

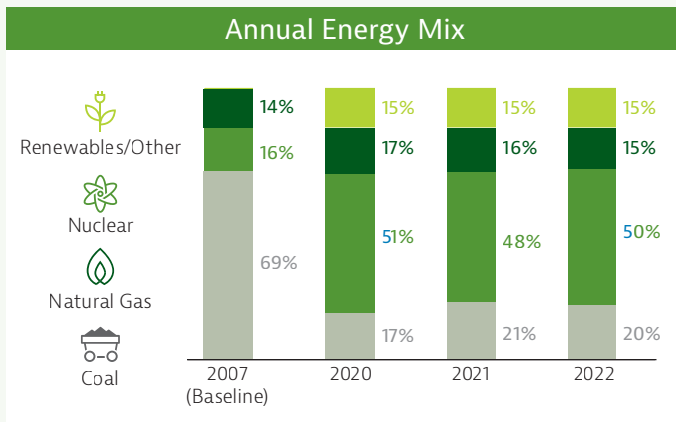


# Electric Operations: Energy Portfolio Transition & Scenario Planning

When Southern Company<sup>1</sup> considers our energy portfolio transition and decarbonization strategy, we must evaluate a wide range of factors. In addition to environmental benefits that come with moving toward net zero greenhouse gas (GHG) emissions, we also consider the potential opportunities and challenges for our customers, communities and employees. It is important that we take a holistic approach so all our stakeholders can benefit from this transition. As we consider the generating resources needed to support growth in our service territories, our electric operating companies are committed to proposing energy deployment options that support the delivery of clean, safe, reliable and affordable energy. These proposals must be considered and approved by state regulators through established integrated resource planning processes, when applicable.

## Energy Portfolio Transition

As we transition to net zero, we believe having a diversified energy portfolio is crucial to reducing emissions while maintaining reliability and affordability. Since 2007, we have significantly reduced our reliance on coal-fired generation, meaningfully increased generation from clean energy resources and made strategic decisions around our use of natural gas. In 2022, nearly one-third of the electricity generated or purchased by Southern Company subsidiaries came from clean energy resources, including nuclear, solar, wind, biomass, landfill gas, and hydropower, as shown in the table below.



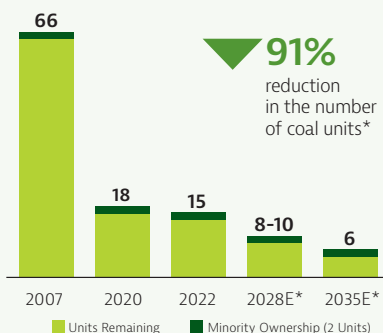
- Annual energy mix represents all of the energy the Southern Company system uses to serve its retail and wholesale customers during the year. It is not meant to represent delivered energy mix to any particular retail customer or class of customers. Annual energy mix percentages include non-affiliate power purchase agreements.
- Renewables/Other category includes wind, solar, hydro, biomass, landfill gas and fuel cells.
- With respect to renewable generation and associated renewable energy credits (RECs), to the extent an affiliate of Southern Company has the right to the RECs associated with renewable energy it generates or purchases, it retains the right to sell the energy and RECs, either bundled or separately, to retail customers and third parties.
- Electric demand in 2020 was reduced by COVID-19 impacts and mild weather. Low natural gas prices in 2020 gave the natural gas generating fleet favorable economics relative to most coal units, displacing additional coal generation.

## Coal Fleet Retirement<sup>2</sup>

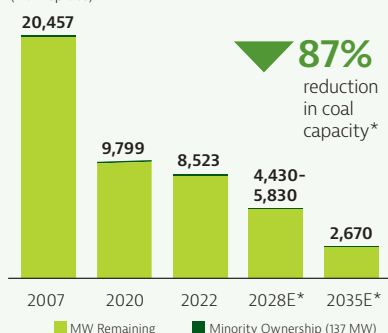
Southern Company continues to reduce the number of generating units in our coal fleet, lowering emissions and retiring uneconomic resources. When considering retirements and conversions that have already been implemented by our electric operating companies as well as expected future retirements or conversions that have been filed with state environmental and/or regulatory agencies, we expect to have just six coal units remaining in our generating fleet with a nameplate capacity of less than 3,000 MWs by the end of 2035. Compared to 2007, this represents a 91% reduction in the number of coal units and an 87% reduction in coal nameplate capacity operated by Southern Company. Importantly, we continue to prioritize the well-being of our employees and communities by focusing on a Just Transition as we seek to accomplish significant reductions in a relatively short timeframe.

### Southern Company Coal Fleet Over Time

Number of Coal Units



Coal Capacity in Megawatts (MW)  
(Nameplate)



Reflects Effluent Limitations Guidelines (ELG) compliance filings made by Southern Company's traditional electric operating companies, as well as the 2021 Integrated Resource Plan (IRP) for Mississippi Power and the 2022 IRP for Georgia Power. Units are expected to be either retired or repowered to burn natural gas during peak loads. Minority ownership units are subject to compliance decisions made by majority owners.

\*For 2028, approvals have already been received to reduce the total number of coal generating units to 10. In prior filings, Georgia Power requested to retire Plant Bowen Units 1&2 by 2028 and Units 3&4 by 2035, and expects these requests to be considered in future regulatory proceedings.



Since 2007, we have retired or converted

**59 Coal/Oil units.**

We plan to retire 5 additional units for a total of 64.\*

Only 8-10 coal units are expected to remain after 2028, at approximately

**4,500-5,800MW.\***

\* subject to regulatory approval

## Significant Oil and Coal Retirements Since 2007

Facility	Action	Total Number of Units	Total Nameplate Capacity (MW)
Barry	Retired Coal/Converted	4	825
Boulevard	Retired Oil/Gas	2	39
Bowen	Retired Oil/Gas	1	39
Branch	Retired Coal	4	1,540
Crist	Converted	2	150
Gadsden	Retired	2	120
Gaston	Converted	4	1,000
Gorgas	Retired Coal	5	1,221
Greene County	Converted	2	500
Hammond	Retired Coal	4	800
Kraft	Retired Coal/Gas	5	303
Lansing Smith	Retired Coal	2	305
McDonough	Retired Coal	2	490
McIntosh	Retired Coal	1	163
McManus	Retired Coal/Oil/Gas	2	115
Mitchell	Retired Coal	4	243
Scholz	Converted	2	80
Wansley	Retired Coal	2	925
Watson	Retired Coal/Converted	2	750
Yates	Retired Coal/Converted	7	1,250
		<b>59</b>	<b>10,858</b>

Submitted to or Approved by the Public Service Commission for Retirement or Conversion:

Facility	Action	Total Number of Units	Total Nameplate Capacity (MW)
Barry 5	Retire Coal	1	700
Daniel 1 & 2	Retire Coal	2	500
Gaston 5	Convert	1	880
Scherer 3	Retire Coal	1	614
		<b>5</b>	<b>2,694</b>



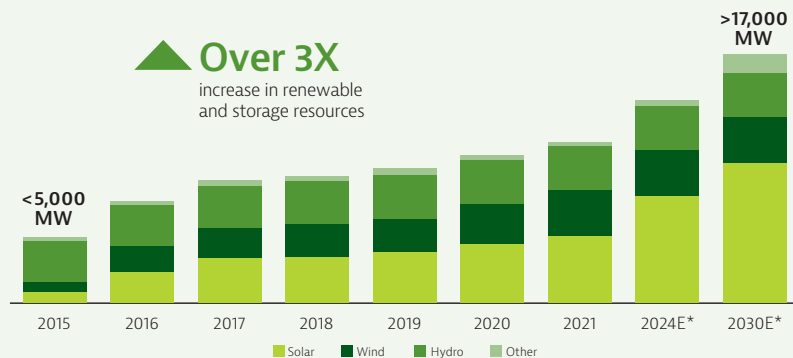


## Renewable Energy Growth

Southern Company is the fourth largest owner of renewable generation resources in the United States.

Our footprint of clean energy resources continues to grow at both our regulated electric utilities and our unregulated subsidiary, Southern Power. For example, in its 2022 Integrated Resource Plan, Georgia Power Company received approval to add an additional 2,300 MW of new renewable resources. Of the approved 2,300 MW, 2,100 MW will be made available for commercial and industrial customers to subscribe to the energy output and RECs from the new renewable resources. The remaining 200 MW will be procured for the benefit of all retail customers as part of the Distributed Generation RFP program. The resources are expected to be added by 2030, which will support the company's long-term plan to add a total of 6,000 MW of additional resources by 2035. This will roughly double its currently approved renewable portfolio and support the company's overall transition to cleaner, more cost-effective energy resources for customers. Additionally, Alabama Power offers customers the opportunity to participate in the Renewable Subscription Program, which has seen over 400 MW of renewable resources approved in the last two years to support the green energy goals of the subscribers. The regulated electric utilities, including Mississippi Power, continue to increase the renewable resources available in their portfolios to meet growing customer participation in clean energy programs. Our unregulated subsidiary, Southern Power, owns wind, solar and energy storage resources across the U.S. and is a trusted wholesale energy partner for municipalities, electric cooperatives, investor-owned utilities, and commercial and industrial customers. Southern Power and its subsidiaries, some of which are owned in part with various partners, own or operate 53 facilities operating in 14 states with more than 12,490 MW of generating capacity, including approximately 5,000 MWs of wind, solar and energy storage.

## Southern Company Expected Renewable and Storage Growth



Includes owned and contracted resources including 100% capacity for jointly owned projects. With respect to certain renewable generation and associated renewable energy credits (RECs), to the extent an affiliate of Southern Company has the right to the RECs associated with renewable energy it generates or purchases, it retains the right to sell the energy and RECs, either bundled or separately, to retail customers or third parties. Other includes battery storage, landfill gas and biomass.

\*Future estimates include owned and contracted capacity that have received regulatory approval. Additional renewable resources could be added prior to 2030 at Southern Power or at our operating companies, should they be proposed and approved through regulatory processes.



## Southern Power's Skookumchuck Wind Facility

The Skookumchuck Wind Facility, which entered commercial operation in 2020, is Southern Power's first wind energy facility in Washington state and is a great addition to Southern Company's growing renewable fleet. At a total capacity of 136 MW, the 38 wind turbines supply electricity and associated renewable energy credits, sold under a 20-year power purchase agreement with Puget Sound Energy, which will utilize the resource to meet the electricity demand of their Green Direct program customers.

For more information about the facility, please visit:  
[https://players.brightcove.net/18122129001/default\\_default/index.html?videoId=6281671570001](https://players.brightcove.net/18122129001/default_default/index.html?videoId=6281671570001)





## Nuclear Energy

Georgia Power is constructing the first new nuclear units in the U.S. in over three decades at [Plant Vogtle Units 3 & 4](#). Southern Company also operates a sizeable fleet of clean, reliable nuclear units, which will grow with the addition of Plant Vogtle Units 3 and 4.





# Electric Operations: Energy Portfolio Transition & Scenario Planning

## Capital Allocation Alignment with Net Zero

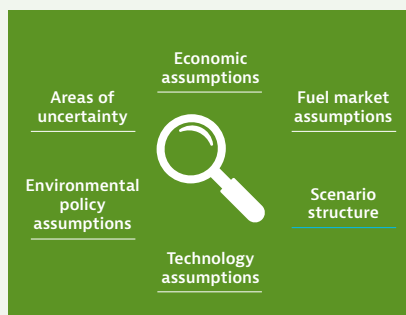
Through our subsidiaries, we are investing in developing clean energy resources. Our current portfolio of more than 15,000 MW of low-carbon and no-carbon capacity has established a foundation upon which to continue our carbon reduction efforts. In addition to spending more on clean energy generation options, we do not intend to invest further in our existing thermal coal fleet, unless the investment ensures safety, affordability or reliability to serve customers or to comply with federal or state laws. Specific to our capital expenditure plans, there are some nuances that might not allow stakeholders to clearly connect our net zero goal and business strategy. For example, as noted above, our generating mix is projected to shift toward clean energy resources, however, the impact on capital expenditures for new generation will be determined by the future balance of purchase power agreements (non-company owned assets) and company-owned renewable assets. As a result, our generating mix is projected to shift toward renewables, though this shift may not be directly reflected in capital expenditures for new generation since we may not construct and own all underlying resources. For more information please review section [C3.5a of our 2022 CDP Response](#) and our [4Q22 Earnings Presentation](#).

## Scenario Planning

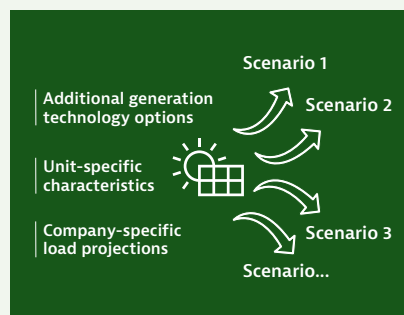
A core element underpinning Southern Company's decarbonization strategy for our electric utilities is our scenario-based integrated resource planning process and related regulatory reviews. Our electric operating companies are subject to the jurisdiction of their respective state Public Service Commissions (PSCs) and state environmental agencies. PSCs have broad regulatory authority over the companies, including approval of new supply-side and demand-side resources and related cost recovery rates, while environmental agencies are charged with the enforcement of each state's environmental policies. Accordingly, our fleet transition will be subject to regulatory oversight in the jurisdictions where we operate.

At varying frequencies and under a variety of circumstances, the electric operating companies file with their respective PSCs economic analyses of recommendations or decisions using the scenario planning process. Southern Company's scenario planning process, which has been in place since 2008, helps to ensure the right resources are deployed at the right time to maintain safety, reliability and affordability for customers. The planning process allows for updates to a number of assumptions, inputs and alternatives, including potential CO<sub>2</sub> prices, fuel and other commodity prices, as well as economic or other policy indicators. It also forms the foundation that each of our state-regulated utilities utilizes to work within their respective regulatory frameworks to ensure that carbon reduction efforts are in customers' best interests over time.

### Energy Economy Modeling



### Integrated Resource Planning





# Electric Operations: Energy Portfolio Transition & Scenario Planning

The scenarios indicated below, used in **Mississippi Power’s 2023 Mid-Point Supply-Side Update** filed with the Mississippi Public Service Commission, are indicative of the scenarios that we utilize in our system planning.

## 2023 MPC Mid-Point Update

Scenario	Natural Gas Path View	Greenhouse Gas Pressure	Technology Cost & Performance	Load View	Label
1	Moderate	Lower (\$0)	Tech Portfolio*	Standard^	MG0
2	Moderate	Mod. (\$20+)	Tech Portfolio*	Alt. 1	MG20
3	Moderate	Higher (\$50+)	Tech Portfolio*	Alt. 2	MG50
4	Moderate	Emissions Limit	Tech Portfolio*	Alt. 2	EL
5	Lower	Lower (\$0)	Tech Portfolio*	Standard	LG0
6	Higher	Lower (\$0)	Tech Portfolio*	Standard^+HG0 delta	HG0

\* Technology Portfolio consisting of the resource options MPC currently uses in its expansion plan modeling.

^ Standard load forecasts produced by each Operating Company that serve as the reference forecasts.

For more information about Southern Company’s scenario planning, please review our carbon reports: [Implementation and Action Toward Net Zero](#) and [Planning for a Low Carbon Future](#).

## Facilitating the Transition

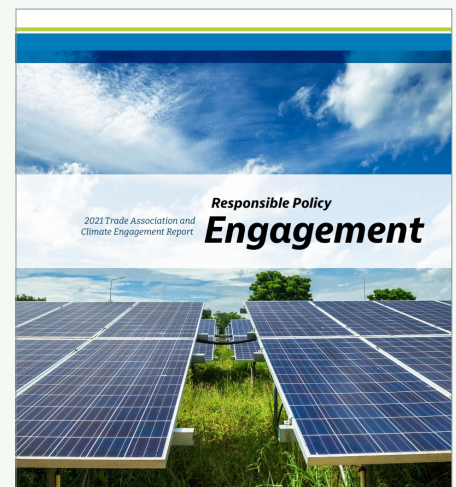
### Constructive Stakeholder Engagement

As a leading energy company, we believe effective communication with our customers, employees, communities, policymakers and other stakeholders is imperative to our business success and to meeting our decarbonization goals.

In particular, the development of constructive energy policy and regulation at both the state and federal levels is essential to executing our customer-centric business model. We engage with policymakers to help shape durable energy and climate policies that support developing and deploying more clean energy resources while ensuring that each state we serve retains the ability to adequately plan and deploy resources that meet the needs of its citizens and communities. In the United States, we need support from policymakers and regulators to develop policies that will support an efficient, reliable and affordable transition to a net zero future.

Gathering input from stakeholders is also an important part of developing Southern Company’s strategy. We hold regular stakeholder forums, webinars, calls and meetings covering a range of topics, including our efforts to reduce GHG emissions, regulatory and policy issues, Just Transition, R&D efforts, system risk and planning related to renewables and energy efficiency, and climate-related lobbying efforts. External participants in these events include investors, environmental advocates, social justice advocates, community representatives and many others. Internal participants include members of our senior management, including Southern Company’s CEO, as well as subject matter experts. Independent members of our board of directors also participate in certain engagements.

For more information about Southern Company’s robust stakeholder outreach initiatives as well as our policy engagement and advocacy activities please review our [Proxy Statement](#) and disclosures dedicated to [Policy Engagement and Advocacy](#).



### Sustainable Finance

To support our capital needs related to the transition, in January 2021, Southern Company became the first large-cap U.S. utility to issue a [Sustainable Financing Framework](#) (SFF). The Framework aligns with our sustainability goals and transition to a net zero-future. As of Dec. 31, 2022, Southern Company’s subsidiaries have issued a total of \$6.5 billion in principal amount of green, social, and sustainability bonds.



# Electric Operations: Energy Portfolio Transition & Scenario Planning

In this fact sheet, the terms we, us and our all refer to Southern Company. Southern Company is a holding company that conducts its business through its subsidiaries. Accordingly, unless the context otherwise requires, references in this document to Southern Company's operations, such as generating activities, greenhouse gas emissions and employment practices, refer to those operations conducted through its subsidiaries.

## 2 FORWARD-LOOKING STATEMENTS

Note: Certain information contained on SouthernCompany.com and subsidiary websites are forward-looking information based on current expectations and plans that involve risks and uncertainties. Forward-looking information includes, among other things, statements concerning Southern Company's financial and operating performance and objectives, business plans and goals, estimates, projections, forecasts, assumptions, risks and uncertainties. Southern Company and its subsidiaries caution 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, 2022 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 tax, environmental, and other laws and regulations to which Southern Company and its subsidiaries are subject, as well as changes in application of existing laws and regulations; the extent and timing of costs and legal requirements related to coal combustion residuals; current and future litigation or regulatory investigations, proceedings, or inquiries, including litigation and other disputes related to the Kemper County energy facility and Plant Vogtle Units 3 and 4; 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 and commodities; the ability to complete necessary or desirable pipeline expansion or infrastructure projects, limits on pipeline capacity, public and policymaker support for such projects, and operational interruptions to natural gas distribution and transmission activities; transmission constraints; the ability to control costs and avoid cost and schedule overruns during the development, construction, and operation of facilities or other projects, including Plant Vogtle Units 3 and 4 (which includes components based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale) and Plant Barry Unit 8, due to current and/or future challenges which include, but are not limited to, changes in labor costs, availability, and productivity; challenges with the management of contractors or vendors; subcontractor performance; adverse weather conditions; shortages, delays, increased costs, or inconsistent quality of equipment, materials, and labor; contractor or supplier delay; the impacts of inflation; delays due to judicial or regulatory action; nonperformance under construction, operating, or other agreements; operational readiness, including specialized operator training and required site safety programs; engineering or design problems or any remediation related thereto; design and other licensing-based compliance matters, including, for Plant Vogtle Unit 4, inspections and the timely submittal by Southern Nuclear Operating Company, Inc. of the Inspections, Tests, Analyses, and Acceptance Criteria documentation and the related investigations, reviews and approvals by the U.S. Nuclear Regulatory Commission ("NRC") necessary to support NRC authorization to load fuel; challenges with start-up activities, including major equipment failure, or system integration; and/or operational performance; continued challenges related to the COVID-19 pandemic or future pandemic health events; continued public and policymaker support for projects; environmental and geological conditions; delays or increased costs to interconnect facilities to transmission grids; and increased financing costs as a result of changes in market interest rates or as a result of project delays; the ability to overcome or mitigate the current challenges at Plant Vogtle Units 3 and 4 that could further impact the cost and schedule for the project; legal proceedings and regulatory approvals and actions related to construction projects, such as Plant Vogtle Units 3 and 4 and Plant Barry Unit 8, including Public Service Commission approvals and Federal Energy Regulatory Commission and NRC actions; under certain specified circumstances, a decision by holders of more than 10% of the ownership interests of Plant Vogtle Units 3 and 4 not to proceed with construction, notices of tender by Oglethorpe Power Company and the City of Dalton, Georgia of a portion of their ownership interests in Plant Vogtle Units 3 and 4 to Georgia Power Company ("Georgia Power"), including related litigation; in the event Georgia Power becomes obligated to provide funding to Municipal Electric Authority of Georgia ("MEAG Power") with respect to the portion of MEAG Power's ownership interest in Plant Vogtle Units 3 and 4 involving Jacksonville Electric Authority, any inability of Georgia Power to receive repayment of such funding; the ability to construct facilities in accordance with the requirements of permits and licenses (including satisfaction of NRC requirements), to satisfy any environmental performance standards and the requirements of tax credits and other incentives, and to integrate facilities into the Southern Company system upon completion of construction; investment performance of the employee and retiree benefit plans and nuclear decommissioning trust funds; advances in technology, including the pace and extent of development of low- to no-carbon energy and battery energy storage technologies and negative carbon concepts; performance of counterparties under 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, additional generating capacity, and fuel and other cost recovery mechanisms; the ability to successfully operate the electric utilities' generation, transmission, and distribution facilities, Southern Power's generation facilities and Southern Company Gas' natural gas distribution and storage facilities and the successful performance of necessary corporate functions; the inherent risks involved in operating and constructing nuclear generating facilities; the inherent risks involved in transporting and storing natural gas; the performance of projects undertaken by the non-utility businesses and the success of efforts to invest in and develop new opportunities; internal restructuring or other restructuring options that may be pursued; potential business strategies, including acquisitions or dispositions of assets or businesses, which cannot be assured to be completed or beneficial to Southern Company or its subsidiaries; the ability of counterparties of Southern Company and its subsidiaries to make payments as and when due and to perform as required; the ability to obtain new short- and long-term contracts with wholesale customers; the direct or indirect effect on the Southern Company system's business resulting from cyber intrusion or physical attack and the threat of cyber and physical attacks; global and U.S. economic conditions, including impacts from recession, inflation, interest rate fluctuations and financial market conditions and the results of financing efforts; access to capital markets and other financing sources; changes in Southern Company's and any of its subsidiaries' credit ratings; the replacement of the London Interbank Offered Rate with an alternative reference rate; 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, political unrest, wars or other similar occurrences; the potential effects of the continued COVID-19 pandemic; 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; impairments of goodwill or long-lived assets; and the effect of accounting pronouncements issued periodically by standard-setting bodies. Southern Company and its subsidiaries expressly disclaim any obligation to update any forward-looking information.