

Southern Company Emissions Reduction Progress and Reporting

Southern Company¹ is committed² to reducing greenhouse gas (GHG) emissions to provide customers and communities a clean energy future. Annually, we report through various agencies and publications detailed information about the Southern Company system's emissions profile. With our 2022 CDP Climate Response, Southern Company now reports all relevant sources of GHG emissions.

Our Net Zero Goal

Our goal is to reach net zero GHG emissions by 2050. We have established an interim goal of a 50% reduction in emissions by 2030 from the 2007 baseline. These goals are enterprise-wide, encompassing our equity-share Scope 1 emissions from all our electricity and natural gas operations.



Southern Company has reduced GHG emissions by 46% since 2007.

Emissions Reduction Progress

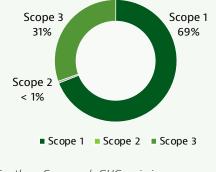
Based on 2022 numbers, GHG emissions increased slightly over 2021 due to increased generation from higher electricity sales. GHG emissions were only up by 3%, while electricity sales were up by 5.6% over 2021. We expect to sustainably achieve 50% GHG emissions reduction relative to our 2007 benchmark no later than 2025.

In 2022, our Scope 1 GHG emissions total is estimated at 85 million metric tons of CO_2e compared to 82 million metric tons of CO_2e in 2021.

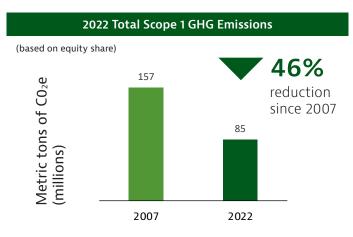
Emissions Profile

In 2021, Scope 1 emissions comprised 70% of gross global emissions, followed by Scope 3 at 30% and Scope 2 at <1%.





Southern Company's GHG emissions are calculated using the equity share approach presented in the WRI/WBCSD GHG Protocol for all its owned facilities.



*In 2022, we experienced a slight decrease from our 47% reduction for 2021 due to increased generation associated with higher electricity sales.

Key to Southern Company's net zero transition are:

- ▶ Reduced reliance on uneconomic coal-fired generating assets
- ► Thoughtful use of natural gas
- ► Further growth in our portfolio of clean energy resources
- Enhanced energy efficiency initiatives
- Negative carbon solutions
- Continued investment in R&D of clean energy technologies



Commitment to Emissions Reporting

Southern Company reports all relevant sources of Scope 1, Scope 2, and Scope 3 emissions in its annual <u>CDP Climate</u> <u>Change Disclosure</u>. We also obtained limited assurance from Deloitte and Touche LLP for 2022, 2021 and 2020 Scope 1 and 2 emissions, as well as for the 2007 Scope 1 baseline.

Scope 1

Scope 1 includes direct GHG emissions from sources that are owned or controlled by the reporting company. For example, emissions from combustion in owned or controlled boilers, furnaces, or vehicles.³

Scope 2

Scope 2 includes GHG emissions from the generation of purchased electricity consumed by the reporting company. Purchased electricity is electricity to be consumed that is purchased or otherwise brought into the organizational boundary of the company.³

Scope 3

Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.⁴

In 2022, for the 2021 reporting year, we expanded reporting to all relevant Scope 3 categories, where new sources are shown below in italics.

- Purchased goods and services and Capital goods: emissions associated with Southern Company's supply chain purchases.
- Fuel-and-energy-related activities: emissions from purchased electricity for resale and upstream emissions from the extraction, production, and transportation of purchased fuel (coal, *natural gas, fuel oil, and nuclear fuel*).
- Upstream transportation and distribution: emissions associated with transporting purchased goods from supplier to the Company.
- Waste generated in operations: emissions from mixed solid waste, paper, metals, and recyclables, as well as spent nuclear fuel.

- Business travel: emissions associated with air, hotel, and rental car travel.
- Employee commuting: emissions associated with travel to work in employee-owned vehicles.
- Upstream leased assets: emissions from fuel combustion in leased vehicles and aircraft and electricity purchased for leased assets outside of the Southern Company territory.
- Use of sold products: emissions from combustion of natural gas sold directly to end users.
- Investments: emissions from the Company's investments with Energy Impact Partners.

For 2021, Category 11: Use of sold products (53%) and Category 3: Fuel-and-energy-related activities (40%) contributed the most to the Scope 3 emissions total.



Scope 3 Emissions Perspectives

Southern Company is committed to reducing GHG emissions across the value chain to achieve a net zero future, consistent with our core principles of providing clean, safe, reliable, and affordable energy to customers and communities, and we are already taking steps to reduce Scope 3 emissions.

- ► We have a longstanding commitment to providing climate-related disclosure, including GHG reduction targets, measurement, and reporting, which provide transparency into our strategy and performance.
- Setting targets for Scope 3 emissions would be premature given concerns about a lack of standardization and accuracy within existing measurement methodologies and protocols for reporting Scope 3 emissions and related Scope 3 mitigation solutions.
- We believe our resources are better spent supporting efforts to standardize methane emissions measurement, engaging in efforts to standardize reporting of Scope 3 emissions, including related mitigation approaches, and taking tangible action to reduce our actual Scope 3 emissions.

For additional information, see page 112 of our 2023 Proxy Statement.

Air Quality

Southern Company has actively reduced air emissions through the installation of emission controls and fuel switching technologies, resulting in significant reductions for NO_x, SO₂, and mercury.

From 1990-2021, **we have reduced NO_x, SO₂ and mercury emissions** from 2005 levels

NO_x emissions $\sqrt{92\%}$

SO₂ emissions $\mathbf{7}$ 99%

Mercury emissions

⊳97%

Footnotes

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 Implementation and action toward net zero (September 2020)

³ World Resources Institute (WRI) Sustainability Dashboard Methodology

⁴ Greenhouse Gas Protocol Scope 3 Emissions FAQ