



Environmental Justice Summary for Southern Company's Largest Power Generating Facilities



Southern Company¹ is committed to the customers and communities we serve. We are dedicated to providing clean, safe, reliable and affordable energy, and conducting our business in ways that protect the environment, our neighbors and our communities, as embodied in our [Environmental Principles](#). Environmental justice considerations are central to these commitments.

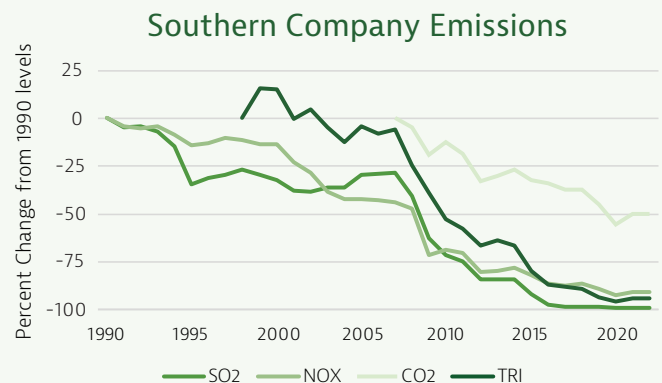


We believe the fair treatment and involvement of our neighbors and customers, including minority and low-income communities, is essential to support sustainable communities and minimize adverse impacts. We believe the communities we serve should be better off because of our work – a goal bigger than our bottom line.



Southern Company consistently evaluates the use of publicly available tools, such as EJSscreen, Power Plants and Neighboring Communities, Climate and Economic Justice Screening Tool and other tools, to better understand potential impacts and demographic makeup of communities near our facilities. Southern Company considers stakeholder concerns and seeks to build and maintain strong community relationships in all our work.

Southern Company is committed to reducing our greenhouse gas (GHG) emissions, including our goals to reduce GHG emissions 50% by 2030 from 2007 levels and to achieve net zero emissions by 2050. Through 2022, we have reduced Scope 1 GHG emissions by 46% as compared to 2007. In addition, Southern Company has actively reduced emissions through the installation of emission controls, fuel switching, reduction of our coal fleet and transitioning to low carbon and carbon-free energy sources. Since 1990, we have reduced nitrogen oxides (NO_x) emissions by 91% and sulfur dioxide (SO₂) emissions by 99%. Toxics Release Inventory (TRI) releases have been reduced by 94% since 1998.



Reflects reductions in data as reported to the U.S. Environmental Protection Agency (EPA) for reportable facilities. Internal data shown for years in which data is not publicly available (prior to 1995).

¹In this document, 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 and greenhouse gas emissions, refer to those operations conducted through its subsidiaries.



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Report and Information Overview

In response to stakeholder interest and representative of our commitment to enhanced transparency, this document summarizes relevant publicly available environmental justice and emissions data for Alabama Power Company's Plant Miller, Georgia Power Company's Plant Bowen and Georgia Power Company's Plant Vogtle. These facilities represent the two largest coal plants and the largest nuclear plant in Southern Company's electric generating fleet. Plant Vogtle does not combust fossil fuels for the generation of electricity and, therefore, several of the tools and regulatory programs do not apply, as indicated in the table below. Data for certain screening tools is dynamic, and we provide direct links to the relevant information for each facility. Other data is static, in which case we provide a downloadable file as of November 10, 2023.



Screening Tool or Compliance Program ²	Miller	Bowen	Vogtle
Environmental Justice Screening and Mapping Tool (EJSCREEN)	✓	✓	✓
Climate and Economic Justice Screening Tool (CEJST)	✓	✓	✓
Power Plants and Neighboring Communities (PPNC)	✓	✓	NA
Greenhouse Gas Reporting Program (GHGRP)	✓	✓	NA
Clean Air Markets Program Data (CAMPD)	✓	✓	NA
Toxics Release Inventory (TRI)	✓	✓	✓
National Pollutant Discharge Elimination System (NPDES)	✓	✓	✓
Coal Combustion Residuals (CCR) Compliance Data	✓	✓	NA

²A summary description of each screening tool and compliance program is available in the appendix.



James H. Miller, Jr. Electric Generating Facility (Plant Miller):

- **Location:** 4250 Porter Rd, Quinton, AL, 35130, USA
- **Total Nameplate Capacity:** 2,640 MW
- **Number of Units:** 4
- **Fuel Type:** Coal
- **Commercial Operation:** Unit 1 – 1978, Unit 2 – 1985, Unit 3 – 1989, Unit 4 - 1991



Environmental Justice Screening Tools

Environmental Justice Screening and Mapping Tool (EJSCREEN) report (PDF) as of 11/10/2023:

- ▶ [Plant Miller - EJScreen Community Report 11.10.2023](#)

Climate and Economic Justice Screening Tool (CEJST) Data Summaries as of 11/10/2023:

- ▶ [Plant Miller - CEJST Graphic Tract 104](#)
- ▶ [Plant Miller - CEJST Table Tract 104](#)
- ▶ [Plant Miller - CEJST Graphic Tract 302](#)
- ▶ [Plant Miller - CEJST Table Tract 302](#)

CEJST Categories of Burden for Plant Miller

Census Tract	Categories of Burden	Identified as Disadvantaged?
01073012104	Climate Change	No
	Energy	No
	Health	No
	Housing	No
	Legacy pollution	No
	Transportation	No
	Workforce Development	No
01073012302	Climate Change	No
	Energy	No
	Health	No
	Housing	No
	Legacy pollution	No
	Transportation	No
	Workforce Development	Yes (Unemployment)

Plant Miller is located on 2 census tracts: 01073012104 and 01073012302. CEJST data for each census tract can be accessed via the following link: [Explore the map - Climate & Economic Justice Screening Tool \(geoplatform.gov\)](#)



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Plant Miller's PPNC Report

Plant ID	6002
Data Year	2021
Plant nameplate capacity (MW)	2,822
Plant Utilization	0.83
Fuels	Reported Primary fuel: Coal Primary combustion fuel: Coal
Total population within 3 miles (ACS2018)	1,655
Demographic Index	16% (24%ile)
Low-Income	29% (52%ile)
People of Color	4% (11%ile)
Less than High School Education	13% (67%ile)
Linguistically Isolated	0% (0%ile)
Population under Age 5	5% (53%ile)
Population over Age 64	31% (90%ile)
2021 Emissions (tons)	22,965,315 CO ₂ 7,372.3 NO _x 1,259.1 SO ₂ 127.5 PM2.5
2022 CAMPD Emissions (tons)	23,814,854 CO ₂ 7,538.1 NO _x 1,191.7 SO ₂
2021 Emission rates (lb/MWh)	2,237 CO ₂ 0.7 NO _x 0.1 SO ₂ 0 PM2.5
2021 Net generation (MWh)	Total generation: 20,528,965 Generation from combustion: 20,528,965

Power Plants and Neighboring Communities (PPNC) Data as of 11/10/2023:

► [Plant Miller - PPNC CEJST](#)



Environmental Justice Summary for Southern Company's Largest Power Generating Facilities

Plant Miller Cont.

Greenhouse Gas Reporting Program (GHGRP) Data and Reports (2010 – present):

▶ [GHG Facility Details \(epa.gov\)](https://www.epa.gov/ghgrp/ghg-facility-details)

National Pollutant Discharge Elimination System (NPDES) Discharge Monitoring reports (2018 – 2022):

▶ [Plant Miller - DMRs 2018 2022](#)

Clean Air Markets Program Data (CAMPD) Emissions (1995 – 2022):

▶ [Plant Miller - CAMPD 1995-2022 11.10.2023](#)

Coal Combustion Residuals (CCR) Compliance Data:

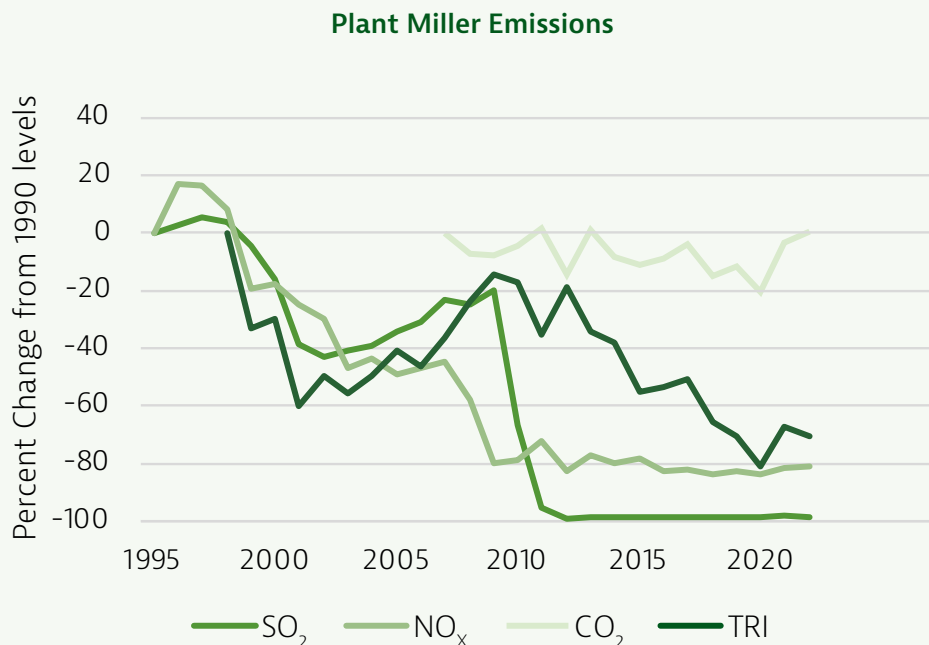
▶ [Compliance Data & Information | Alabama Power](#)

Toxics Release Inventory (TRI) (1998 – present):

▶ [TRI Search | US EPA](#)

Publicly Available Emissions Data

Summary of emissions and TRI reductions for Plant Miller



Note: Reflects reductions in data as reported to the EPA for reportable facilities. NO_x, SO₂ from CAMPD 1995-present and TRI from 1998-present, reflecting all years where consecutive annual emissions are available. CO₂ emissions from CAMPD 2007-present reflect the GHG baseline year for Southern Company.



Bowen Steam Plant (Plant Bowen):

- **Location:** 317 Covered Bridge Rd, Cartersville, GA, 30120, USA
- **Total Nameplate Capacity:** 3,160 MW
- **Number of Units:** 4
- **Fuel Type:** Coal
- **Commercial Operation:** Unit 1 – 1971, Unit 2 – 1972, Unit 3 – 1974, Unit 4 - 1975



Environmental Justice Screening Tools

Environmental Justice Screening and Mapping Tool (EJSCREEN) report (PDF) as of 11/10/2023:

- ▶ [Plant Bowen - EJScreen Community Report 11.10.2023](#)

Climate and Economic Justice Screening Tool (CEJST) Data Summaries as of 11/10/2023:

- ▶ [Plant Bowen - CEJST Graphic](#)
- ▶ [Plant Bowen - CEJST Table](#)

CEJST Categories of Burden for Plant Bowen

Census Tract	Categories of Burden	Identified as Disadvantaged?
13015961000	Climate Change	No
	Energy	No
	Health	No
	Housing	No
	Legacy pollution	No
	Transportation	No
	Workforce Development	No

Plant Bowen is located on census tract 13015961000.

CEJST data for each census tract can be accessed via the following link:

[Explore the map - Climate & Economic Justice Screening Tool \(geoplatform.gov\)](#)



Environmental Justice Summary for Southern Company's Largest Power Generating Facilities

Plant Bowen's PPNC Report

Plant ID	703
Data Year	2021
Plant nameplate capacity (MW)	3,499
Plant Utilization	0.308
Fuels	Reported Primary fuel: Coal Primary combustion fuel: Coal
Total population within 3 miles (ACS2018)	7,194
Demographic Index	23% (39%ile)
Low-Income	30% (55%ile)
People of Color	16% (33%ile)
Less than High School Education	13% (67%ile)
Linguistically Isolated	0% (0%ile)
Population under Age 5	5% (49%ile)
Population over Age 64	10% (27%ile)
2021 Emissions (tons)	10,376,634 CO ₂ 6,248.3 NO _x 6,668.8 SO ₂ 256.9 PM2.5
2022 CAMPD Emissions (tons)	9,260,206 CO ₂ 5,276.6 NO _x 5,508.3 SO ₂
2021 Emission rates (lb/MWh)	2,196 CO ₂ 1.3 NO _x 1.4 SO ₂ 0.1 PM2.5
2021 Net generation (MWh)	Total generation: 9,452,106 Generation from combustion: 9,452,106

Power Plants and Neighboring Communities (PPNC)

Data as of 11/10/2023:

► [Plant Bowen - PPNC CEJST](#)



Plant Bowen Cont.

Greenhouse Gas Reporting Program (GHGRP) Data and Reports (2010 – present):

▶ [GHG Facility Details \(epa.gov\)](#)

National Pollutant Discharge Elimination System (NPDES) Operation Monitoring reports (2018 – 2022):

▶ [GPC Plant Bowen OMRS 2018 2022](#)

Clean Air Markets Program Data (CAMPD) Emissions (1995 – 2022):

▶ [Plant Bowen - CAMPD 1995-2022 11.10.2023](#)

Coal Combustion Residuals (CCR) Compliance Data:

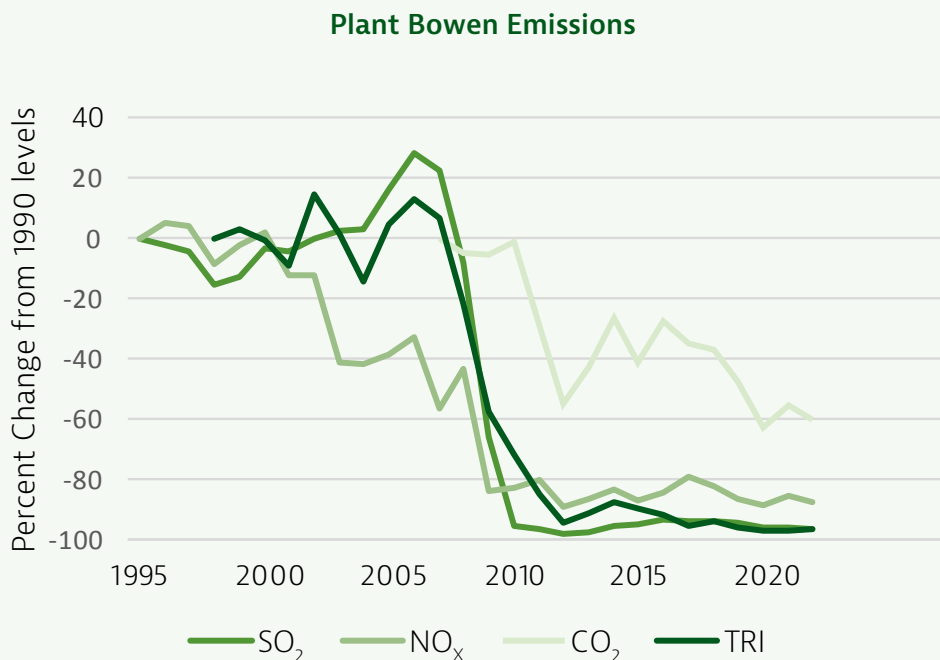
▶ [Compliance Data & Information | Georgia Power](#)

Toxics Release Inventory (TRI) (1998 – present):

▶ [TRI Search | US EPA](#)

Publicly Available Emissions Data

Summary of emissions and TRI reductions for Plant Bowen



Note: NO_x, SO₂ from CAMPD 1995-present and TRI 1998-present, reflecting all years where consecutive annual emissions are available. CO₂ emissions from CAMPD 2007-present reflect the GHG baseline year for Southern Company.



Alvin W. Vogtle Electric Generating Plant (Plant Vogtle):

- **Location:** 7825 River Rd, Waynesboro, GA 30830, USA
- **Total Nameplate Capacity:** 3,540 MW
- **Number of Units:** 3
- **Fuel Type:** Nuclear
- **Commercial Operation:** Unit 1 – 1987, Unit 2 – 1989, Unit 3 – 2023



Environmental Justice Screening Tools

Environmental Justice Screening and Mapping Tool (EJSCREEN) report (PDF) as of 11/10/2023:

- ▶ [Plant Vogtle - EJScreen Community Report 11.10.2023](#)

Climate and Economic Justice Screening Tool (CEJST) Data Summaries as of 11/10/2023:

- ▶ [Plant Vogtle - CEJST Graphic](#)
- ▶ [Plant Vogtle - CEJST Table](#)

CEJST Categories of Burden for Plant Vogtle

Census Tract	Categories of Burden	Identified as Disadvantaged?
13033950100	Climate Change	No
	Energy	No
	Health	No
	Housing	No
	Legacy pollution	No
	Transportation	No
	Workforce Development	No

Plant Vogtle is located on census tract 13033950100.

CEJST data for each census tract can be accessed via the following link:

[Explore the map - Climate & Economic Justice Screening Tool \(geoplatform.gov\)](#)

Power Plants and Neighboring Communities (PPNC) Data:

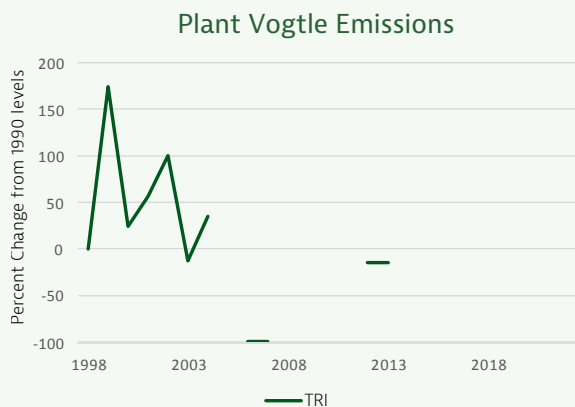
- ▶ Not applicable. Plant Vogtle is not included in PPNC because it does not burn fossil fuels.



Environmental Justice Summary for Southern Company's Largest Power Generating Facilities

Publicly Available Emissions Data

Summary of emissions and TRI reductions for Plant Vogtle



Note: Due to EPA reporting requirements, TRI reports for Plant Vogtle and Plant Wilson are combined and reported together as a single facility; however, releases shown here reflect only Plant Vogtle. Absence of data reflects years where Plant Vogtle did not have any reportable TRI releases.

Greenhouse Gas Reporting Program (GHGRP) Data and Reports

▶ Not applicable

Clean Air Markets Program Data (CAMPD) Emissions:

▶ Not applicable

Toxics Release Inventory (TRI) (1998 – present):

▶ [TRI Search | US EPA](#)

National Pollutant Discharge Elimination System (NPDES) Operation Monitoring Reports (2018 – present):

▶ [Vogtle 1-2 OMRS 2018 2022](#)

▶ [Vogtle 3-4 OMRS 2018 2022](#)

Note: OMRs are provided for 2018-2022 corresponding to all months with outfall discharge. Some months have been omitted for Vogtle 3-4 because there was no discharge.

Coal Combustion Residuals (CCR) Compliance Data:

▶ Not applicable





Appendix:

Environmental Justice Screening Tools

Environmental Justice Screening and Mapping Tool (EJSCREEN):

EPA's EJScreen is an environmental justice³ mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic socioeconomic indicators. EJScreen users choose a geographic area; the tool then provides demographic, socioeconomic and environmental information for that area. All of the EJScreen indicators are publicly-available data. EJScreen simply provides a way to display this information and includes a method for combining environmental and demographic indicators into EJ indexes.

Climate and Economic Justice Screening Tool (CEJST):

The Council on Environmental Quality's (CEQ) CEJST tool has an interactive map and uses datasets that are indicators of burdens in eight categories: climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, and workforce development. The tool uses this information to identify communities that are experiencing these burdens. These are the communities that are disadvantaged because they are overburdened and underserved. Federal agencies will use the tool to help identify disadvantaged communities⁴ that will benefit from programs included in the [Justice40 Initiative](#). The Justice40 Initiative seeks to deliver 40% of the overall benefits of investments in climate, clean energy, and related areas to disadvantaged communities.

Power Plants and Neighboring Communities (PPNC):

EPA's PPNC mapping tool displays fossil fuel power plant locations; power plant carbon dioxide (CO₂), NO_x, and SO₂ emissions; community demographic indicators; and select tribal lands. Each of these different datasets is displayed as a different map layer.

Publicly Available Emissions Data

Greenhouse Gas Reporting Program (GHGRP):

EPA's GHGRP requires reporting of GHG data and other relevant information from large GHG emission sources, fuel and industrial gas suppliers, and CO₂ injection sites in the United States.

Clean Air Markets Program Data (CAMPD):

EPA's CAMPD web application is the data publication warehouse for allowance, compliance, emissions and facility/unit attributes data collected under EPA's federal emissions trading programs: Cross-State Air Pollution Rule (CSAPR), CSAPR Update, Revised CSAPR Update, Acid Rain Program (ARP), and other retired programs.

Toxics Release Inventory (TRI):

EPA's TRI program tracks the management of certain chemicals that may pose a threat to human health and the environment. U.S. facilities in different industry sectors must report annually how much of each TRI regulated chemical is released to the environment and/or managed through recycling, energy recovery and treatment. (A "release" of a chemical means that it is emitted to the air, water, or placed in some type of land disposal.) The information submitted by facilities is compiled in the Toxics Release Inventory. TRI helps support informed decision-making by companies, government agencies, non-governmental organizations and the public.



Appendix:

Publicly Available Emissions Data

National Pollutant Discharge Elimination System (NPDES):

The Clean Water Act's NPDES permit program regulates point sources that discharge pollutants to waters of the United States. In essence, an NPDES permit translates general requirements of the Clean Water Act into specific provisions tailored to the operations of each point source discharging pollutants. The EPA authorizes many state governments to administer NPDES permit programs to perform certain permitting, administrative, and enforcement aspects of the program.

Coal Combustion Residuals (CCR) Compliance Data:

On April 17, 2015, the U.S. Environmental Protection Agency released a final rule for management and disposal of Coal Combustion Residuals (CCRs) from electric utilities. The CCR rule establishes a comprehensive set of requirements for the management and disposal of CCR material generated from combustion of coal in electric power generation, commonly known as coal ash. Additionally, the CCR rule sets out recordkeeping and reporting requirements as well as the requirement for each facility to establish and post specific compliance information to a publicly accessible website.



³Environmental Justice is defined by the [EPA](#) as the fair treatment of people of all races, cultures, incomes, and educational levels with respect to the development and enforcement of environmental laws, regulations, and policies. Fair treatment implies that no population should be forced to shoulder a disproportionate share of exposure to the negative effects of pollution due to lack of political or economic strength.

⁴The [CEQ](#) considers a community disadvantaged if: they are located in a census tract that meets the thresholds for at least one of the tool's categories of burden, if they are on land within the boundaries of Federally Recognized Tribes, or any Census tracts that are completely surrounded by disadvantaged communities are also considered disadvantaged if they meet an adjusted low income threshold (\geq 50th percentile).