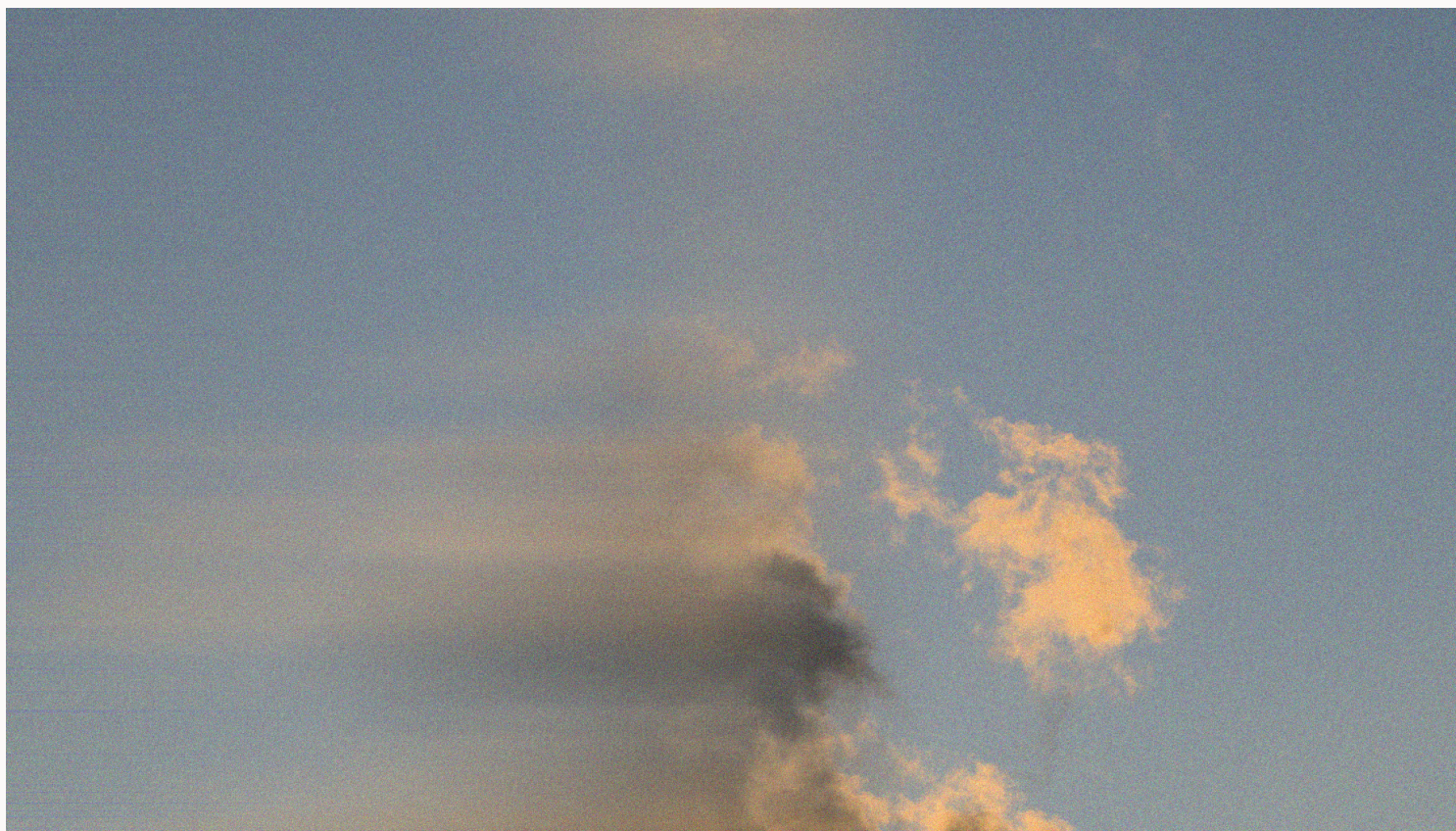


Trends and Accountability in EPA Greenhouse Gas Reporting Program Data



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July 21, 2026

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Executive Summary

- In this report, we illustrate how the Greenhouse Gas Reporting Program (GHGRP) can be used to track trends in greenhouse gas emissions, including where emissions occur and which parent companies are responsible.
 - Such analyses can inform initiatives that hold state and corporate actors accountable for their role in emissions and, in turn, the climate crisis.
- In 2023, nationally, reported greenhouse gas emissions from direct emitters fell to 2,580 million metric tons of carbon dioxide equivalents (MMT CO₂e), while reported greenhouse gas emissions from suppliers climbed to 4,650 MMT CO₂e.
 - This is a record low for direct emitters and a record high for suppliers.
- Some places concentrate larger volumes of emissions than others, and when facility emissions are aggregated by state and congressional districts, not all areas follow national trends. For example:
 - Two congressional districts in Texas alone accounted for over 18% of the nationally reported supplier emissions in 2023.
 - Reported emissions in Texas have been on the rise annually for *both* direct emitters and suppliers.
- After aggregating greenhouse gas emissions from facilities to their respective parent company owners, emissions appear heavily skewed, suggesting an outsized impact by a short list of major corporations.
 - Only 10 owners of direct emitting facilities accounted for 23.3% of all reported emissions in 2023.
 - Only 10 owners of supplier facilities accounted for 53.2% of all reported emissions in 2023.
- We conclude by offering several suggestions for improving the GHGRP.

Table of Contents

Executive Summary.....	1
Table of Contents.....	2
Glossary.....	3
Introduction.....	4
GHGRP Background.....	5
Data, Methods, and Measures.....	5
Methodological notes on trend analyses.....	6
Methodological notes on parent company analyses.....	6
How Are Greenhouse Gas Emissions Trending?.....	8
Where Are Greenhouse Gases Emitted?.....	10
How Can Supplier Emissions Reveal Where Greenhouse Gas Intensive Products Are Made?..	12
Which Corporations Are Linked to Greenhouse Gas Emitters and Suppliers?.....	16
Discussion.....	23
Suggestions for Improvement to the GHGRP.....	25
1) More complete and consistent data quality.....	25
2) Integration and analysis with EPA, CDC, and U.S. Census Bureau datasets.....	25
3) Include data on state-corporate connections, especially the political activities of parent corporations.....	26
Conclusion.....	27

Glossary

- EPA = Environmental Protection Agency
- GHG = Greenhouse Gas or Gasses
- GHGRP/GHGP = Greenhouse Gas Reporting Program
- GWP = Global Warming Potential
- EJScreen = Environmental Justice Screening and Mapping Tool (Version 2.3)
- CO₂ = Carbon Dioxide
- N₂O = Nitrous Oxide
- CO₂e = [Carbon Dioxide equivalents](#)
- LDC = Local Distribution Companies
- SF₆ = Sulfur Hexafluoride
- MMT = Million Metric Tons

Introduction

The EPA's Greenhouse Gas Reporting Program (GHGRP) was established in 2009 to collect and communicate greenhouse gas emissions data from industrial facilities nationwide. On September 12, 2025, EPA Administrator Lee Zeldin [announced](#) the EPA would seek to end the Program. The EPA's proposed rule, "[Reconsideration of the Greenhouse Gas Reporting Program](#)," would eliminate reporting requirements for nearly all major greenhouse gas emitting facilities. According to Zeldin, the GHGRP "[is nothing more than bureaucratic red tape that does nothing to improve air quality](#)." As of the publication of this report, this rule and the rollback of the GHGRP has not been finalized. In an effort to understand what would be lost should the rule be finalized, this report analyzes data from the GHGRP. Ending the GHGRP is just one of many environmental deregulation initiatives taken in Trump's second administration.

One important feature of the GHGRP (of [many](#)) is its ability to let the public examine greenhouse gas emissions at varying units of analysis. Specifically, GHGRP data allow users to aggregate greenhouse gas emissions to (1) geographic units of analysis (such as the national, state, or local levels) as well as to (2) facilities and the parent companies that own facilities. Each level of aggregation allows the public to learn more about where emissions occur and provides different insight into who is responsible for greenhouse gas emissions. Taken together, this can inspire different ideas for where and how to confront the climate crisis. This can include holding both *corporate* actors/entities as well as *state* actors/entities (e.g., regulatory authorities, elected officials) accountable for their role(s) in climate change.

In this report, we analyze GHGRP data to better understand trends and concentrations of greenhouse gas emissions at varying levels of analysis. We begin by providing a short background into the GHGRP. Next we examine national trends in greenhouse gas emissions, breaking these trends down by state and congressional district. We then aggregate greenhouse gas emissions to the top emitting facilities, as well as to the parent companies that own emitter and supplier facilities. We conclude by discussing our observations in a political-economic context and offer some suggestions for improving the GHGRP.

GHGRP Background

The GHGRP has collected greenhouse gas emissions data from U.S. facilities annually since 2010. While the GHGRP does *not* collect data from *all* greenhouse gas emitting sources, the EPA estimates the [GHGRP covers about 85-90% of U.S. greenhouse gas emissions](#). The greenhouse gases reported to the GHGRP include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and several fluorinated gases. CO₂ emissions make up the large majority, [constituting 91.9%](#) of all reported greenhouse gas emissions in 2023. Methane emissions [constituted 7.1%](#) of all reported greenhouse gas emissions in 2023. The GHGRP program reports all greenhouse gas emissions as carbon dioxide equivalents (CO₂e), a standardized metric that calculates the global warming potential (GWP) of each gas, facilitating emission comparisons across time and place¹. According to GHGRP data, in 2023, [2,578 million metric tons \(MMT\) CO₂e](#) were directly emitted by reporting facilities in the United States.

Data, Methods, and Measures

For this report, we obtained the GHGRP data from [the EPA's website](#) in September 2025 and analyzed data from two files in particular: the “2023 Data Summary Spreadsheets” and the “Reported Parent Companies” file. Data from both files were reported to the EPA by facilities as of August 16, 2024. “Facilities” refers to industrial operations distinguished by their EPA-designated Facility Registry System Identification (FRSID) number. Greenhouse gas emissions were reported as CO₂e. For analyses pertaining to locations, we used the “2023 Data Summary Spreadsheets” combined with geolocation information from the [U.S. Census](#). For analyses aggregating facility emissions to the parent companies that own them, we used the “Reported Parent Companies” file.

Our report focuses on reported greenhouse gas emissions from facilities classified in these GHGRP data files as **direct emitters** or **suppliers**². The EPA [defines direct emitters](#) as, “facilities that combust fuels or otherwise put greenhouse gases into the atmosphere

¹ The EPA [defines](#) GWP as “a measure of the total energy that a gas absorbs over a particular period of time (usually 100 years), compared to carbon dioxide. The GWP for carbon dioxide is one.”

² While we restrict our analyses to emissions reported by direct emitters and suppliers, facilities that report to the GHGRP *are not limited to* direct emitters and suppliers. For example, the 2023 GHGRP also included data from an additional 81 facilities that reported injecting CO₂ underground.

directly from their facility.” The EPA [defines suppliers](#)³ as, “entities that supply certain fossil fuels or fluorinated gases into the economy that—when combusted, released, or oxidized—emit greenhouse gases into the atmosphere.” According to the EPA, in [2023](#), facilities that reported to the GHGRP included 7,544 direct emitters and 995 suppliers.

Methodological notes on trend analyses

Several nuances in GHGRP emissions trends over time are worth acknowledging. First, the GHGRP underwent multiple reporting changes since its inception. For example, the EPA [notes](#) that in 2011, 12 new source categories began monitoring greenhouse gas emissions, reporting to the GHGRP for the first time in 2012. Also, in the “2023 Data Summary Spreadsheet FAQ,” the EPA also describes changes in GWP calculations over time⁴. Lastly, the COVID-19 pandemic has been [associated](#) with declines in greenhouse gas emissions, particularly between 2019 and 2020.

Methodological notes on parent company analyses

For analyses of parent companies, we used the GHGRP “Reported Parent Companies” file to link individual direct emitter and supplier facilities to their reported parent companies. The GHGRP requires facilities to report their “[highest level U.S. Parent company\(s\)](#)” and percent ownership as part of their annual report. “Parent companies” are entities with an ownership stake in facility operations. For example, according to the 2023 GHGRP, the Labadie Energy Center (Facility) in Labadie, Missouri, is owned by Ameren Corp (Parent Company). Most

³ The EPA also [explains](#), “The GHG quantity reported by suppliers might not always result in GHG emissions, and the emissions might not take place during that particular reporting year. However, the data from suppliers provide important information on the structure and flow of products through the economy and these products may ultimately result in greenhouse gas emissions. In addition, data reported by fossil fuel and industrial gas suppliers can account for greenhouse gases emitted by the numerous sources that use these products but do not report under the GHGRP due to their low individual emissions (passenger vehicles, for example).”

⁴ Per 2023 GHGRP FAQ: “Effective reporting year 2013, the GHGRP updated many of the GWP values used to calculate reporters’ emissions in carbon dioxide equivalent (CO₂e). These GWP values were updated from values provided in Intergovernmental Panel on Climate Change’s (IPCC) Second Assessment Report (SAR) to those in the Fourth Assessment Report (AR-4). [See Table A-1](#) for the complete list of gases and their updated GWPs. To present a consistent time-series, EPA has provided re-calculated prior year GHG totals, which were calculated using SAR values, using the revised AR4 GWP values. The raw data submitted by facilities for reporting years prior to 2013 remains as submitted using SAR GWPs.”

parent companies in this dataset are corporations, though some facilities report they are owned by one or more nonprofit and/or government entities, such as cities or universities.

It is not uncommon for a single parent company to have ownership stakes in multiple facilities across the United States. For example, according to the 2023 GHGRP, Berkshire Hathaway had ownership stakes in 97 direct emitter and/or supplier facilities. It is also not uncommon for one facility to have multiple parent owners. For example, according to 2023 GHGRP data, 95.92% of the J.H. Miller Electric Generating Plant is owned by The Southern Company and 4.08% is owned by Powersouth Energy Cooperative.

To connect emissions to parent companies, we linked each facility's reported emissions to their parent company identified in the GHGRP. In instances where one facility has multiple owners, we reference the percentage of ownership and allocate emissions accordingly. For example, we allocated 95.92% of J.H. Miller Electric Generating Plant's reported greenhouse gas emissions to The Southern Company, and the remaining 4.08% to Powersouth Energy Cooperative.

How Are Greenhouse Gas Emissions Trending?

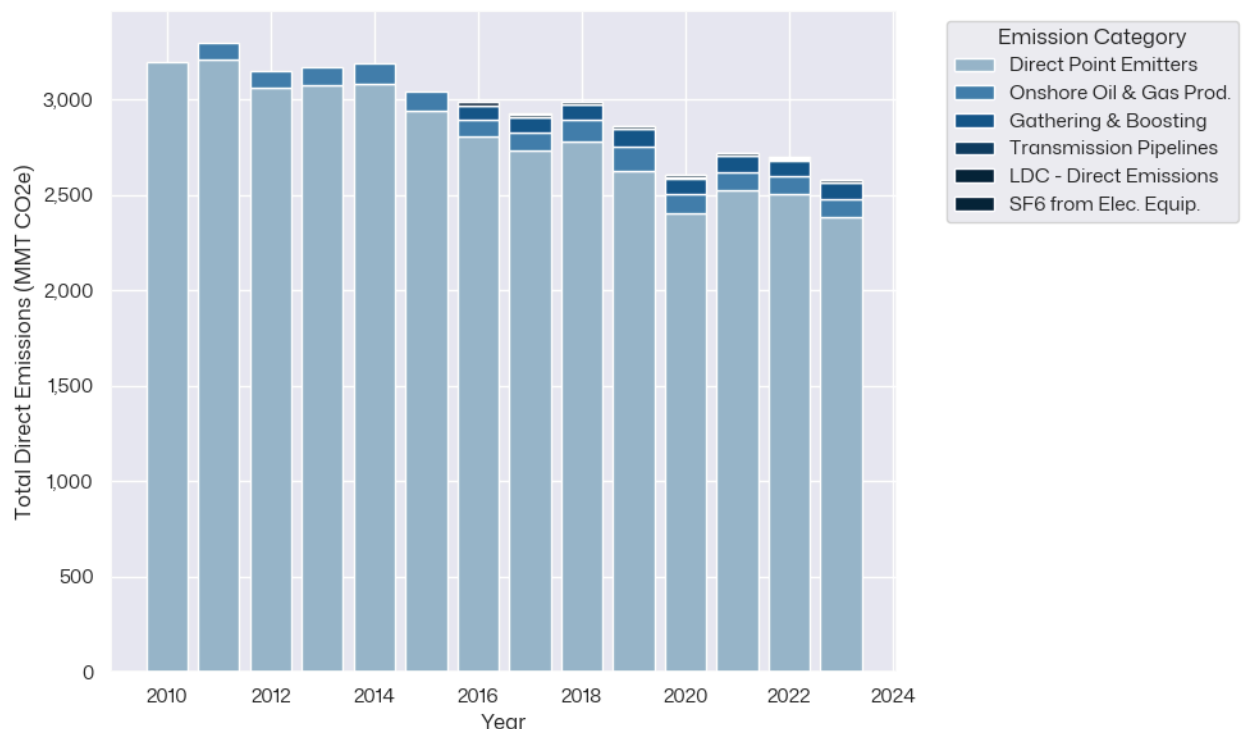


Figure 1. Annual emissions reported to GHGRP by direct emitters, per category, in MMT CO₂e, 2010–2023. Note: LDC = Local Distribution Companies; SF6 = Sulfur Hexafluoride.

We begin by looking at how greenhouse gas emissions are trending nationally (Figure 1). Annual reported emissions from direct emitters peaked in 2011 at about 3,320 MMT CO₂e. Since then, reported annual emissions from direct emitters trended downward. In 2023, direct emitters reported emissions of 2,580 MMT CO₂e. This represents the lowest annual volume of direct emissions reported since the start of the GHGRP program, about a 4.39% decrease in direct emissions from 2022.

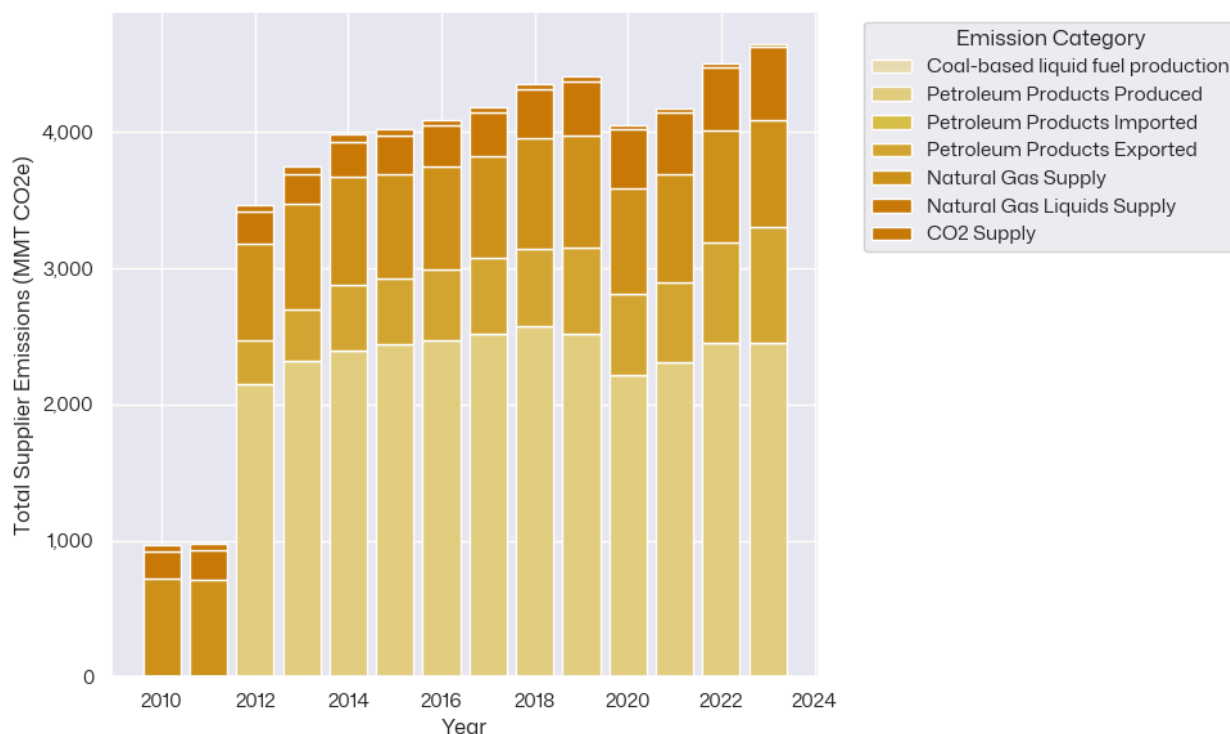


Figure 2. Annual emissions reported to GHGRP by suppliers in MMT CO₂e, 2010–2023.

Greenhouse gas emissions reported to the GHGRP by suppliers follow a different trend than direct emitters (Figure 2). As emissions from direct emitters trended downward over time, emissions from suppliers trended upward, with the exception of decreases during the COVID-19 pandemic in 2020. While emissions from direct emitters peaked in 2011, greenhouse gas emissions from suppliers peaked in the most recent reporting year. In 2023, suppliers reported emitting about 4,650 MMT CO₂e. This was the highest level of emissions reported by suppliers since the GHGRP was established and is the equivalent of over 969 million homes' electricity use for one year.

Where Are Greenhouse Gases Emitted?

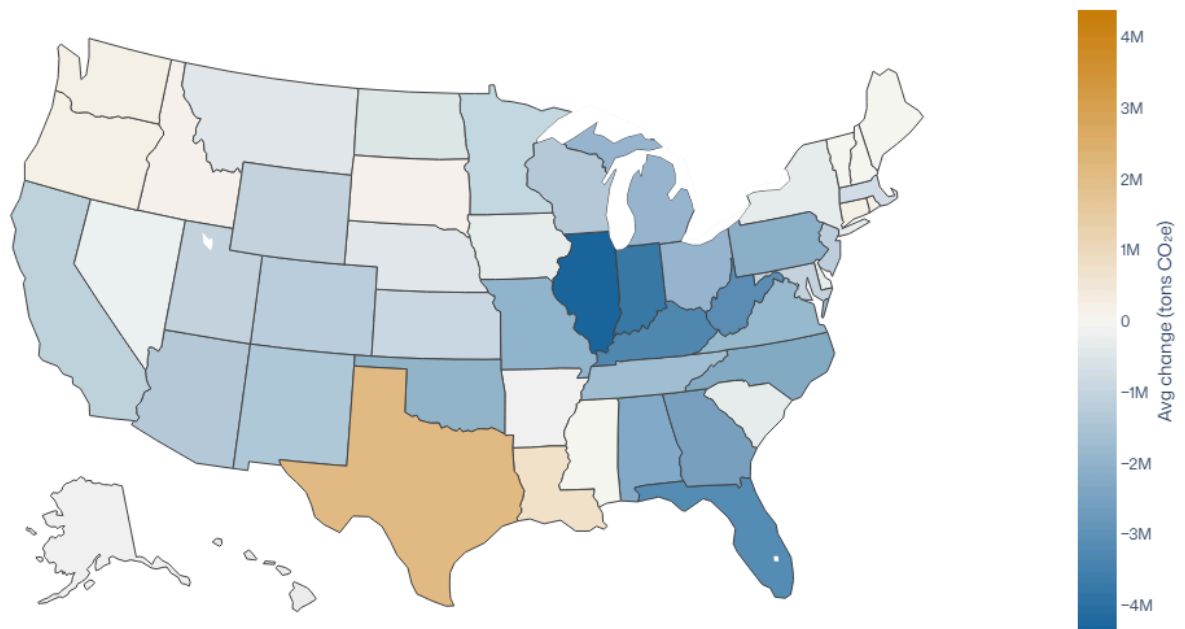


Figure 3. Average annual change of direct emissions by state: 2016 to 2023.

To get a sense of where greenhouse gas emissions are occurring, we used information from the GHGRP and U.S. Census to map the locations of direct emitter facilities. Next, we aggregated their emissions to the state level. Figure 3 displays the average annual change⁵ in direct CO₂e emissions by state, from 2016 to 2023. These results reveal that the national trends depicted in Figure 1 are not necessarily replicated within states. Nationally, direct emissions generally decreased annually from 2016 through 2023. By comparison, while direct emissions *decreased* in some states (e.g., Illinois, Indiana, Kentucky), direct emissions *increased* in other states (e.g., Washington, Texas, Louisiana). Further, there were also differences in the volume of these changes, with Texas reporting the largest average volume of emission increases (2.1 MMT CO₂e) and Illinois driving the largest average volume of emission decreases (4.4 MMT CO₂e).

⁵ Average change per year for direct emissions. For example, Illinois emitted 107 MMT CO₂e in 2016, compared to 72 MMT CO₂e in 2023. Illinois's rate of change over the 8 years is then $(72-107)/8$, which is -4.4 MMT CO₂e per year.

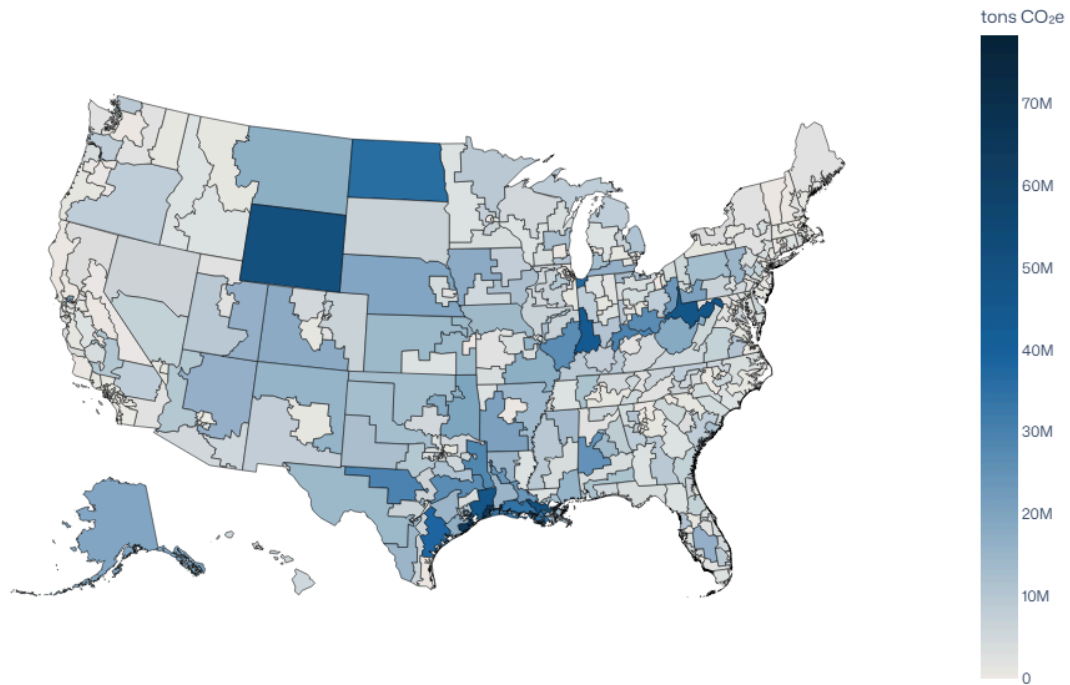


Figure 4. Total direct emissions by Congressional District, 2023.

Greenhouse gas emissions from direct emitters can also be aggregated to congressional districts, which we present in Figure 4. Since the land area of congressional districts varies highly between regions of the U.S., this map is more effective in showing which districts are home to the largest emitters. While Texas has the most emissions overall, the largest districts in Wyoming, West Virginia, and North Dakota are responsible for comparable volumes of emissions. For example, Texas’s 36th district had about 48 MMT CO₂e from direct emitters in 2023, while Wyoming’s at-large district had around 51 MMT CO₂e.

Finally, we used GHGRP data to rank the largest direct emitters by volume of emissions. Table 1 shows the cumulative emissions from the top 10 highest direct emitting facilities from 2010 through 2023. The J.H. Miller Electric Generating Plant released the largest volume of greenhouse gases, emitting over 277 MMT CO₂e from 2010 through 2023. J.H. Miller Electric Generating Plant released over 53 MMT CO₂e more than the second largest emitter (“Plant Scherer”) and over 101 MMT CO₂e more than the 10th largest emitter (“Plant Bowen”). Six of the top 10 direct emitters released more than 200 MMT CO₂e from 2010 through 2023.

Table 1. Top 10 largest direct emitters, 2010 to 2023.

Facility Name	Total Direct Emissions (MT CO ₂ e)	City, State
J. H. Miller Electric Generating Plant	277,098,434.0	Quinton, AL
Georgia Power Plant R.W. Scherer (“Plant Scherer”)	223,191,763.9	Juliette, GA
Labadie Energy Center	214,448,291.2	Labadie, MO
The Monroe Power Plant	209,916,077.7	Monroe, MI
General James M. Gavin Power Plant	201,962,405.8	Cheshire, OH
Martin Lake Power Plant	201,923,079.5	Tatum, TX
W.A. Parish Generating Station	199,142,432.3	Thompsons, TX
Gibson Generating Station	194,017,583.3	Owensville, IN
Colstrip Power Plant	185,277,698.6	Colstrip, MT
Georgia Power Plant Bowen (“Plant Bowen”)	176,025,133.3	Cartersville, GA

How Can Supplier Emissions Reveal Where Greenhouse Gas Intensive Products Are Made?

We also used the GHGRP to locate suppliers and their reported emissions. For this analysis, we began by locating supplier facilities. We then aggregated their reported emissions to the state they were housed in. It is important to re-emphasize that, unlike direct emitters, supplier emissions do not necessarily occur at the location of the supplier facility. The EPA [explains](#):

“Suppliers do not report direct emissions, but instead report the quantity of GHGs that would be emitted if the fuels and industrial GHGs that they produce, import, or

export each year were combusted, released, or oxidized. Emissions associated with these fuels and industrial gases do not occur at the supplier's facility but instead occur throughout the country, wherever they are used. An example of this is gasoline, which is supplied into the U.S. economy by a relatively small number of entities and consumed by many individual vehicles throughout the country.”

As such, our maps of supplier emissions by state provide a measure of where some greenhouse gas intensive products are produced, imported, or exported.

We also compare trends in national supplier emissions to each state, to examine if national trends in supplier emissions are reproduced at the state level.

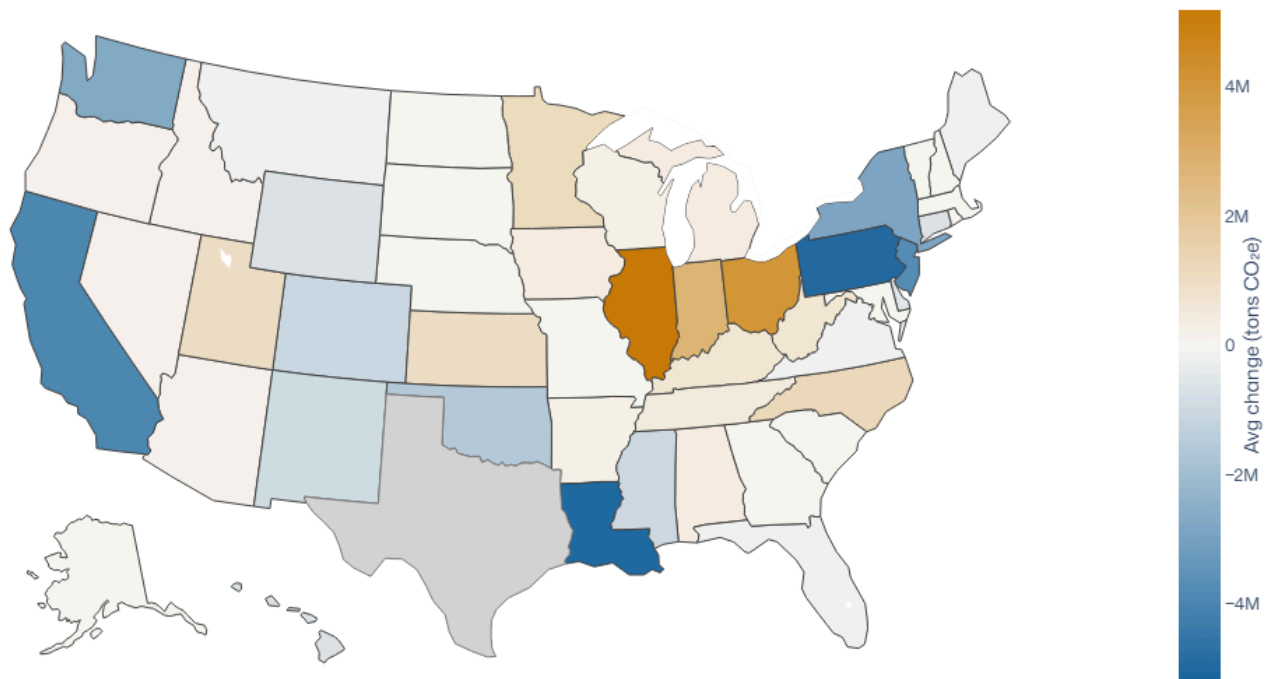


Figure 5. Average annual change of supplier emissions by state, omitting Texas: 2016 to 2023.

Figure 5 maps average annual change in supplier emissions by state for 2016 through 2023. This figure omits Texas's average change, because Texas is an outlier with an average annual change of +80 MMT CO₂e, as compared to the second highest state (Illinois) at +5.2 MMT CO₂e. As with the examination of direct emissions by state, several nuanced findings emerged. Nationally, supplier emissions increased annually, and this also occurred across 28 states. The largest average annual increases occurred in Texas, which emerged again as

an outlier, averaging annual increases of over 80 MMT CO₂e. Illinois emerged as the state with the second largest average annual increases in reported emissions, at over 5.2 MMT CO₂e. In 22 other states, annual supplier reported emissions declined, on average. Taken together, state-level analyses of GHGRP data reveal nuance in GHG emissions as it relates to time, place, source, and scale.

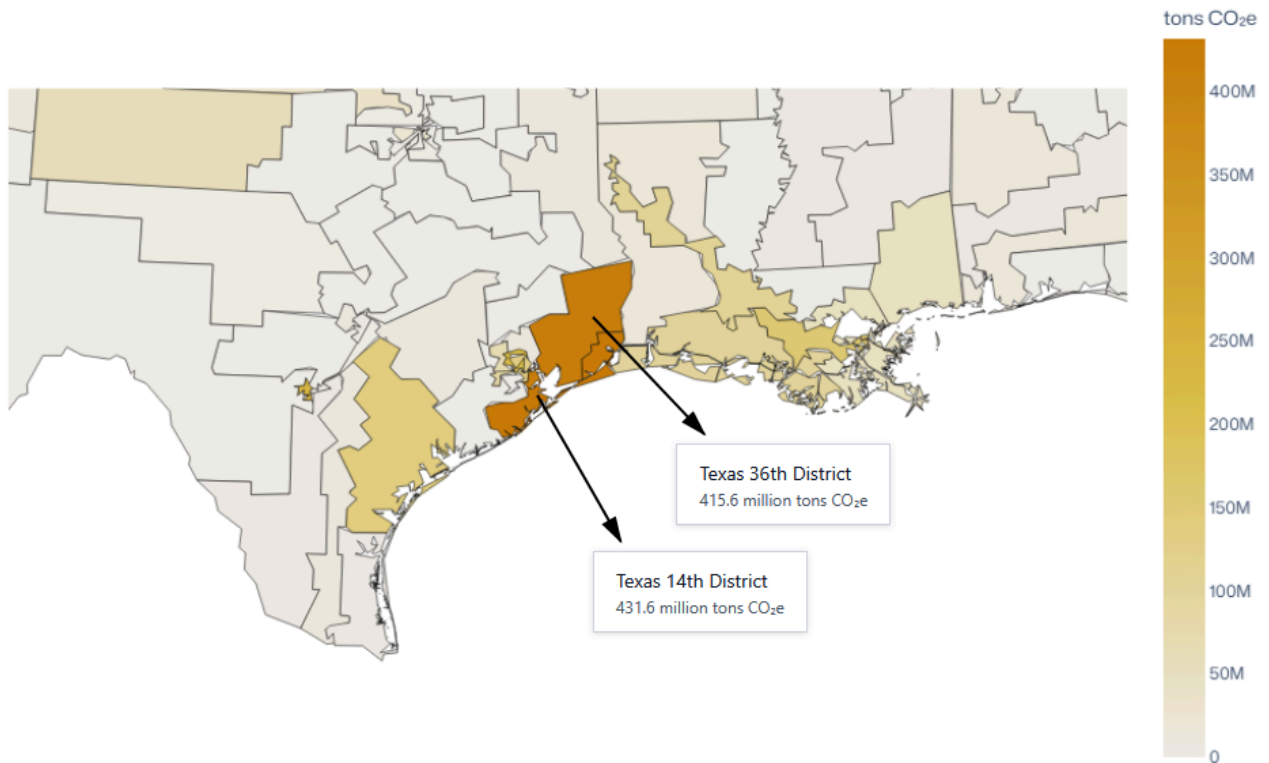


Figure 6. Total supplier emissions by Congressional District, 2023, zoomed in to the two largest supplier areas in the U.S.

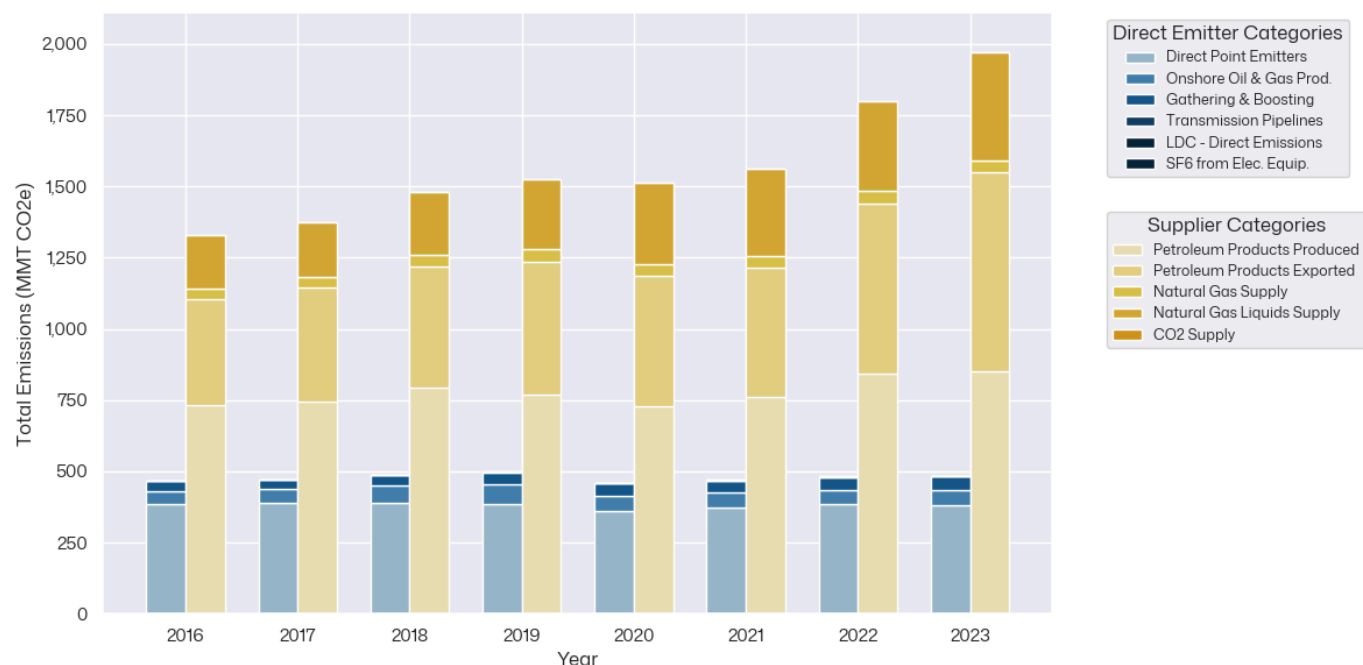


Figure 7. Texas' total emissions from 2016 to 2023, MMT CO₂e.

Compared to emissions associated with other states, Texas is an outlier. This is especially true within the supplier emissions category. To better understand this divergence, Figure 6 illustrates Texas' supplier emissions by congressional district, and Figure 7 illustrates Texas's emission trends from 2016 to 2023. While direct emissions remained relatively stable, supplier emissions increased, especially from 2021 to 2023. During this three-year window, Texas's supplier emissions climbed from about 1,560 MMT CO₂e to about 1,970 MMT CO₂e. This increase of about 410 MMT CO₂e accounts for **85%** of the 478 MMT national increase over the same interval, making Texas the primary driver of the nation's upward supplier emissions trajectory. Additionally, Figure 6 shows how concentrated the emissions are within just two congressional districts in Texas. Combined, districts 14 and 36 account for a total of 847.2 MMT CO₂e in 2023, which is **18.2%** of all supplier emissions in 2023.

Finally, we used GHGRP data to explore supplier emissions at the facility level. Table 2 shows the cumulative emissions associated with the 10 supplier facilities with the highest volume of total reported emissions from 2010 through 2023. The top two suppliers reported releasing over 1,000 MMT CO₂e from 2010 through 2023. All facilities in the top 10 released at least 595 MMT CO₂e each from 2010 through 2023. While most of the top direct emitters are located

in the south and the midwest regions of the U.S., the top suppliers are mostly concentrated in Texas and Louisiana [near the gulf coast](#).

Table 2. Top 10 largest suppliers, 2010 to 2023.

Facility Name	Total Supplier Emissions (MT CO ₂ e)	City, State
Valero Marketing and Supply Company	1,124,845,670	San Antonio, TX
Garyville Refinery	1,017,227,236	Garyville, LA
Motiva Enterprises LLC	999,166,995.4	Port Arthur, TX
ExxonMobil Baytown Site	927,852,221.8	Baytown, TX
ExxonMobil Baton Rouge Refinery and Chemical Plant	846,404,528.2	Baton Rouge, LA
Galveston Bay Refinery	805,951,664.5	Texas City, TX
CITGO Petroleum Corp. - Lake Charles Manufacturing Complex	680,627,720	Westlake, LA
BP Whiting Business Unit	655,454,810.8	Whiting, IN
Exxonmobil Beaumont Refinery	598,551,068.5	Beaumont, TX
Southern California Gas Co. End User Emissions (LDC)	595,445,260.6	Los Angeles, CA

Which Corporations Are Linked to Greenhouse Gas Emitters and Suppliers?

Figure 8 presents the proportion of emissions associated with the top 10 parent companies that accounted for the largest share of direct emissions in 2023. Combined, the top three emitters—Vistra Corp, The Southern Co., and Duke Energy—accounted for 43.7% percent of all greenhouse gas emissions released by facilities owned by the top 10 parent companies of direct emitters.

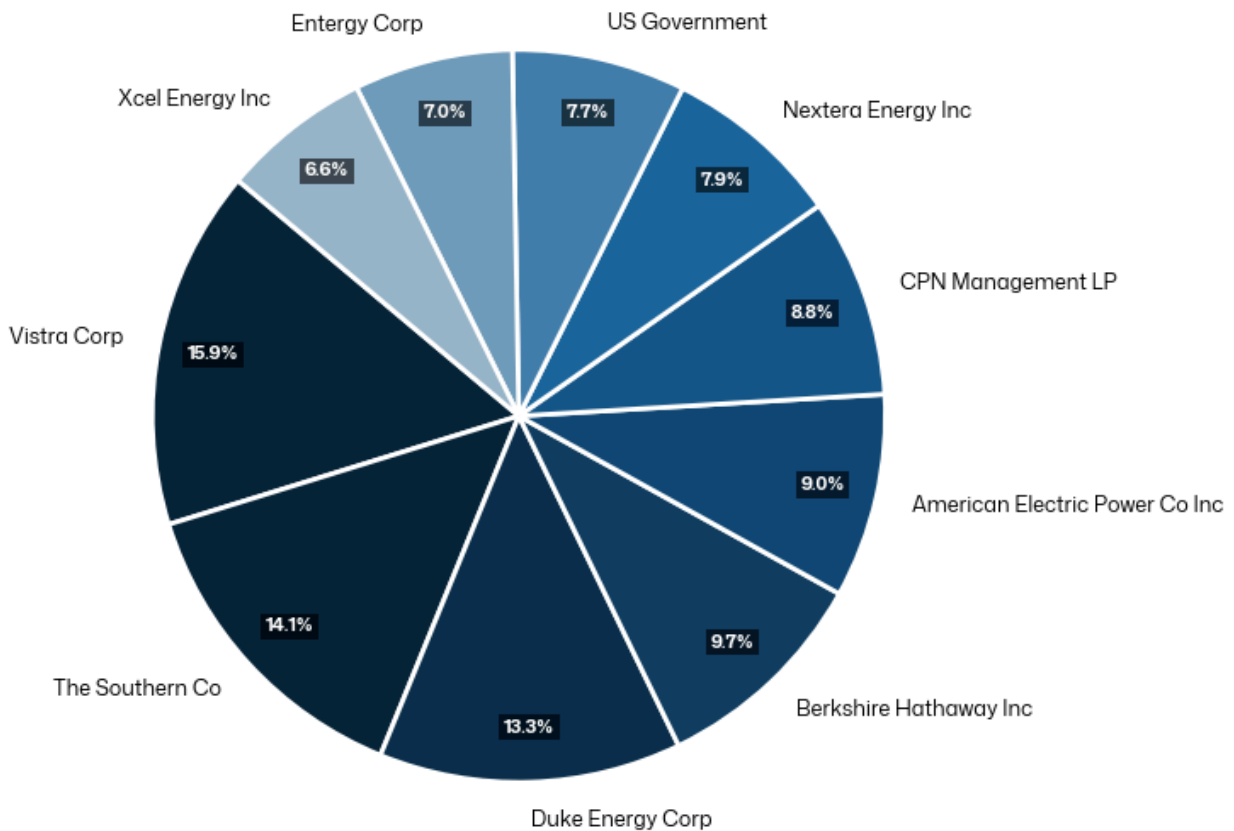


Figure 8. CO₂e direct emissions by top 10 parent companies in 2023.

We also analyzed GHGRP supplier emissions to top 10 parent companies (Figure 9). Supplier emissions appear even more concentrated than direct emissions: Valero, Marathon, and Phillips combined account for 52.4% of emissions among the top 10 parent companies of suppliers. Alternatively stated, the top three supplier parents account for a larger proportion of greenhouse gas emissions from top suppliers than the next seven largest parents combined. Five parent companies appear in *both* the top 20 direct emitters and suppliers: Exxon Mobil, Phillips 66, Marathon Petroleum Corp, Valero Energy, and Koch Industries.

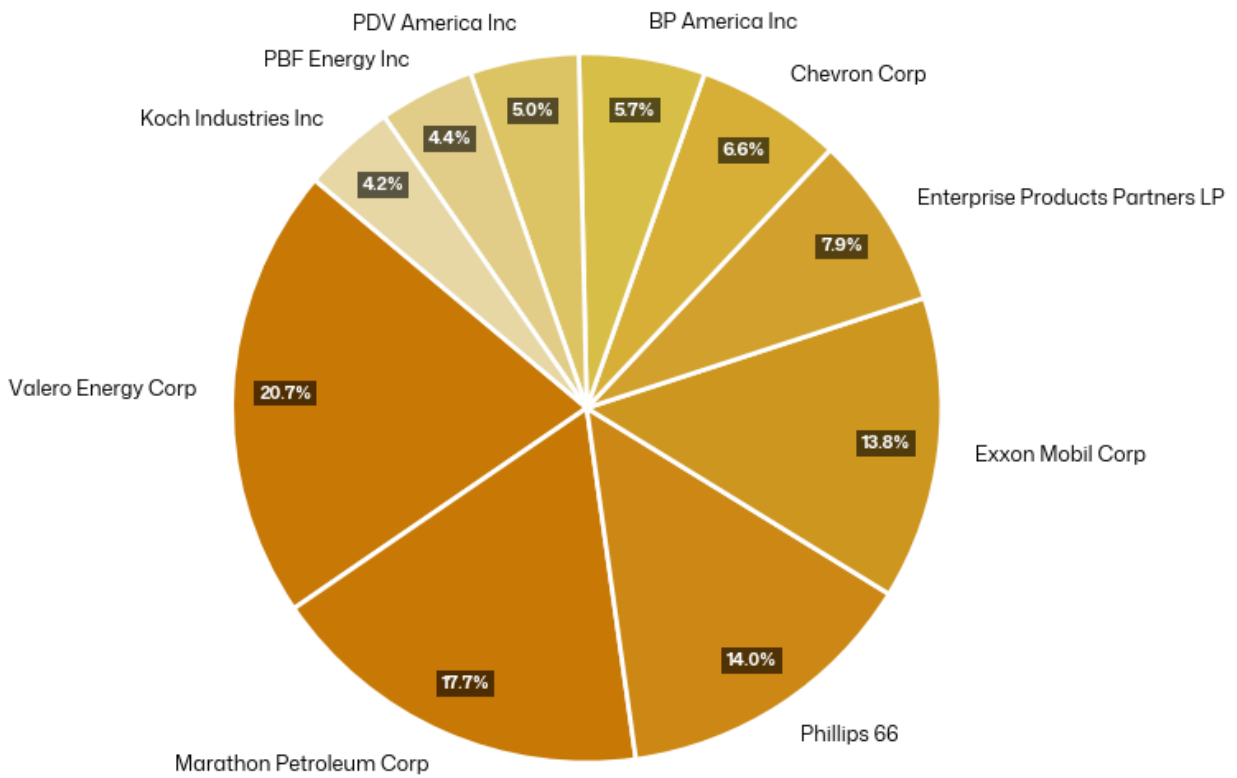


Figure 9. CO₂e supplier emissions from top 10 parent companies in 2023.

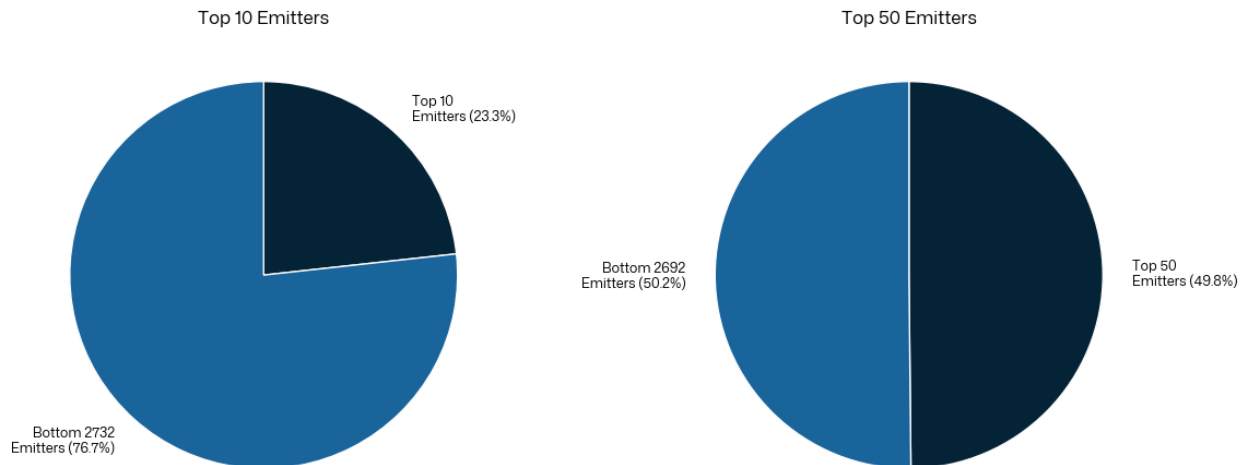


Figure 10. Distributions of CO₂e Emissions by Largest Emitting Parent Companies in 2023.

Next, we wanted to further understand the distribution of reported GHG emissions across all parent companies. Figure 10 compares reported emissions from the top 10 and top 50 direct emitters to all remaining direct emitters. Again, we observe that greenhouse gas emissions are highly concentrated among parent companies. Results indicate that out of 2,742 parent companies, the top 10 emitters account for 23.3% of all reported direct emissions. Results also reveal that in 2023, just 50 companies, or less than 2% of all companies tracked in GHGRP, account for 49.8% of all emissions.

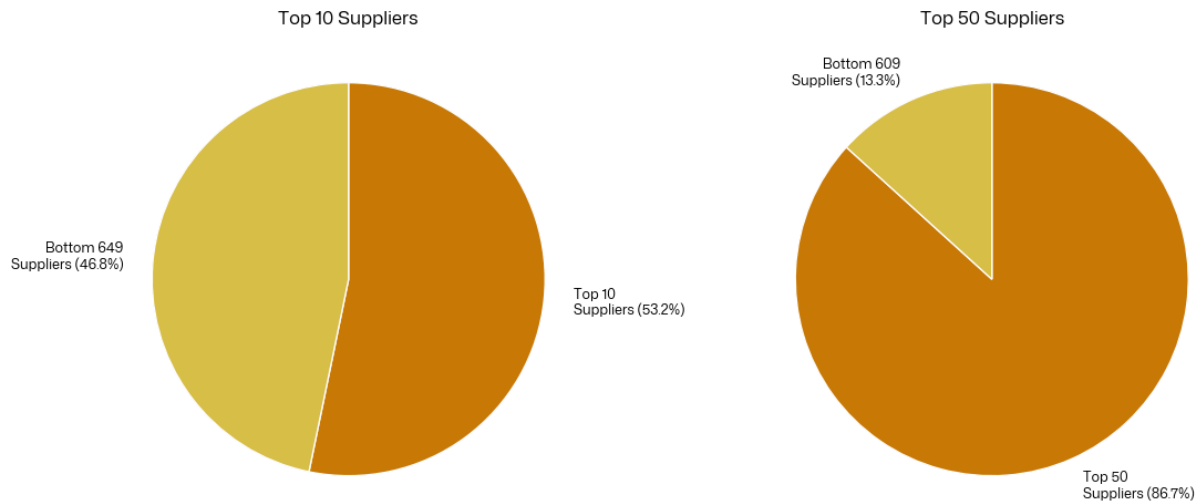


Figure 11. Distributions of CO₂e emissions by largest supplying parent companies in 2023.

We also explored the distribution of greenhouse gas emissions connected to supplier sources aggregated by their parent companies (Figure 11). The top 10 supplier parent companies were responsible for over half of all supplier emissions in 2023. Specifically, less than 2% of all supplier parent companies were responsible for 53.2% of all greenhouse gas emissions reported by suppliers. Among suppliers, GHGRP data suggest that the top 50 companies are associated with over 85% of all emissions.

To further contextualize these emissions, we generated infographics to express emissions from parent companies of direct emitters and suppliers as individual level emissions (Figures 11 and 12). The concept of a “carbon footprint” was [invented and popularized by the fossil fuel industry](#) to redirect blame for emissions towards individuals rather than corporations. Here, we demonstrate the inverse: that individual carbon footprints are miniscule in comparison with the emissions of the fossil fuel industry. Rather than focusing on individual facility emissions alone, by identifying parent companies that are responsible for the greatest emissions, we highlight [greater opportunities for leverage](#) with regard to advocacy for emissions reduction. We cannot effectively address this issue without first identifying which specific actors are most responsible.

How do corporate emissions compare to individual emissions?

Direct emissions from parent companies in 2023 totaled

2.6 billion
metric tons of CO₂e

That same year, the average American was responsible for 16.13 metric tons of CO₂e per year. To put this in perspective...

Direct emissions were equivalent to the average emissions of

47.8% of the US population



The top 10 direct emitters released

841 million metric tons of CO₂e

or equivalent to the average emissions of

52.2 million Americans



about the population of Texas and Florida combined

The #1 direct emitter released

86 million metric tons of CO₂e

or equivalent to the average emissions of

5.4 million Americans



about the population of South Carolina

Figure 11. Emissions from GHG direct emitter parent companies expressed as individual emissions.

Supplier emissions from parent companies in 2023 totaled

4.7 billion
metric tons of CO₂e

That same year, the average American was responsible for 16.13 metric tons of CO₂e per year. To put this in perspective...

Supplier emissions were equivalent to the average emissions of

86.3% of the US population



The top 10 suppliers released

3.2 billion metric tons of CO₂e

or the equivalent of the average individual emissions of

58.9% of the US population



The #1 supplier released

512 million metric tons of CO₂e

or equivalent to the average emissions of

31.7 million Americans

about the population of Texas



Figure 12. Emissions from GHG Supplier parent companies expressed as individual emissions.

Discussion

Our findings demonstrate the utility of GHGRP data to map and track emissions trends over time and aggregate these emissions to various levels of analysis. Interestingly, each level of analysis reveals that greenhouse gas emissions appear to concentrate more in some places—and among some corporations—than others.

Our national analysis reveals that while reported emissions from direct emissions are declining, reported emissions linked to suppliers reached a record high in the most recent reporting year. While annual reported direct emitter and supplier trends may diverge, it's worth noting that as a nation the United States remains [one of the largest greenhouse gas emitters in the world](#). Climate Watch reports 60% of greenhouse gas emissions come from just 10 countries, among them the United States. By comparison, the 100 least emitting countries account for less than 3% of global emissions.

More localized analyses (state, facility, congressional district) in our report also illustrate skewed distributions of greenhouse gas emissions that do not necessarily follow national trends. We observe, for instance, that Texas emerges as an outlier with respect to both direct emissions and supplier emissions. While direct emissions declined nationally, direct emissions increased in Texas during the same time frame. Similarly, supplier emission increases in Texas were substantially higher than national increases.

[Similar to prior EDGI analyses](#), we find that the majority of emissions are linked to a few parent companies. This is consistent with observations about how the energy industry is heavily controlled by only a few major corporations, inviting questions about market monopolization. Our comparative analysis that examines corporate emissions relative to individual emissions highlights that corporate production practices appear to be a much larger driver of emissions than individual consumption choices. This suggests that serious efforts to confront climate change should strongly consider corporate production practices.

Future research may look to explain *why* the skewed distribution of greenhouse gas emissions emerges. One potential area to explore may be the relationships between *political activities of parent companies/industries* that report to the GHGRP and *elected officials responsible for jurisdictions housing emissions*. This could include, but would not necessarily

be limited to, corporate lobbying efforts, revolving door appointments, and political campaign contributions. For example, according to an analysis from OpenSecrets, [from 1998 to 2024, the oil and gas industry spent around \\$2.95 billion on federal lobbying](#).

Instances of a “revolving door” between fossil fuel industry and policy makers have been documented, with one recent [report](#) finding that of Trump’s 111 executive branch nominees and appointees: 43 are former fossil fuel industry employees, 12 were tied to fossil fuel funded right wing think tanks, 29 were former corporate executives, and 14 were former corporate lawyers.

Connections between corporations/industries represented in the GHGRP and the state are not restricted to lobbying and executive branch appointees. For example, according to Public Citizen’s 2023 [analysis](#) of OpenSecrets data, 19 of the top 50 career fossil fuel money recipients in the U.S. House of Representatives represent districts in Texas. Public Citizen notes that this was by far the most of any state. Altogether, the Texas representatives in Public Citizens’ analysis received over \$9.8 million in contributions from the oil and gas industry during their political careers—constituting over 35% of all oil and gas contributions to the top 50 recipients. What this communicates is that Texas appears to emerge as an outlier both in greenhouse gas emissions as well as political funding from the oil and gas industry.

Taken together: The skewed distributions of emissions invite important questions about which jurisdictions and which corporations are playing the largest roles in the climate crisis. Future research may seek to explore if or how the political activities of industries and corporations in the GHGRP shape climate policy and lawmaking. Left unaddressed, political influence of industry may undermine productive solutions to climate change.

These findings show how important GHGRP data are to identifying the main contributors to emissions in the United States, making the restoration and ongoing maintenance of the GHGRP a valuable step in addressing the causes of the climate crisis.

Suggestions for Improvement to the GHGRP

Beyond restoring the GHGRP, we identified three key areas with opportunities for improving the program.

1) More complete and consistent data quality

First, the GHGRP suffers from data incompleteness and inconsistency. The current version has many gaps and discrepancies that make analysis more difficult, such as missing identifiers and variation in how facilities are named. There should also be more clarity on the sources of GHG emissions, particularly the parent companies. While this information is available elsewhere from the EPA, it currently requires actively cross-referencing datasets, obfuscating who is most responsible for emissions.

2) Integration and analysis with EPA, CDC, and U.S. Census Bureau datasets

Second, integration and analysis of GHGRP data with distinct but related datasets, such as EPA's [Risk Screening Environmental Indicators \(RSEI\)](#), [Toxics Release Inventory \(TRI\)](#), [Enforcement and Compliance History Online \(ECHO\)](#), and [Environmental Justice Screening and Mapping Tool \(EJScreen\)](#); Center for Disease Control and Prevention's public health data (e.g., [CDC PLACES](#)); and United States Census Bureau data (e.g., [American Community Survey](#)) would allow for more comprehensive analysis and understanding of GHG emissions data as pieces of a larger puzzle of environmental, climate, socioeconomic, and public health data. While some of these datasets have previously been integrated with GHGRP data (e.g., select EJScreen data were included in versions of EPA's [Facility Level Information on Greenhouse Gases Tool \(FLIGHT\)](#), which maps facility-level GHGRP data), other integrations have yet to be fully realized. For instance, an improved GHGRP would facilitate cross-referencing GHG emissions with enforcement and compliance records (e.g., with facility violations of the Clean Air Act), support the examination of the proximity of communities to high emitting facilities, and allow for the calculation of the cumulative public health risks (short and longterm) posed by a facility's toxic co-emissions and GHG emissions. In conjunction with integrating facility enforcement and compliance records, the GHGRP should also reintegrate EJScreen, which was briefly incorporated into FLIGHT until removal by the Trump administration in 2025. Integration and analysis with environmental justice data from EJScreen and the [Environmental Justice Analysis Multisite Tool \(EJAM\)](#), and with data from EPA's Toxics Release Inventory (TRI) and Risk-Screening Environmental Indicators (RSEI), would promote analyses of both the cumulative environmental burdens experienced by communities and the risks and harms imposed by particular facilities and their parent companies.

3) Include data on state-corporate connections, especially the political activities of parent corporations

In its most recent form, the GHGRP contains data that can connect emitters, emissions, and suppliers to place. As we demonstrate, this can be connected to jurisdiction (e.g., national, state, congressional district), highlighting which policy makers have authority over emitters and suppliers. The GHGRP data also illustrate which parent companies are connected to emissions.

What is missing from the GHGRP are data that illustrate political activities of parent companies, linking them to elected officials and policy makers. This kind of data may clarify important details about how the industries and parent companies most responsible for greenhouse gas emissions influence our democracy and, in turn, perhaps shape the regulations that dictate their operations and influence their emissions. Understanding more about these connections may also help explain what incentivizes the persistence of an energy production practice (e.g., reliance on fossil fuels) that threatens environmental health and sustainability.

The GHGRP could be enhanced, for example, by including data on:

- [Political campaign contributions](#) that connect industry and parent companies to elected officials,
- Data on [lobbying activities](#) employed by parent companies identified in the GHGRP,
- Data on [revolving door](#) parent company personnel who cycle between positions that serve industry and serve the public interest,
- Government contracts or [subsidies](#) granted to parent companies, and
- Financial disclosures from elected officials and their staff that document [investments](#) in parent companies.

Conclusion

We recommend a continued and improved GHGRP. Policymakers and industries rely upon GHGRP data to make informed decisions and maintain incentives and cap-and-trade programs. Advocates and scientists use it to inform research and practices to improve environmental quality and public health. But perhaps most critically, people have a right to know about the quality of the environments where they live. Access to consistent, structured

data and information like the kind provided by the GHGRP is crucial to maintaining that right.