

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	2017	2018	2019	2020
Energy Use and Emissions				
Enterprise-Wide				
Reduction in greenhouse gas emissions since 2007 (percent)[1]	35	34	44	52
Scope 1 greenhouse gas emissions (million metric tons CO2e)[2]	101.2	102.6	88.2	75.1
Scope 2 greenhouse gas emissions (million metric tons CO2e) ^[3]	N/A	N/A	0.2	0.2
Scope 3 greenhouse gas emissions (million metric tons CO2e) ^[4]	37.0	39.4	38.8	36.6
Electric				
Generation greenhouse gas emissions (million metric tons CO2e) ^[5]	96.6	97.2	83.1	70.4
Generation greenhouse gas emissions intensity (lb. CO2e/net MWh) ^[6]	1,124	1,080	983	886
Generation NOx emissions intensity (lb./net MWh) ^[6]	0.45	0.46	0.37	0.30
Generation SO2 emissions intensity (lb./net MWh) ^[6]	0.23	0.25	0.18	0.11
Generation lead emissions (lbs.) ^[7]	1,034	842	763	461
GHG emissions associated with power deliveries by business division (million in	metric tons CO2e	e):		
Alabama Power Company ^[8]	36.7	36.5	33.4	28.2
Georgia Power Company ^[9]	38.9	39.9	37.4	30.0
Mississippi Power Company ^[10]	6.5	6.5	6.1	6.4
Gas				
Emissions from fugitive methane (million metric tons CO2e)[11]	N/A	0.78	0.79	0.91
Distribution methane intensity (MtCH ₄ emitted ÷ MtCH ₄ delivered) ^[12]	0.134	0.134	0.135	0.181

Metric	2017	2018	2019	2020
Water Management				
Withdrawn (million gallons/day)	2,962	3,282	2,385	1,862
Consumed (million gallons/day)	226	260	208	196
Percentage of facilities in "High" or "Extremely High" baseline water stress[13]	0	0	0	0
Waste Management				
Hazardous waste disposal (thousand lb.)[14]	793	502	570	432
Percentage of ash sold for beneficial use	62	58	87	89
Percentage of gypsum sold for beneficial use ^[15]	62	68	110	100
Percentage of coal combustion residual products sold for beneficial use ^[16]	62	62	97	93
Coal combustion residual products (thousand tons)	4,203	4,251	3,126	2,160

Social

Metric	2017	2018	2019	2020
Workforce				
Total Employees ^[17]	28,606	28,670	27,739	27,700
Full-time employees (percent)	99.8	99.8	99.8	99.8
Part-time employees (percent)	0.2	0.2	0.2	0.2
Women as a percent of workforce	26	25	26	25
Women as a percent of management	23	23	24	24
Minorities as a percent of workforce	27	27	28	28
Minorities as a percent of management	19	20	21	22
Veterans as a percent of workforce	N/A	8	8	8
Minorities as a percent of new external hires	37	39	39	38
Women as a percent of new external hires	29	24	30	24
Percentage of employees by business:				
State regulated electric companies (percent)	51	51	51	50
Southern Company Gas (percent)	15	15	16	16

Metric	2017	2018	2019	2020
Southern Nuclear Operating Company (percent)	13	13	14	14
Southern Company Services (percent)	13	13	13	14
Other (percent)	7	8	5	5
Employee turnover:				
Total turnover as a percent of workforce	8.0	7.3	6.7	5.7
Voluntary turnover as a percent of workforce	2.0	2.2	2.2	1.6
Involuntary turnover as a percent of workforce	2.0	1.5	1.2	1.5
Retirement as a percent of workforce	4.0	3.6	3.3	2.7
Average employee tenure (years)	16	15	15	15
Employees expected to retire in next 5 years	3,394	3,934	2,975	3,300
Employees expected to retire in next 10 years	7,899	8,260	6,247	6,400
Safety				
Percentage of employees that worked without an injury that met OSHA recordable requirements	99.0	98.5	98.6	98.9
Serious Injury Incident Rate	N/A	0.13	0.08	0.10
Recordable Incidence Rate	1.08	1.37	1.37	1.11
Days Away, Restricted, and Transfer (DART) Rate	0.67	0.84	0.78	0.81
Lost-time Case Rate	0.26	0.39	0.26	0.39
Work-related Fatalities	1	0	0	0
Supply Chain				
Gas				
Total supplier spend (millions)[18]	1,632	1,572	1,701	1,799
Small business supplier spend (millions) ^[18]	121	98	52	126
Diverse business supplier spend (millions) ^[18]	474	557	691	714
Electric				
Total supplier spend (millions) ^[18]	4,022	4,355	4,630	4,744
Small business supplier spend (millions)[18]	429	474	535	534

Metric	2017	2018	2019	2020
Diverse business supplier spend (millions) ^[18]	680	777	894	881
Customers				
Number of customers (thousands, year end):				
Electric operations[19]	4,640	4,685	4,270	4,322
Gas distribution operations	4,623	4,248	4,277	4,308

Governance

Metric	2017	2018	2019	2020
Board of Directors				
Total number of directors ^[20]	15	15	15	14
Number of independent directors ^[20]	14	14	14	13
Number of female directors ^[20]	3	3	2	2
Number of minority directors ^[20]	3	3	4	3
Operations				
Electricity generation:				
Coal (percent) ^[21]	28	27	22	17
Natural gas (percent) ^[21]	47	47	50	51
Nuclear (percent) ^[21]	15	15	16	17
Renewables/other (percent) ^[21]	10	11	12	15
Total (owned nameplate MW, year end)	46,937	45,824	45,560	42,548
Percent revenue from coal ^[22]	N/A	N/A	14	14
Transmission system average interruption duration index (SAIDI)				
Alabama Power Company	5.0	8.6	5.1	6.2
Georgia Power Company	8.2	6.5	5.4	9.3
Mississippi Power Company	3.2	4.7	1.5	3.4
Southern Company System	6.9	6.7	5.0	8.0

Metric	2017	2018	2019	2020
Distribution system average interruption duration index (SAIDI)				
Alabama Power Company	112.6	113.2	127.1	120.4
Georgia Power Company	117.4	124.3	133.7	143.0
Mississippi Power Company	64.2	95.3	60.5	67.2
Southern Company System	112.0	115.4	128.1	131.8
Transmission system average interruption frequency index (SAIFI)				
Alabama Power Company	0.101	0.109	0.100	0.109
Georgia Power Company	0.116	0.106	0.078	0.122
Mississippi Power Company	0.053	0.085	0.010	0.033
Southern Company System	0.106	0.102	0.079	0.112
Distribution system average interruption frequency index (SAIFI)				
Alabama Power Company	0.993	1.045	1.088	1.030
Georgia Power Company	1.141	1.206	1.239	1.363
Mississippi Power Company	0.790	0.971	0.821	0.736
Southern Company System	1.060	1.116	1.168	1.219
Transmission customer average interruption duration index (CAIDI)				
Alabama Power Company	49.5	78.9	51.0	56.9
Georgia Power Company	70.7	61.3	69.2	76.2
Mississippi Power Company	60.4	55.3	150.0	103.0
Southern Company System	65.1	65.7	63.3	71.4
Distribution customer average interruption duration index (CAIDI)				
Alabama Power Company	113.4	108.3	116.8	116.9
Georgia Power Company	102.9	103.1	107.9	104.9
Mississippi Power Company	81.3	98.1	73.7	91.3
Southern Company System	105.7	103.4	109.7	108.1
Total wholesale electricity purchased (MWh)	13,649,411	13,613,088	11,862,093	13,346,736

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.

¹¹The Southern Company system achieved a GHG emission reduction of 52% in 2020 as compared to our 2007 baseline. In 2020, the combination of the COVID-19 pandemic and relatively mild weather significantly reduced demand. GHG emissions reductions may fluctuate around 50 percent for 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 wholly owned and its ownership percentage of co-owned facilities. 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; 2019 non-GHGRP data was used as a proxy for 2020 non-GHGRP data where 2020 data was not yet available. Company owned mobile vehicle emissions, coal pile fugitive methane emissions, and fuel cell emissions are also included in Scope 1.

[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 wholly owned and its ownership percentage of co-owned facilities. 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, and regional 2019 EPA eGRID emission factors.

[4] Southern Company system's Scope 3 greenhouse gas emissions for 2017 and 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.

[5] Emissions from equity-owned electricity generated for sale to retail and wholesale customers (includes Sulfur Hexaflouride (SF6)). Does not include gas sector, purchased power or leveraged lease facilities.

[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 245,819 MWh of renewable energy credits (RECs) on behalf of all retail customers in 2020. 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 3,320,931 MWh of RECs on behalf of all retail customers in 2020. 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] MPC retired 14,855 MWh of RECs on behalf of all retail customers in 2020. 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. 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 2018–2020 decommissioning activities surrounding Mississippi Power's integrated coal gasification combined cycle project in Kemper County, Mississippi.

[15] When gypsum demand exceeds generation, needed gypsum is excavated from prior years' surplus generation.

[16] The increase starting 2019 in coal combustion residual diversion is attributed to increased available coal combustion residual from ash pond closure projects.

[17] Decline from 2018 to 2019 related primarily to the sale of Gulf Power Company (exclusion of divested employees).

[18] To be comparable to 2020 and 2019, detail for Gulf Power Company and other Florida assets sold in 2019 was excluded in 2017 and 2018.

[19] Customer decline from 2018 to 2019 related primarily to the sale of Gulf Power Company.

[20] Reflects data as of date of annual meeting of stockholders, as disclosed in the applicable proxy statement.

[27] 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 cateogry 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.

[22] 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.