody the commitment to safety and

excellence for which we are known, led countless women and men to restore power and hope.

"It might not be the first time women have led storm restoration, but I doubt there has been a storm of this magnitude in our service territory with the restoration led by this many brilliant and powerful women," said Nicole Faulk, vice president of customer service and operations at Mississippi Power.

The tireless commitment to safety, excellence and our communities by Collins and Scarborough – and the thousands of other Southern Company women and men like them – allow us to be at our best when things are at their worst.



  
Gulf Power

USDOT 224401

## SUPPLIER DIVERSITY

Southern Company works to ensure the suppliers we do business with reflect the diversity of our more than 9 million customers. Working with small and diverse businesses helps energize the success and economic development of our communities.

Competitive energy prices are imperative to our business. Our prices have been below the national average for the past quarter century. A diverse supplier base helps maximize the value of the Southern Company system's supply chain.

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

### 2018 Small and Diverse Suppliers

<u>Total spending with</u>	<u>Electric</u>	<u>Gas</u>	<u>Consolidated</u>
Suppliers	\$4.8 billion	\$1.6 billion	<b>\$6.4 billion</b>
Small businesses	\$1.0 billion	\$0.1 billion	<b>\$1.1 billion</b>
Diverse businesses*	\$0.9 billion	\$0.5 billion	<b>\$1.4 billion</b>
<b>Total small businesses: 4,260</b>		<b>Total diverse businesses: 2,563</b>	

\* Amount spent with diverse businesses includes spend with contractors and subcontractors that are 51% owned by minorities, women, veterans or service-disabled veterans.

## A diverse supplier base not only makes good business sense, it maximizes the value of our supply chain.

- 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 small and diverse businesses to improve the communities in which we serve and to create a more competitive supplier base





## OUR COMMUNITY

Our employees  
serve our customers  
and communities  
through a steadfast  
commitment to  
**Our Values.**

In keeping with our uncompromising values, our employees display our unwavering commitment to serving our communities and to valuing one another.

### CHARITABLE GIVING

Southern Company is committed to the success of our customers, employees, stockholders and the communities we are privileged to serve. Each year, the Southern Company system contributes to independent funds, nonprofit organizations and foundations that have a positive impact on arts and culture, health and human services, civic and community projects, safety, education and the environment.

Corporate and foundation giving by Southern Company and its subsidiaries for 2018 totaled \$63.6 million. Additionally, employees across the system raised \$2.1 million for numerous organizations that serve our local communities, including the American Red Cross, the American Cancer Society, the American Heart Association and the Salvation Army.



**\$63.6  
million**

in corporate and  
foundation giving

**\$2.1  
million**

raised by  
employees

**258k  
hours**

volunteered by  
employees and retirees

## REBUILDING AND RESTORING AFTER HURRICANE MICHAEL

### **Southern Company is there for the community – in good times and bad.**

On Oct. 10, 2018, Hurricane Michael made landfall on the Gulf Coast as a Category 5 storm, leaving more than 2.6 million customers without power in Alabama, Florida, Georgia, the Carolinas and Virginia. Across the Southern Company system service territory, 614,000 customers were impacted by Michael.

The widespread destruction devastated businesses, destroyed important infrastructure like power lines and left residents without electricity, running water – and, in some cases, even without a home. Electricity providers mobilized an army of more than 35,000 workers from at least 27 states and Canada to restore power safely and as quickly as possible.



Lives were forever altered for those in Michael's path, many of whom are our customers, families, co-workers and friends. Our unflagging commitment to Our Values guided our unprecedented response to the unprecedented storm as every part of the Southern Company system came together to restore power and rebuild hope.

"It's in times like these that each of us

steps up to showcase our dedication to customers, the communities we serve and to each other," said CEO Tom Fanning. "One of the things that makes me most proud to be a part of Southern Company is that we are at our best when things are at their worst."

Southern Company Family Services – which assists employees impacted by significant storm damage so they can focus on serving our customers – sprang into action. What's more, a relief fund established in the historic storm's wake raised \$132,000 to help those hardest hit by Michael.

Bringing peace of mind to those facing challenges is part of our Total Commitment to caring for our community and for each other.

## VOLUNTEERING

Southern Company system employees and retirees take part in community service projects year-round. Employees and retirees freely gave more than 258,000 hours in 2018 to serve and improve our communities.

On holidays, like Martin Luther King Jr. Day, employees are encouraged to participate in “a day on, not a day off.” On these days on, employees work with community groups to give back in the spirit of service. This dedication by every employee to do

this or her part to make our world better extends throughout the year – including on special days such as Earth Day and Arbor Day – and through our employees’ support of groups making a difference for the most vulnerable, like Habitat for Humanity, American Cancer Society and Boys & Girls Clubs of America.

Our commitment to Southern Company system employees and their families continues well after employees begin the next phase of life in retirement.

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, Mississippi Power Community Connection and Southern Company Gas V-Force.



## EDUCATIONAL INITIATIVES

We believe lifelong learning is essential to improving our world.

Southern Company is committed to education and to developing a well-prepared workforce to support future generations through opportunities for our youth.

Through programs such as Learning Power and Power to Play, we partner with our local school systems to teach students at all levels about energy and the many opportunities in science, technology, engineering and math (STEM).

We believe serving our youth fosters greater overall community engagement.

Whether it's engaging with students in the classrooms through STEM programs, participating in career and science fairs or providing grants and recognition to our valued teachers, Southern Company and our system employees understand that strengthening the minds of our youth is vital to a brighter future.

## A WEEK OF ENERGIZING EDUCATION

Southern Nuclear has participated in Nuclear Science Week – an annual, week-long celebration to focus local, regional, national and international interest on all aspects of nuclear science – since it began in 2010. Each year, students are given the opportunity to explore nuclear energy with hands-on activities at our Southern Nuclear Energy Education Centers, inspiring a new generation of students to imagine how they can build the future of energy.

Employees participate in engaging activities with students in the Plant Farley, Hatch and Vogtle communities. "The kids were awed while touring the cooling towers and dome," said Carol Jarriel of G.R.A.C.E. Homeschool Co-op. "The experience sparked interest in future careers in energy. One of our elementary students commented that he would indeed work there one day!"



## SUPPORTING CUSTOMERS

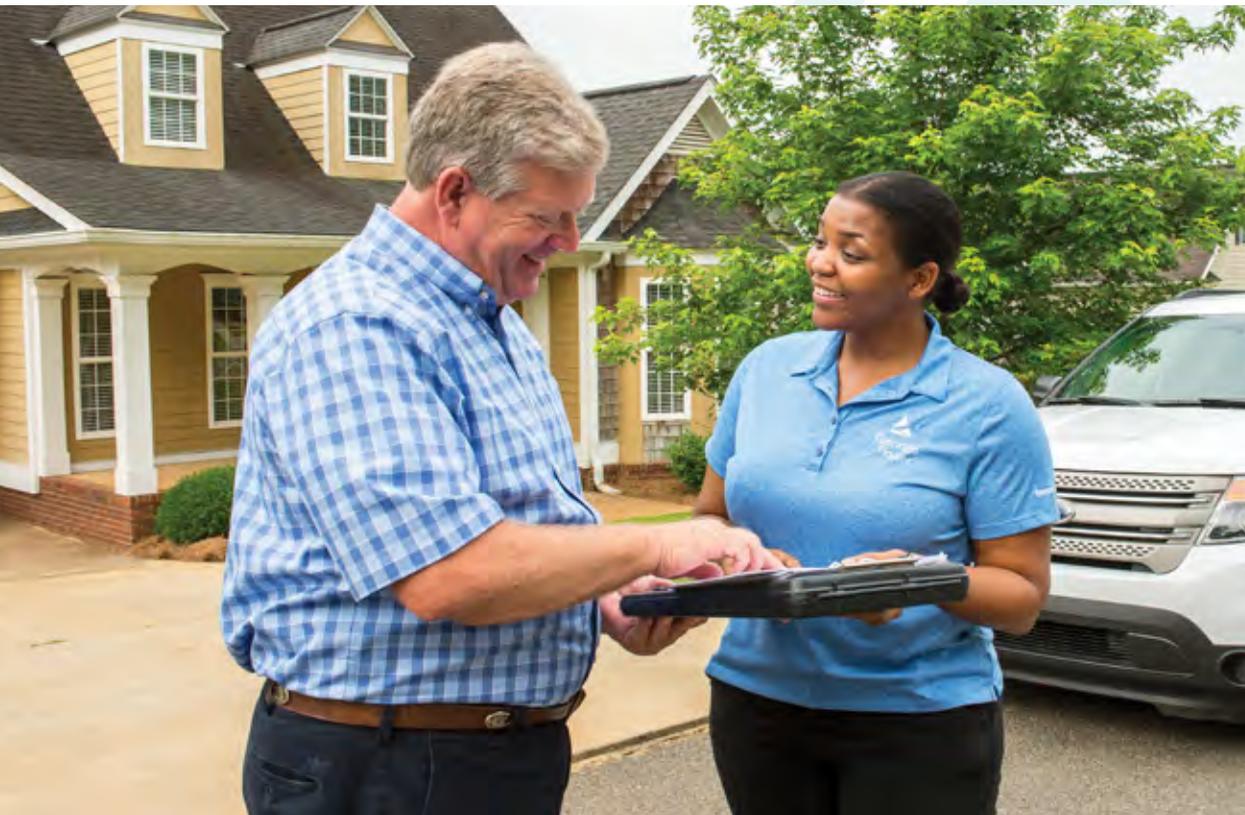
Southern Company continues to reinvent America's energy future by developing the full portfolio of energy resources that includes carbon-free nuclear, advanced carbon-capture technologies, natural gas, renewables and energy efficiency

solutions, and by creating new products and services for the benefit of customers.

Southern Company brands are known for excellent customer service, high reliability and affordable prices that are below the national average.

We continually evaluate ways we can best deliver value. Our innovative electric and natural gas energy efficiency programs help customers use energy more wisely. Our subsidiaries help customers – including the most vulnerable – save money by providing assistance with bills and tools to lower energy costs.

- **Home Energy Improvement Program** – rebates for energy-saving improvements
- **In-Home Energy Checkup** – a professional evaluation to identify ways to save energy
- **My Power Usage** – a way to monitor and manage usage and costs
- **Low-income and senior citizen assistance programs** – help for qualified households with their energy bills



## SMART NEIGHBORHOOD PROJECTS

Near Birmingham, Alabama Power's Smart Neighborhood® at Reynolds Landing project, in partnership with Signature Homes, is an example of how we are making customers' lives better, more comfortable and more enjoyable through advances in energy and technology.

Alabama Power partnered with developers, technology vendors and Oak Ridge National Laboratory to create the first-of-its-kind, energy-efficient community. The neighborhood is a real-world research and development project that helps Southern Company research engineers understand how we can improve homeowners' lives using the latest smart home technologies and energy efficient appliances, building materials and products. A year after completion, the homes are functioning 35 percent more efficiently than the standard home being built in Alabama today.



The first neighborhood has been so successful that Alabama Power has established a new Smart Neighborhood Builder Program. Through the new program, Alabama Power is collaborating with homebuilders on three additional neighborhoods in Auburn and Leeds, Alabama, to extend the groundbreaking approach.

Similarly, Georgia Power is developing a community in partnership with PulteGroup in Atlanta. The Altus at the Quarter development, set to open in 2019, will be equipped with the latest energy technologies including rooftop solar installations and in-home battery energy storage.

## BUYING AND LIVING SMART

First-time homebuyers Hannah and Burns Kennedy, were anxious and excited to jump into the homebuying market but weren't sure what to expect. What they were certain of is that they wanted to make a real difference with their new investment.

Working together, the Kennedys' realtor and broker; Alabama Power; and Signature Homes helped make the homebuying process as smooth as possible to ensure their new home needs were met.

The investment in technology, along with the opportunity to make a difference in the energy future, sold the new homeowners on the Smart Neighborhood at Reynolds Landing. "Being provided the equipment to allow



that positive change, taking the research and applying it across the board, gives us the opportunity to live comfortably while still making a difference," Hannah explained. "That's what drew us in."

A year after moving into their home, the busy couple enjoy the control they have over their home even when they

are away. "The entire house is accessible on our mobile phone – from heater to lights to fridge – we can control each and monitor our usage," Hannah said. "There's an app for each appliance!"

The biggest benefit from their experience living in the smart home is a lower energy bill.

Even with a bigger space to heat and cool, the Kennedys pay less to keep their new, larger home comfortable than they paid at their former two-bedroom apartment.

"It's so fun to watch our guests' first reaction when they walk into our home! They are always amazed," Hannah said. "We couldn't have asked for a better, more incredible experience."



"The entire house is accessible on our mobile phone – from heater to lights to fridge – we can control each and monitor our usage. There's an app for each appliance!"

– Hannah Kennedy

## ECONOMIC DEVELOPMENT

The Southern Company system is devoted to developing our communities as part of our economic commitment.

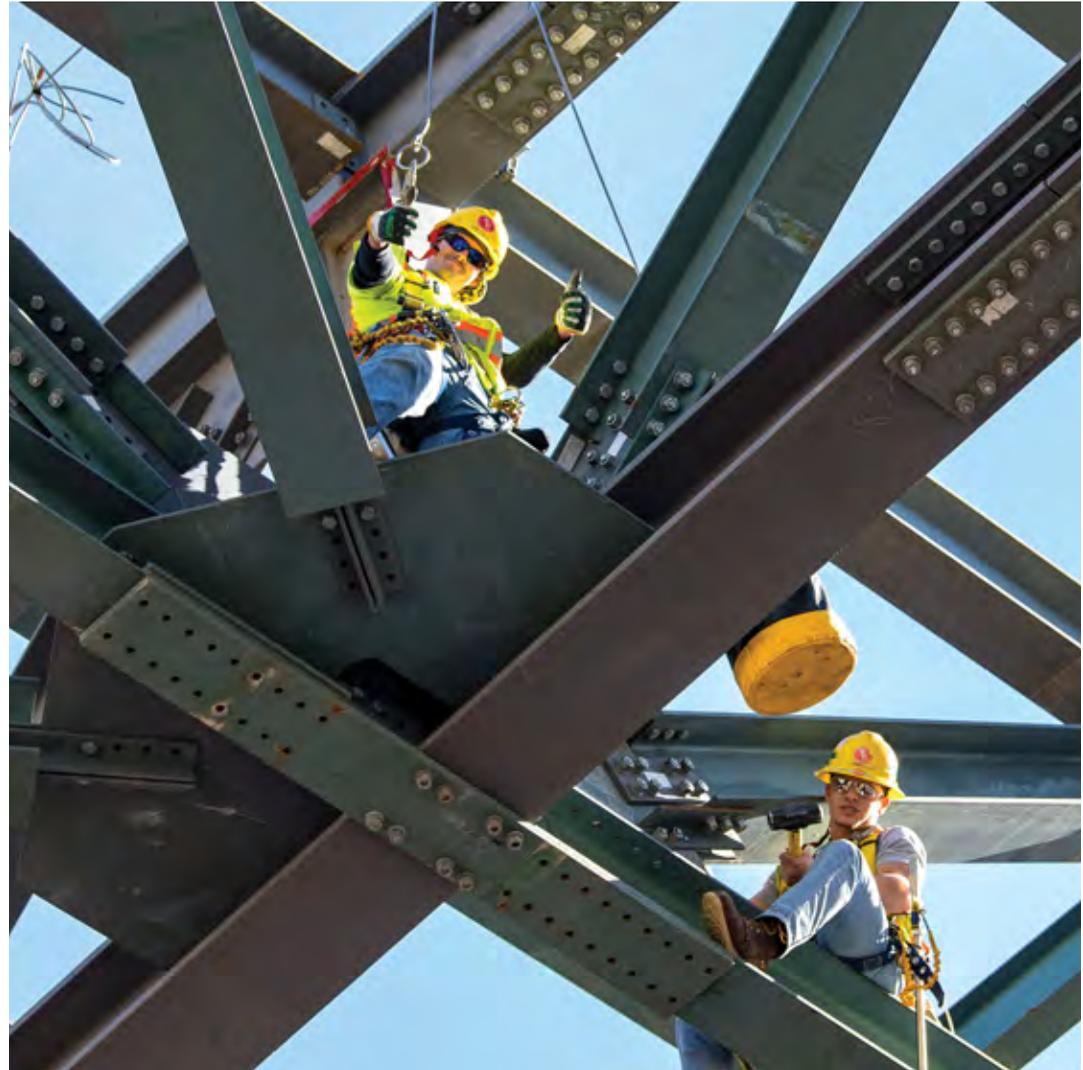
Our economic development efforts have brought an average of 21,000 new jobs and \$7 billion in overall capital investment to the Southeastern United States for each of the past five years. At the Vogtle nuclear power plant in Georgia, the construction of two new units currently provides jobs for more than 7,000 people. When the new Vogtle units 3 & 4 are fully operational, 800 permanent jobs are expected to be created.

Through 2018, our traditional electric operating companies have invested approximately \$14.2 billion in environmental capital retrofit projects to comply with environmental requirements.

The Southern Company system's current

compliance strategy estimates capital expenditures of \$1.4 billion from 2019

through 2023 to comply with environmental requirements.



## ENVIRONMENTAL STEWARDSHIP

The Southern Company system has a longstanding commitment to environmental stewardship and continues to lead in protecting and conserving our natural resources for future generations.

We practice conservation, promote biodiversity and understand that prudent use of natural resources is vital to meeting our customers' needs.

We maintain rigorous programs to help ensure we comply with applicable environmental guidelines in our operations. But our commitment to our shared heritage goes even further: We believe we should leave the world better than we found it.

This commitment is demonstrated through our partnerships with public and private organizations to conserve and protect wildlife and their natural habitats, particularly the National Fish and Wildlife Foundation (NFWF).

Through this nationally recognized partnership, which celebrated its 15th year in 2018, we have made a difference by empowering communities, bolstering wildlife populations and recovering at-risk species:

- **Southeast Aquatics Fund** - announced with NFWF and other partners \$940,000 in grants to improve the health of aquatic systems and secure populations of native freshwater aquatic species in the Southeastern United States.
- **Bats for the Future Fund** - for the second year, Southern Company and its subsidiaries, along with other partners, are funding grants totaling \$1.1 million to protect and recover imperiled bat populations.
- **Longleaf Stewardship Fund** - our longest-running conservation program, in 2018 alone Southern Company's commitment of \$600,000 resulted in funding 15 projects which resulted in over \$11.6 million in conservation impacts. Nearly 11,000 acres of new longleaf habitat was established, almost 270,000 additional

acres enhanced, and over 2,000 landowners engaged through technical assistance and outreach.

- **Gulf Coast Conservation Program** - announced with NFWF and other partners seven grant awards totaling over \$700,000 to enhance coastal habitats, bolster fish and wildlife populations, and strengthen resilience in Alabama, Florida, Louisiana, Mississippi and Texas.
- **Renew Our Rivers** - removed 15 million pounds of trash and debris since 2000 with the help of 120,000 volunteers.





## OUR WORLD

We protect and  
conserve our world for  
future generations —  
because it is the right  
thing to do.

With the trust customers place in the Southern Company system to deliver clean, safe, reliable and affordable energy comes a responsibility to protect and preserve our world. We do this to live up to our commitment to future generations – and because it is the right thing to do.

### GHG EMISSIONS REDUCTIONS

We work to reduce our GHG and air emissions, while being good stewards of the natural resources we all share. We safely and effectively manage byproducts and waste. This focus on our world helps us to meet or exceed environmental laws and regulations, while providing

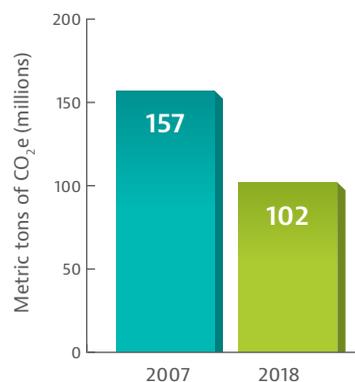
energy to power millions of lives.

Without any regulatory mandates, our system's total annual GHG emissions in 2018 of 102 million metric tons of CO<sub>2</sub> equivalent (CO<sub>2</sub>e), were approximately 35 percent (54 million metric tons) lower than 2007 levels.

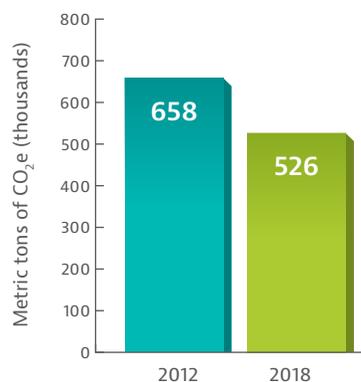


#### Total GHG emissions

(based on financial control)



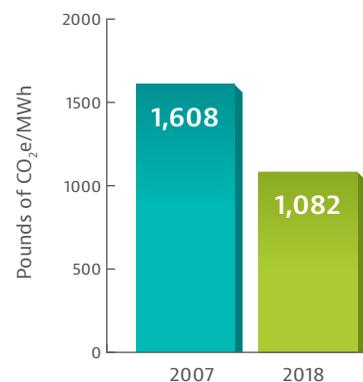
#### Gas distribution total GHG emissions\*



\*Includes Southern Company Gas GHG emissions reported under the EPA GHGRP (40 CFR 98).

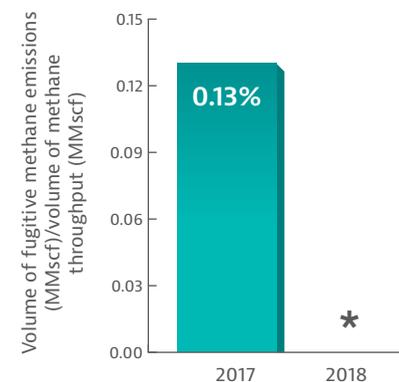
#### Electricity GHG intensity

(based on financial control)



#### Gas distribution methane emissions intensity rate

(based on ONE Future methodologies)



\*2018 data not yet available

Our “all of the above” energy strategy and diverse energy portfolio – including low-carbon and carbon-free resources and a significant transformation of our electricity generation mix over the past decade – has enabled us to continue our trajectory of lowering GHG emissions.

In 2018, we reduced our system’s total annual GHG emissions to 102 million metric tons of CO<sub>2</sub>e, representing a decrease of approximately 35 percent – or 54 million metric tons – from 2007 levels.

We have achieved this while maintaining the reliability and affordability for which the Southern Company system is known.

A slight increase in GHG emissions between 2017 and 2018 was primarily due to an increase in energy demand. It is important to note that during this period our GHG intensity decreased to 1,082 pounds CO<sub>2</sub>e/megawatt hours (MWh) in 2018 from 1,124 pounds CO<sub>2</sub>e/MWh in 2017. This means we generated more electricity using lower-emitting resources.

Generation increases were primarily a result of weather as heating degree days increased 26 percent in 2018 compared to 2017, and cooling degree days increased by 6 percent compared to the prior year.



## RESPONSIBLY TRANSITIONING OUR GENERATING FLEET

Southern Company will continue to pursue a diverse portfolio that includes low-carbon and carbon-free resources and energy efficiency resources. We will continue our industry-leading R&D with a particular focus on technologies that lower GHG emissions, and constructively engage with policymakers, regulators, investors and customers to support outcomes leading to a low-carbon future.

We will ensure the transition of our generating fleet is in a manner responsible to our customers and meets the needs of the communities we serve.

Achieving our goals depends on many factors, including natural gas prices and the pace and extent of advancements in low- to no-carbon energy technologies.





Atlanta Gas Light is actively supporting the Metropolitan Atlanta Rapid Transit Authority (MARTA) in the completion of its bus fleet transition to safe compressed natural gas (CNG) – one of the cleanest alternative fuels. MARTA's fleet of 384 buses powered by CNG, among the country's largest, is improving air quality for Atlanta.

## LOWERING AIR EMISSIONS

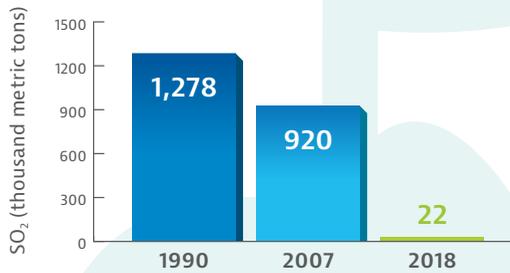
The Southern Company system's dedication to environmental responsibility includes addressing emissions such as nitrogen oxides (NO<sub>x</sub>), sulfur dioxide

(SO<sub>2</sub>) and mercury. We have cut SO<sub>2</sub> emissions by 98 percent and reduced NO<sub>x</sub> emissions by 88 percent since 1990. What's more, our system has lowered mercury emissions 89 percent from

2007 levels. We have achieved these reductions while continuing to reliably produce energy to meet the needs of millions of customers.

### SO<sub>2</sub> emissions total

(based on financial control)



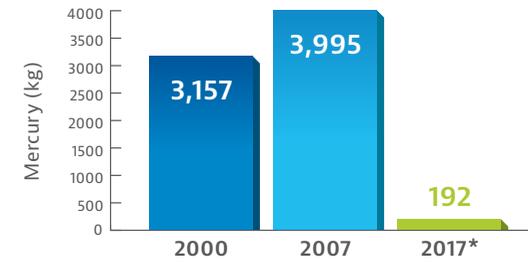
### NO<sub>x</sub> emissions total

(based on financial control)



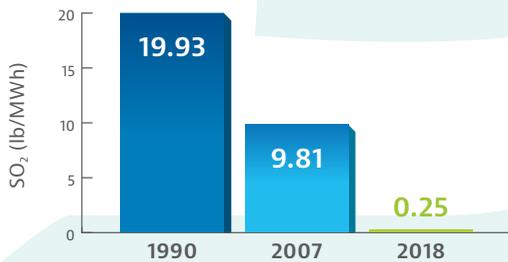
### Mercury emissions total

(based on financial control)



### SO<sub>2</sub> emissions intensity

(based on financial control)



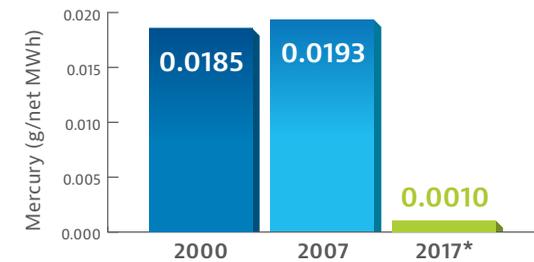
### NO<sub>x</sub> emissions intensity

(based on financial control)



### Mercury emissions intensity

(based on financial control)



\* Latest available data.

## CONSERVING WATER

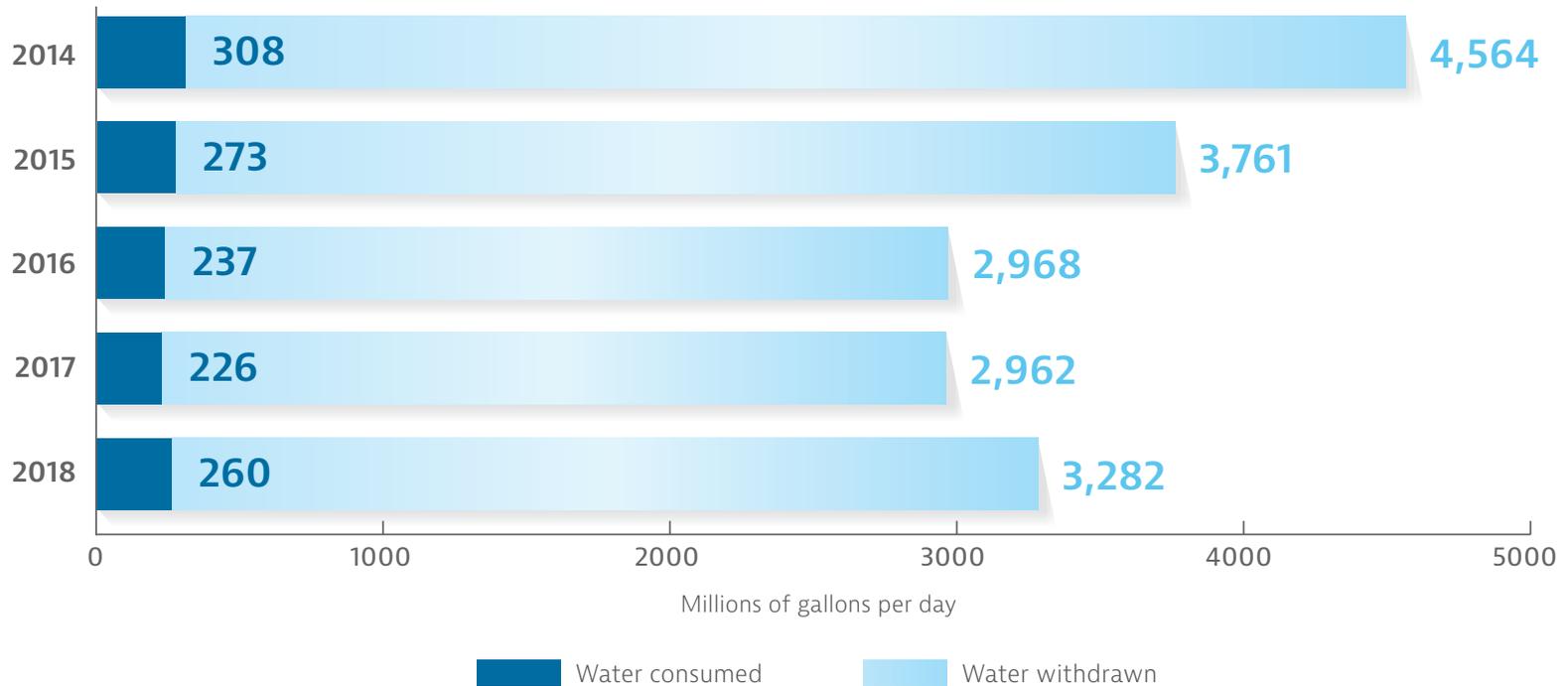
Southern Company's state-regulated electric companies draw from a range of plentiful sources of surface water for our system operations, which are heavily reliant on water. This includes rivers and streams, lakes and reservoirs, coastal water and groundwater sources. Each

source presents unique and valuable differences and challenges in the process of power production.

Between 2013 and 2018, the system's thermoelectric plants returned 92 percent of the 3.7 billion gallons of water withdrawn on average per day to the source – rivers

or lakes. Surface water withdrawal has been reduced more than 25 percent during the same period. The system's 33 hydroelectric facilities make up around 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**



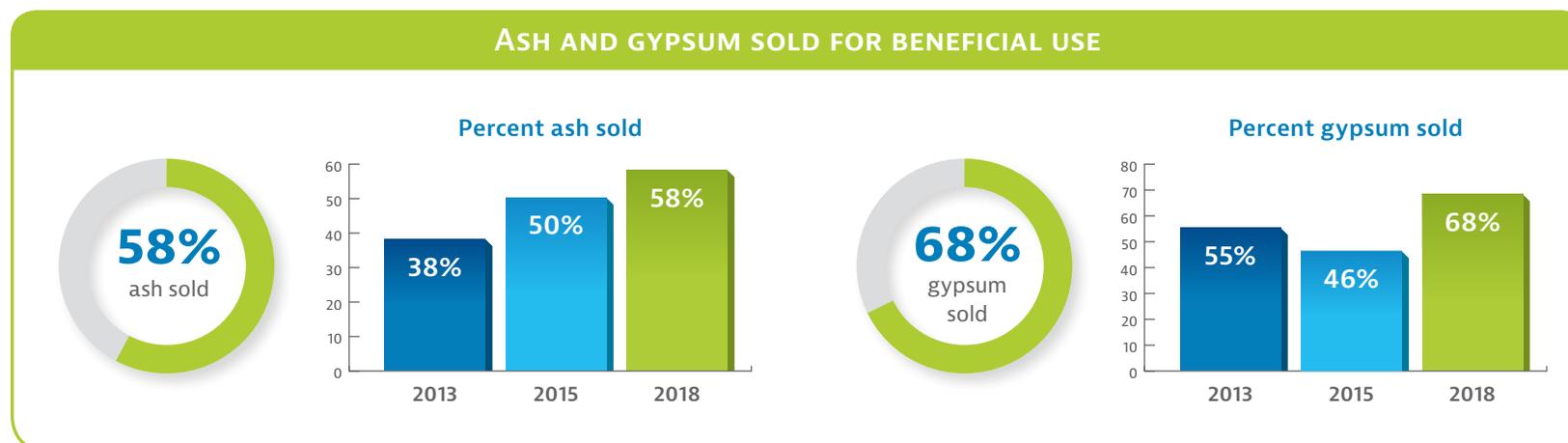
We operate rigorous programs with the goal to safely and effectively manage coal ash and other waste resulting from power generation.

### MANAGING SOLID WASTES

Across the Southern Company system, we are aggressively diverting ash and wastewater from ash ponds as part of our rigorous Coal Combustion Residuals (CCR) compliance program. This program 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 closing inactive ponds, have exceeded our self-imposed schedule to stop sending ash to all unlined ponds by the end of 2019 and, thereafter, plan to close every remaining ash pond in our system.

What's more, the Southern Company system currently avoids CCR disposal by beneficially using 62 percent of produced ash and gypsum. All Southern Company electric operating companies are complying with public data posting requirements and publish this information on their respective websites.



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 pencil eraser-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 our 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.



## HELPING PAVE THE WAY TO A LOW-CARBON FUTURE

Standing over 500 feet tall each, 43 wind turbines in Concho County, Texas, are capable of producing 148 MW of energy at Southern Power's Cactus Flats facility. Southern Power announced in August 2018 that the facility – its fifth wind project in Texas – became operational.

The electricity and associated renewable energy credits\* generated by the facility are being sold under two separate power purchase agreements with General Mills and General Motors.

Southern Power is a leading provider of wholesale energy in the United States. The company has over 3,000 MW of renewable generation operating or under

construction from coast to coast. Projects like Cactus Flats help support Southern Company in reducing GHG emissions.

“ **Cactus Flats highlights Southern Power's ongoing commitment to the development of wind energy. We are pleased to be supporting our customers' sustainability efforts through renewable** **wholesale energy.** ”

– **Bill Grantham,**  
**Southern Power President**



\* 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.

## MITIGATING METHANE EMISSIONS

Southern Company Gas has been a leader in methane reduction projects for more than two decades, serving as a trusted education source for consumers and participating in federal emissions reduction programs.

We have mitigated more than 3.3 million metric tons of CO<sub>2</sub>e from the atmosphere. These reductions are the result of aggressive investment in programs like those targeting pipeline replacement to improve the safety and performance of our natural gas system.

The decrease is equivalent to the GHG emissions from more than 8 billion miles driven by an average passenger vehicle.

Southern Company Gas has invested more than \$2 billion during a 20-year timeframe to reduce methane through efforts that include replacing 6,000 miles



of unprotected steel and cast-iron pipe from its system since 1998.

Our decades-long commitment to the environment includes being a founding member of Our Nation's Energy Future

Program (ONE Future), under which industries across the value chain voluntarily set goals for methane emission reductions. In 2018, our gas distribution methane emissions intensity rate was less than ONE Future goals for 2020 and 2025.

## APPENDIX

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

## GRI INDEX

Southern Company's 2018 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
Our Company	Overview • Business environment • Energy portfolio • Celebrating 50 years of R&D • Advancing technology • Policy and engagement • Leadership oversight • New board members • Our Values • Code of Ethics	102-1, 102-2, 102-4, 102-6, 102-7, 102-13, 102-16, 102-18, 102-43, 405-1
Our People	Who we are • Listening to our employees • Diversity and inclusion • Investing in employees • Recruitment • Developing people • Diverse career options • Safety • Supplier diversity	102-9, 401-1, 404-2
Our Communities	Charitable giving • Volunteering • Educational initiatives • Supporting customers • Smart Neighborhood projects • Economic development • Environmental stewardship	102-12, 304-3, 203-1
Our World	GHG emissions reductions • Lowering 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

## ENVIRONMENTAL METRICS

Emissions	2016	2017	2018
CO <sub>2</sub> e emissions (million metric tons) <sup>1</sup>	103.9	100.8	102.4
Generation CO <sub>2</sub> e emissions (million metric tons) <sup>2</sup>	99.4	96.5	97.3
CO <sub>2</sub> e emissions intensity (lb/net MWh) <sup>3</sup>	1,158	1,124	1,082
Fugitive CO <sub>2</sub> e emissions of sulfur hexafluoride (million metric tons)	0.079	0.109	0.089
Total CO <sub>2</sub> e emissions of natural gas sector (million metric tons) <sup>4</sup>	0.57	1.00	0.99
Generation NO <sub>x</sub> emissions (thousand metric tons) <sup>2</sup>	41.3	38.7	41.8
Generation NO <sub>x</sub> emissions intensity (lb/net MWh)	0.48	0.45	0.46
Generation SO <sub>2</sub> emissions (thousand metric tons) <sup>2</sup>	30.2	19.7	22.1
Generation SO <sub>2</sub> emissions intensity (lb/net MWh)	0.35	0.23	0.25
Generation mercury emissions (kg) <sup>2</sup>	230	192	*
Generation mercury emissions intensity (g/net MWh)	0.0012	0.0010	*
Water withdrawn and consumed for electric generation	2016	2017	2018
Withdrawn (million gallons/day)	2,968	2,962	3,282
Consumed (million gallons/day)	237	226	260
Fresh water resources	2016	2017	2018
Water withdrawals - consumptive (millions of gallons/net MWh)	0.0005	0.0004	0.0005
Water withdrawals - non-consumptive (millions of gallons/net MWh)	0.005	0.005	0.006
Waste products	2016	2017	2018
Hazardous Waste Disposal (thousand lb) <sup>5</sup>	417	793	502
Coal combustion residual products sold for beneficial use (%)	53%	62%	62%

1 Includes all tracked direct emissions from electricity and gas sector financially owned assets. Emissions for all years now include leveraged leases, and will not match the annual report on form 10-K.

2 Emissions from electricity sales to retail and wholesale customers. Does not include gas sector, purchased power or leveraged lease facilities.

3 Intensities for the electricity sector include energy sales to retail and wholesale customers. Intensities do not include gas sector, purchased power or leveraged lease facilities.

4 Emissions from gas sector for owned assets, as tracked under GHGRP (40 CFR 98).

5 Excludes 2018 Kemper County IGCC facility decommissioning activities.

\* 2018 data not yet available.

## COMPANY METRICS

Financial summary	2016	2017	2018
Operating revenues (millions)	\$19,896	\$23,031	\$23,495
Earnings (millions)	\$2,448	\$842	\$2,226
Diluted earnings per share	\$2.55	\$0.84	\$2.17
Dividends per share (amount paid)	\$2.22	\$2.30	\$2.38
Dividend yield (year-end, percent)	4.5	4.8	5.4
Total assets (millions)	\$109,697	\$111,005	\$116,914
Utility customers (thousands, year end)	2016	2017	2018
Electric operations	4,593	4,640	4,685
Gas distribution operations	4,586	4,623	4,248
<b>Total</b>	<b>9,179</b>	<b>9,263</b>	<b>8,933</b>
Generation capacity (owned nameplate MW, year end)	2016	2017	2018
Coal	17,513	16,890	13,307
Natural gas	18,744	19,514	21,764
Nuclear	3,680	3,680	3,680
Biomass/biogas	116	116	116
Geothermal	3	3	3
Hydroelectric	2,756	2,756	2,756
Solar	2,282	2,504	2,576
Wind	1,198	1,474	1,622
<b>Total</b>	<b>46,291</b>	<b>46,937</b>	<b>45,824</b>
Sources of electricity generation*	2016	2017	2018
Coal	30%	28%	27%
Natural gas	49%	47%	47%
Nuclear	15%	15%	15%
Renewables/other	6%	10%	11%

\*Includes non-affiliate power purchase agreements.

## 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 in our senior management.
- » Veterans or active military comprise 10 percent of our total workforce.

Workforce	2016	2017	2018
Full-time employees	30,534	29,629	28,317
Part-time employees	78	71	66
<b>Total employees</b>	<b>30,612</b>	<b>29,700</b>	<b>28,383</b>
Workforce demographics	2016	2017	2018
Women as a percent of workforce	26%	26%	25%
Women as a percent of management	23%	23%	23%
Minorities as a percent of workforce	26%	27%	27%
Minorities as a percent of management	19%	19%	20%
Employee turnover rate	2016	2017	2018
Voluntary as a percent of workforce	2%	2%	2%
Involuntary as a percent of workforce	2%	2%	2%
Retirement as a percent of workforce	4%	4%	4%
Employees readying for retirement	2016	2017	2018
Employees expected to retire in next 5 years	3,740	3,394	3,934
Employees expected to retire in next 10 years	8,027	7,899	8,260
Safety and health program	2016	2017	2018
Percentage of employees that worked injury free	99%	99%	98.5%

\*As of Dec. 31 of each year. Excludes PowerSecure.

## SASB INDEX

For the first time, we are providing a Sustainability Accounting Standards Board (SASB) index that identifies where in this report or in our other publicly available disclosures we provide information identified in the Electric Utilities & Power Generators industry standards within the Infrastructure sector. Though we do not yet address all metrics included in the standards, we continue to evaluate our future disclosures in light of investor interest in the SASB framework.

Topic	Accounting Metric	Location/Subsection
Greenhouse Gas Emissions & Energy Resource Planning	(1) Gross global Scope 1 emissions, percentage covered under (2) emissions-limiting regulations, and (3) emissions-reporting regulations	- <a href="#">CDP: Climate</a> - Corporate Responsibility Report: Reducing GHG Emissions
	Greenhouse gas (GHG) emissions associated with power deliveries	- <a href="#">CDP: Climate</a>
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	- <a href="#">Planning for a low-carbon future</a> - <a href="#">CDP: Climate</a>
	(1) Number of customers served in markets subject to renewable portfolio standards (RPS) and (2) percentage fulfillment of RPS target by market	- No RPS in Retail Electric states
Air Quality	Air emissions of the following pollutants: (1) NO <sub>x</sub> (excluding N <sub>2</sub> O), (2) SO <sub>x</sub> , (3) particulate matter (PM10), (4) lead (Pb), and (5) mercury (Hg); percentage of each in or near areas of dense population	- <a href="#">EEI ESG/ Sustainability Reporting Template</a> - Corporate Responsibility Report: Reducing GHG Emissions - <a href="#">Toxics Release Inventory</a>
Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	- <a href="#">EEI ESG/ Sustainability Reporting Template</a> - Corporate Responsibility Report: Conserving water
	Description of water management risks and discussion of strategies and practices to mitigate those risks	- <a href="#">Southern Company Water Action Report</a>
Coal Ash Management	Amount of coal combustion residuals (CCR) generated, percentage recycled	- <a href="#">EEI ESG/ Sustainability Reporting Template</a> - Corporate Responsibility Report: Managing solid wastes
	Total number of coal combustion residual (CCR) impoundments, broken down by hazard potential classification and structural integrity assessment	- <a href="#">Alabama Power CCR Compliance Data and Information</a> - <a href="#">Georgia Power CCR Compliance Data and Information</a> - <a href="#">Mississippi Power CCR Compliance Data and Information</a>
Energy Affordability	Average retail electric rate for (1) residential, (2) commercial, and (3) industrial customers	- <a href="#">Annual Electric Power Industry Report: Form EIA- 861</a>
	Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory	- <a href="#">Annual Report: Form-10k ; pg I-19</a>
Workforce Health & Safety	(1) Total recordable incident rate (TRIR) and (2) fatality rate	- <a href="#">EEI ESG/ Sustainability Reporting Template</a> - Corporate Responsibility Report: Our People/Safety
End-Use Efficiency & Demand	Percentage of electric load served by smart grid technology	- <a href="#">Annual Electric Power Industry Report: Form EIA- 861</a>
	Customer electricity savings from efficiency measures, by market	
Nuclear Safety & Emergency Management	Total number of nuclear power units, broken down by U.S. Nuclear Regulatory Commission (NRC) Action Matrix Column	- <a href="#">United States Nuclear Regulatory Commission Action Matrix</a>
	Description of efforts to manage nuclear safety and emergency preparedness	- Corporate Responsibility Report: Managing solid wastes
Grid Resiliency	Number of: (1) residential, (2) commercial, and (3) industrial customers served	- <a href="#">EEI ESG/ Sustainability Reporting Template</a> - <a href="#">Annual Report: Form-10k: pg II-5</a>
	Activity Metric	Location/Subsection
	Combined total electricity delivered to: residential, commercial, industrial, all other retail customers, and wholesale customers	- <a href="#">Annual Report: Form-10k: pg II-21</a>
	Length of transmission and distribution lines	- <a href="#">CDP: Climate</a>
	Total electricity generated, percentage by major energy source, percentage in regulated markets	- <a href="#">CDP: Climate</a>
	Total wholesale electricity purchased	- <a href="#">CDP: Climate</a>

## 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 goals, 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, 2018, 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, as well as changes in application of existing laws and regulations; the extent and timing of costs and legal requirements related to CCR; 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, including from the development and deployment of alternative energy sources; variations in demand for electricity and natural gas; available sources and costs of natural gas and other fuels; the ability to complete necessary or desirable pipeline expansion or infrastructure projects, limits on pipeline capacity and operational interruptions to

natural gas distribution and transmission activities; 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 return on equity, equity ratios and 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, 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.



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