

Environmental, social and governance (ESG) data is of increasing importance to our investors. We continue to evaluate and enhance our reporting in response to investor feedback. Additional quantitative and qualitative information is available in our reports, including the EEI ESG/Sustainability Reporting Template, CDP Climate Disclosure, and other publications that are posted on our website.

Environment

Metric	2022	2021	2020	2019	2018
Energy use and emissions					
Enterprise-wide					
Reduction in greenhouse gas emissions since 2007 (percent) ^[1]	46	47	52	44	34
Scope 1 greenhouse gas emissions (million metric tons CO ₂ e) ^[2]	84.8	82.5	75.1	88.2	102.6
Alabama Power Company	34.2	34.1	28.0	32.0	36.0
Georgia Power Company	22.6	22.5	20.9	27.5	30.4
Mississippi Power Company	8.6	8.3	8.4	8.6	7.8
Southern Power Company	13.4	11.5	12.1	13.4	13.5
Southern Company Gas	1.5	1.5	1.4	1.3	1.4
SEGCO	0.8	0.6	0.8	1.6	2.0
Other	3.9	3.9	3.4	3.8	11.5
Scope 2 greenhouse gas emissions (million metric tons CO ₂ e) ^[3]	0.2	0.2	0.2	0.2	N/A
Scope 3 greenhouse gas emissions (million metric tons CO ₂ e) ^[4]	38.5	34.8	36.6	38.8	39.4
Electric					
Generation greenhouse gas emissions (million metric tons CO ₂ e) ^[5]	83.0	80.8	73.6	86.7	101.2
Generation greenhouse gas emissions intensity (lb. CO ₂ e/net MWh) ^[6]	938	932	886	983	1,080
Generation NO _x emissions intensity (lb./net MWh) ^[6]	0.33	0.32	0.30	0.37	0.46
Generation SO ₂ emissions intensity (lb./net MWh) ^[6]	0.11	0.15	0.11	0.18	0.25
Generation lead emissions (lbs.) ^[7]	620	667	581	792	887

Metric	2022	2021	2020	2019	2018
Electric					
GHG emissions associated with power deliveries by business division (million metric tons CO ₂ e):					
Alabama Power Company ^[8]	32.8	30.3	28.2	33.4	36.5
Georgia Power Company ^[9]	32.4	32.0	30.0	37.4	39.9
Mississippi Power Company ^[10]	6.1	5.9	5.8	6.1	6.5
Gas					
Emissions from fugitive methane (million metric tons CO ₂ e) ^[11]	0.94	0.96	0.91	0.79	0.78
Distribution methane intensity (MtCH ₄ emitted ÷ MtCH ₄ delivered) ^[12]	0.193	0.195	0.181	0.135	0.134
Water management					
Withdrawn (million gallons/day)	2,008	1,828	1,863	2,385	3,282
Consumed (million gallons/day)	196	200	196	208	260
Percentage of facilities in "High" or "Extremely High" baseline water stress ^[13]	0	0	0	0	0
Waste management					
Hazardous waste disposal (thousand lb.) ^[14]	309	299	432	570	502
Coal combustion residual products generated (thousand tons)	2,476	2,605	2,160	3,113	4,251
Percentage of coal combustion residual products sold for beneficial use	93	90	93	81	62
Percentage of ash sold for beneficial use	88	87	89	71	58
Percentage of gypsum sold for beneficial use	100	94	100	94	68

Social

Metric	2022	2021	2020	2019	2018
Workforce					
Total Employees ^[15]	27,700	27,300	27,700	27,739	28,670
Full-time employees (percent)	99.8	99.8	99.8	99.8	99.8
Part-time employees (percent)	0.2	0.2	0.2	0.2	0.2
Women as a percent of workforce	26	25	25	26	25

Metric	2022	2021	2020	2019	2018
Women as a percent of management	25	25	24	24	23
Minorities as a percent of workforce	30	29	28	28	27
Minorities as a percent of management	23	23	22	21	20
Veterans as a percent of workforce	8	8	8	8	8
Women as a percent of new hires	31	29	24	30	24
Minorities as a percent of new hires	45	47	38	39	39
Veterans as a percent of new hires	11	9	N/A	N/A	N/A
Employees covered by agreements with unions as a percent of workforce	31	32	N/A	N/A	N/A
Employee turnover:					
Total turnover as a percent of workforce	8.9	7.7	5.7	6.7	7.3
Voluntary turnover as a percent of workforce	3.9	3.1	1.6	2.2	2.2
Retirement as a percent of workforce	3.5	3.4	2.7	3.3	3.6
Involuntary turnover as a percent of workforce	1.5	1.2	1.5	1.2	1.5
Average employee tenure (years)	15	15	15	15	15
Safety					
Work-related fatalities	0	0	0	0	0
Serious injury incident rate	0.05	0.05	0.10	0.08	0.13
Recordable incident rate	1.32	1.27	1.11	1.37	1.37
Days away, restricted, and transfer (DART) rate	0.97	0.93	0.81	0.78	0.84
Lost-time case rate	0.48	0.46	0.39	0.26	0.39
Percentage of employees that worked without an injury that met OSHA recordable requirements	98.7	98.7	98.9	98.6	98.5
Supply chain					
Total supplier spend (millions) ^{16j}	7,418	7,063	6,543	6,331	5,927
Diverse business supplier spend (millions) ^{16j}	2,067	1,871	1,595	1,585	1,334
Community impact					
Total charitable giving (millions)	118.2	108.5	N/A	N/A	N/A

Metric	2022	2021	2020	2019	2018
Customers					
Number of customers (thousands, year end):					
Electric operations ^[17]	4,437	4,385	4,322	4,270	4,685
Gas distribution operations	4,358	4,337	4,308	4,277	4,248

Governance

Metric	2022	2021	2020	2019	2018
Southern Company Board of Directors^[18]					
Total number of directors	13	13	14	15	15
Number of independent directors	12	12	13	14	14
Number of female directors	3	3	2	2	3
Percent of female directors	23	23	14	13	20
Number of minority directors	3	3	3	4	3
Percent of minority directors	23	23	21	27	20
Number of diverse directors	4	4	4	3	4
Percent of diverse directors	31	31	29	20	27
Board meetings held	7	7	9	8	14

Operations

Electricity generation:

Coal (percent) ^[19]	20	21	17	22	27
Natural gas (percent) ^[19]	50	48	51	50	47
Nuclear (percent) ^[19]	15	16	17	16	15
Renewables/other (percent) ^[19]	15	15	15	12	11
Total (owned nameplate MW, year end)	42,937	43,202	42,548	45,560	45,824
Percent revenue from coal-fired generation ^[20]	11.4	13.4	14	14	N/A
Percent revenue from carbon-free generation ^[21]	8.8	11	N/A	N/A	N/A
Southern Company System Transmission system average interruption duration index (SAIDI) ^[22]	5.5	6.8	8.0	5.0	6.7

Metric	2022	2021	2020	2019	2018
Southern Company System Distribution system average interruption duration index (SAIDI) ^[22]	136.1	120.7	131.8	128.1	115.4
Southern Company System Transmission system average interruption frequency index (SAIFI) ^[22]	0.085	0.095	0.112	0.079	0.102
Southern Company System Distribution system average interruption frequency index (SAIFI) ^[22]	1.155	1.084	1.219	1.168	1.116
Southern Company System Transmission customer average interruption duration index (CAIDI) ^[22]	64.7	71.6	71.4	63.3	65.7
Southern Company System Distribution customer average interruption duration index (CAIDI) ^[22]	117.8	111.3	108.1	109.7	103.4
Percentage of electric load served by smart grid technology	100	100	100	100	100
Total wholesale electricity purchased (MWh)	17,386,146	13,714,832	13,346,736	11,862,093	13,613,088

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.

Occasionally, due to timing of data reports, additional information becomes available after report issuance. In these cases, we strive to update both current and prior data points when appropriate. Southern Company seeks to provide the most recent and accurate data in each of its voluntary sustainability reports. To this end, any new metrics included will be provided for the current reporting period. For broken out data, totals may not sum due to rounding.

[1] In 2022, the Southern Company system's GHG emissions were 46% below its 2007 benchmark level (156.5 million metric tons CO₂e). Emissions increased slightly over 2021 due to increased generation from increased electricity sales. GHG emissions were only up 3% while electricity sales were up by 5.6% over 2021. While GHG emissions reductions may fluctuate around 50 percent over the next few years depending on demand, weather and other factors, the system expects to sustainably achieve a 50% reduction or greater by 2025, if not sooner.

[2] Southern Company system's greenhouse gas emissions are calculated using the equity share approach presented in the WRI/WBCSD GHG Protocol for all of its owned assets. The greenhouse gas emissions included are Scope 1 direct facility emissions that are required to be tracked by U.S. Environmental Protection Agency's (EPA) Greenhouse Gas Reporting Program (GHGRP) and calculated using methods required by the GHGRP. Additional emissions sources for the gas distribution sector are also included consistent with EPA's Greenhouse Gas Inventory and ONE Future. Company owned mobile vehicle emissions, fuel cell emissions, and de minimis emissions (emergency generators, natural gas purchases for comfort heating, landscape equipment, refrigerants, fire suppression equipment, and fugitive methane from hydro reservoirs, coal piles and natural gas transmission pipelines not required to be tracked under GHGRP) are also included in Scope 1. "Other" includes Transmission & Distribution, PowerSecure, Southern Nuclear, and Gulf Power, as well as Southern Company's leveraged leases, company-owned mobile fleet and de minimis emission sources. Gulf Power is included in 2018 data.

[3] Southern Company system's Scope 2 greenhouse gas emissions are calculated using the equity share approach presented in the WRI/WBCSD GHG Protocol Scope 2 Guidance for its owned assets. The data provided here represents market-based calculations. The greenhouse gas emissions included in Scope 2 are emissions from electricity purchases for company use at company-owned locations that are located outside of the Southern Company system's retail electric service territory, and emissions from line losses on Southern Company system's T&D system from power purchased for resale to Southern Company system's customers. The market-based calculations use a combination of supplier-provided emissions factors, where available, Green-e residual mix emission factors, and regional EPA eGRID emission factors.

[4] Southern Company continues to enhance disclosure of Scope 3 emissions and has included additional categories over time. Southern Company system's Scope 3 greenhouse gas emissions for 2018 include fuel-and energy-related activities and use of sold products not included in Scope 1 or 2 greenhouse gas emissions. Southern Company system's Scope 3 greenhouse gas emissions for 2019 include fuel-and energy-related activities, upstream leased assets and use of sold products not included in Scope 1 or 2 greenhouse gas emissions. Southern Company system's Scope 3 greenhouse gas emissions for 2020 include fuel-and energy-related activities, waste generated in operations, business travel, employee commuting, upstream leased assets and use of sold products not included in Scope 1 or 2 greenhouse gas emissions. Southern Company system's Scope 3 greenhouse gas emissions for 2021 and 2022 include purchased goods and services, capital goods, fuel-and energy-related activities, upstream transmission and distribution, waste generated in operations, business travel, employee commuting, upstream leased assets, use of sold products and investments not included in Scope 1 or 2 greenhouse gas emissions.

[5] Emissions from equity-owned electricity generated (includes Sulfur Hexafluoride (SF₆)). Does not include gas sector or purchased power.

[6] Intensities are calculated with emissions from equity-owned electricity generated for sale to retail and wholesale customers. Does not include gas sector, purchased power or leveraged lease facilities.

[7] Emissions from equity-owned electricity generated for sale to retail and wholesale customers. Does not include gas sector, purchased power or leveraged lease facilities. Southern Company reports releases of Toxic Release Inventory (TRI) compounds, including lead, as required by the EPA.

[8] Alabama Power retired 236,880 MWh of renewable energy credits (RECs) on behalf of all retail customers in 2022. These retired RECs were included in the calculation as zero emissions for associated loads. Generation associated with unretired RECs or RECs that were kept by or sold to third parties were considered "null" energy in the calculation, and an EPA eGRID emission factor was applied to this generation. RECs retired on behalf of specific customers, such as for purposes of a green energy program, and associated loads were excluded from this calculation.

- [9] Georgia Power retired 5,141,785 MWh of RECs on behalf of all retail customers in 2022. These retired RECs were included in the calculation as zero emissions for associated loads. Generation associated with unretired RECs or RECs that were kept by or sold to third parties were considered “null” energy in the calculation, and an EPA eGRID emission factor was applied to this generation. RECs retired on behalf of specific customers, such as for purposes of a green energy program, and associated loads were excluded from this calculation.
- [10] Mississippi Power retired 2,148 MWh of RECs on behalf of all retail customers in 2022. These retired RECs were included in the calculation as zero emissions for associated loads. Generation associated with unretired RECs or RECs that were kept by or sold to third parties were considered “null” energy in the calculation, and an EPA eGRID emission factor was applied to this generation. RECs retired on behalf of specific customers, such as for purposes of a green energy program, and associated loads were excluded from this calculation.
- [11] Emissions from gas sector for equity-owned assets, as tracked under the EPA’s Greenhouse Gas Reporting Program (40 CFR 98). Additional emissions sources for the gas distribution sector are also included consistent with the EPA’s Greenhouse Gas Inventory and ONE Future methodologies.
- [12] Distribution methane intensity (MtCH₄ emitted ÷ MtCH₄ delivered) is based on ONE Future methodology for the Distribution sector. Methane Intensity varies year to year based on factors including system and customer growth, variations in throughput due to weather and changes in EPA reporting methodologies. For 2020, EPA adopted a new methodology for calculating methane emissions for certain source categories that is the primary driver of the intensity increase reported for 2020–2021. For all reported years, methane intensity is well below the ONE Future 2025 Distribution sector goal of 0.44%.
- [13] Baseline water stress as classified by the World Resources Institute Water Risk Atlas Tool, Aqueduct.
- [14] Excludes 2018–2021 decommissioning activities surrounding Mississippi Power’s integrated coal gasification combined cycle project in Kemper County, Mississippi.
- [15] Decline from 2018 to 2019 related primarily to the sale of Gulf Power Company (exclusion of divested employees).
- [16] To be comparable to 2020 and 2019, detail for Gulf Power Company and other Florida assets sold in 2019 was excluded in 2018.
- [17] Customer decline from 2018 to 2019 related primarily to the sale of Gulf Power Company.
- [18] Reflects data as of date of annual meeting of stockholders, as disclosed in the applicable proxy statement.
- [19] 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 and landfill gas. With respect to certain renewable generation and associated 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.
- [20] Percentage shown is of total company revenue and is based on allowed return on equity (ROE) for currently operating coal units in retail rate base (including associated environmental controls), coal-related wholesale revenues and coal-related expenses.
- [21] Percentage shown is of total company revenue and is based on allowed return on equity (ROE) for currently operating company-owned units in retail rate base, wholesale revenues, and related expenses. This percentage also includes revenues collected from power purchase agreements (PPAs). Carbon-free resources include both company owned and contracted generating resources including nuclear, hydropower, wind, solar, and battery storage. A portion of the revenues from carbon-free resources includes capacity where the renewable generator or subscribing customers retains ownership of the associated renewable energy credits (RECs), which is specified in each respective PPA. The party that owns the RECs retains the right to use them.
- [22] SAIDI, SAIFI, CAIDI results based on internal Southern Company reporting methodology.