

Mandatory Greenhouse Gas Reporting

2023 Emissions Year Frequently Asked Questions

This document provides questions and answers related to the 2023 greenhouse gas (GHG) emissions reported by entities subject to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (MRR).¹ MRR requires data reporting and third-party data verification from the largest GHG emitters. Thus, MRR data includes a subset of the statewide GHG emissions sources. MRR data supports the Cap-and-Trade Program, the AB 32 Cost of Implementation Fee Regulation, and the statewide GHG Emissions Inventory. The statewide GHG Emissions Inventory establishes historical emission trends and supports tracking California's progress in reducing GHGs. The GHG Emissions Inventory is a separate program from MRR.² All data sources used to develop the GHG Emissions Inventory are listed in supporting documentation available at <https://ww2.arb.ca.gov/ghg-inventory-data>.

Question: What sources of GHG emissions must report under MRR?

Answer: The MRR program captures approximately 80 percent of the GHG emissions included in the State's GHG inventory. The MRR program requires annual reporting of GHGs by industrial sources that emit more than 10,000 metric tons of CO₂e, transportation and natural gas fuel suppliers, and electricity importers (Figure 1).

Question: What sources of GHG emissions are not reported under the MRR program, but will be included in the official statewide GHG inventory for 2023?

Answer: Agricultural emissions, high global warming potential gases, emissions from landfills and composting, and select fugitive emissions are not captured under the MRR program.

Question: How do total reported GHG emissions for 2023 compare to 2022 emissions?

Answer: Total 2023 GHG emissions reported under MRR decreased by approximately 4,622,000 metric tons of carbon dioxide equivalent (CO₂e), or 1.4 percent, in comparison to 2022.³ Emissions covered by the Cap-and-Trade Program decreased by approximately 9,388,000 metric tons of CO₂e, or 3.3 percent.

¹ Mandatory GHG Reporting - Reported Emissions: <https://ww2.arb.ca.gov/mrr-data>

² GHG Inventory Program page - <https://ww2.arb.ca.gov/our-work/programs/ghg-inventory-program>

³ For this analysis, the total GHG emissions provided in the public data spreadsheets are adjusted to remove emissions that are reported by both covered facilities and natural gas suppliers. The final FAQ in this document discusses this adjustment in detail.

GHG emissions decreased from 2022 to 2023 for eight of the nine source categories. Tailpipe GHG emissions from combusted transportation fuels showed the greatest absolute decrease, declining by approximately 2,127,000 metric tons of CO₂e, or 1.3 percent. Electricity imports decreased by approximately 1,300,000 metric tons of CO₂e, or 7.5 percent; GHG emissions from oil and gas production decreased by approximately 751,000 metric tons of CO₂e, or 5.4 percent; GHG emissions from other combustion sources decreased by approximately 518,000 metric tons of CO₂e, or 4.4 percent; GHG emissions from in-state electricity generation decreased by approximately 481,000 metric tons of CO₂e, or 1.4 percent; GHG emissions from cement plants decreased by approximately 456,000 metric tons of CO₂e, or 5.9 percent; GHG emissions from cogeneration decreased by approximately 391,000 metric tons of CO₂e, or 8.5 percent; and GHG emissions from refinery and hydrogen production (H₂) plants decreased by approximately 59,000 metric tons of CO₂e, or 0.2 percent.

One source category showed an increase in GHG emissions from 2022 to 2023. GHG emissions from supplied natural gas, natural gas liquids (NGLs), and liquefied petroleum gas (LPG) fuels increased by approximately 1,460,000 metric tons of CO₂e, or 3.1 percent.

Question: When will the GHG Emissions Inventory be updated to reflect calendar year 2023 emissions?

Answer: An updated GHG Emissions Inventory that incorporates 2023 MRR emissions data will be published in 2025.

Question: What is the difference between total CO₂e (i.e., total emissions), total covered emissions, and non-covered emissions values found in the public data spreadsheets posted on the MRR webpage?

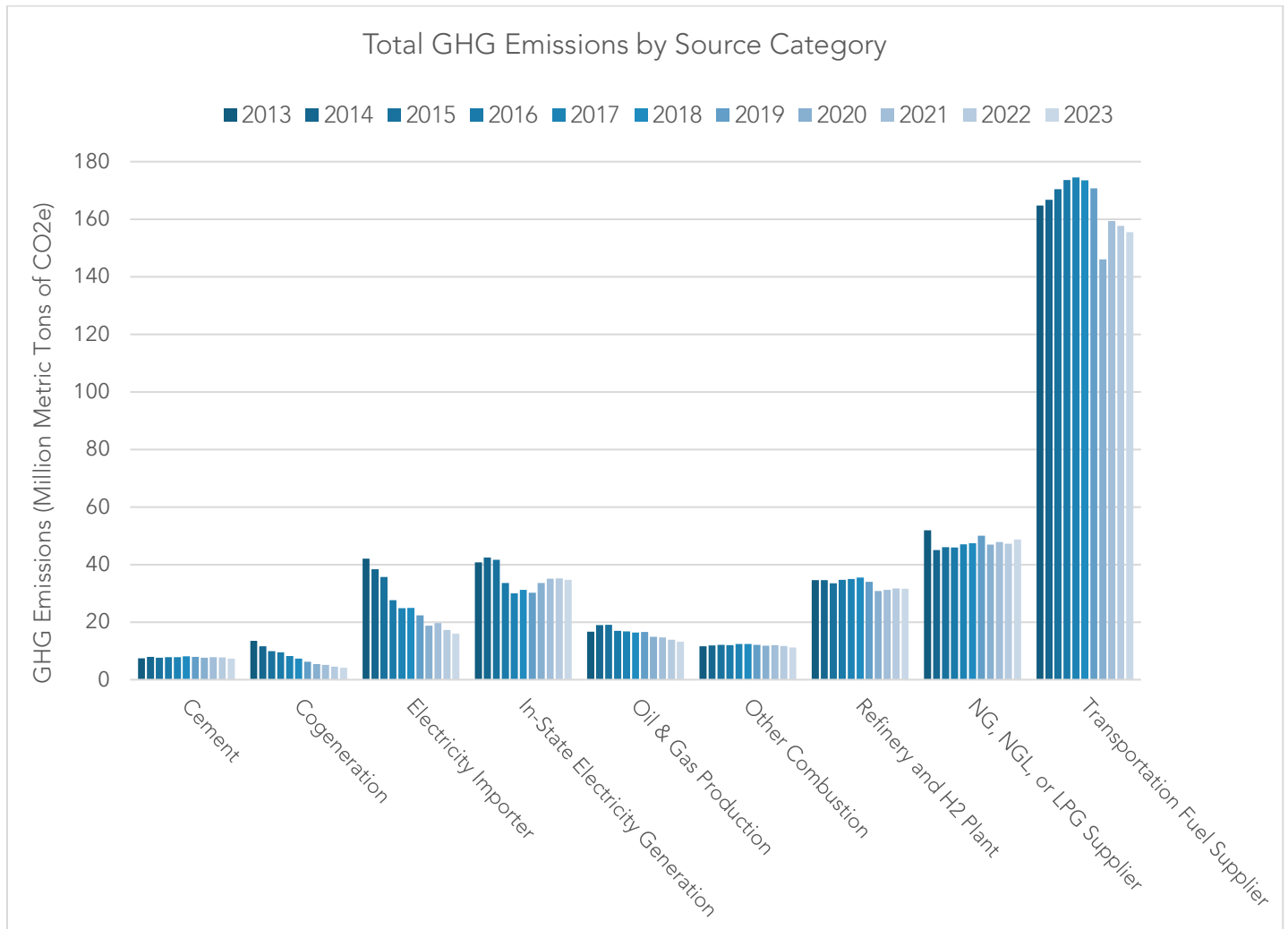
Answer: For entities subject to the Cap-and-Trade Program, total covered emissions (column R in the spreadsheet) are equal to total emissions (column F) minus non-covered emissions (column S). Non-covered emissions include emissions that are exempt from a compliance obligation under the Cap-and-Trade Program, such as biogenic emissions from exempt biomass fuels and certain fugitive emissions.

For entities who are subject to MRR, but not the Cap-and-Trade Program, the covered emissions are zero regardless of the emissions source.

In the case of natural gas suppliers, emissions from natural gas supplied to covered facilities (approximately 46.8 million metric tons in 2023) are

subtracted from the supplier's total and covered emissions to avoid double counting. In Figure 1, the 2023 total CO₂e emissions for the Supplier of Natural Gas, NGL, or LPG source category (approximately 48.7 million metric tons in 2023) reflect this accounting.

Figure 1. 2013-2023 Total GHG Emissions by Source Category



Notes: The NG, NGL, or LPG Supplier category does not include emissions from natural gas supplied to covered entities to avoid double counting, as described in the last FAQ. The Oil & Gas Production category includes only facility emissions (i.e., stationary combustion, fugitive, and process emissions); supplier emissions reported by Oil & Gas Production entities are included in the NG, NGL, or LPG Supplier category.