CALIFORNIA AIR RESOURCES BOARD

November 6, 2023

Mandatory Greenhouse Gas Reporting

2022 Emissions Year Frequently Asked Questions

This document provides questions and answers related to the 2022 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 *www.arb.ca.gov/cc/inventory/data/data.htm*.

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 CO_2e, 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 2022?

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 2022 compare to 2021 emissions?

Answer: Total 2022 GHG emissions reported under MRR decreased by approximately 5,900,000 metric tons of carbon dioxide equivalent (CO_2e), or 1.8 percent, in

[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*

comparison to 2021.[3] Emissions covered by the Cap-and-Trade Program decreased by approximately 10,567,000 metric tons of CO_2e, or 3.6 percent.

GHG emissions decreased from 2021 to 2022 for seven of the nine source categories. GHG emissions from electricity imports showed the greatest absolute and relative decrease, declining by approximately 2,434,000 metric tons of CO_2e, or 12.4 percent. Tailpipe GHG emissions from combusted transportation fuels decreased by approximately 1,776,000 metric tons of CO_2e, or 1.1 percent; GHG emissions from oil and gas production decreased by approximately 787,000 metric tons of CO_2e, or 5.4 percent; and GHG emissions from supplied natural gas, natural gas liquids (NGLs), and liquefied petroleum gas (LPG) fuels decreased by approximately 598,000 metric tons of CO_2e, or 1.2 percent. GHG emissions from cogeneration decreased by approximately 517,000 metric tons of CO_2e, or 10.1 percent; GHG emissions from other combustion sources decreased by approximately 271,000 metric tons of CO_2e, or 2.3 percent; and GHG emissions from cement plants decreased by approximately 84,000 metric tons of CO_2e, or 1.1 percent.

Two source categories showed a minor increase in GHG emissions from 2021 to 2022. GHG emissions from refinery and hydrogen production (H_2) plants rose by approximately 449,000 metric tons of CO_2e, or 1.4 percent, while GHG emissions from in-state electricity generation increased by approximately 118,000 metric tons of CO_2e, or 0.3 percent. Due to the sizeable decrease in emissions from electricity imports and cogeneration, overall, GHG emissions from the electricity sector (comprised of the cogeneration, electricity importer, and in-state electricity generation source categories) decreased by 2,833,000 metric tons of CO_2e, or 4.7 percent.

Question: When will the GHG Emissions Inventory be updated to reflect calendar year 2022 emissions?

Answer: An updated GHG Emissions Inventory that incorporates 2022 MRR emissions data will be published in 2024.

Question: What is the difference between total CO_2e (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

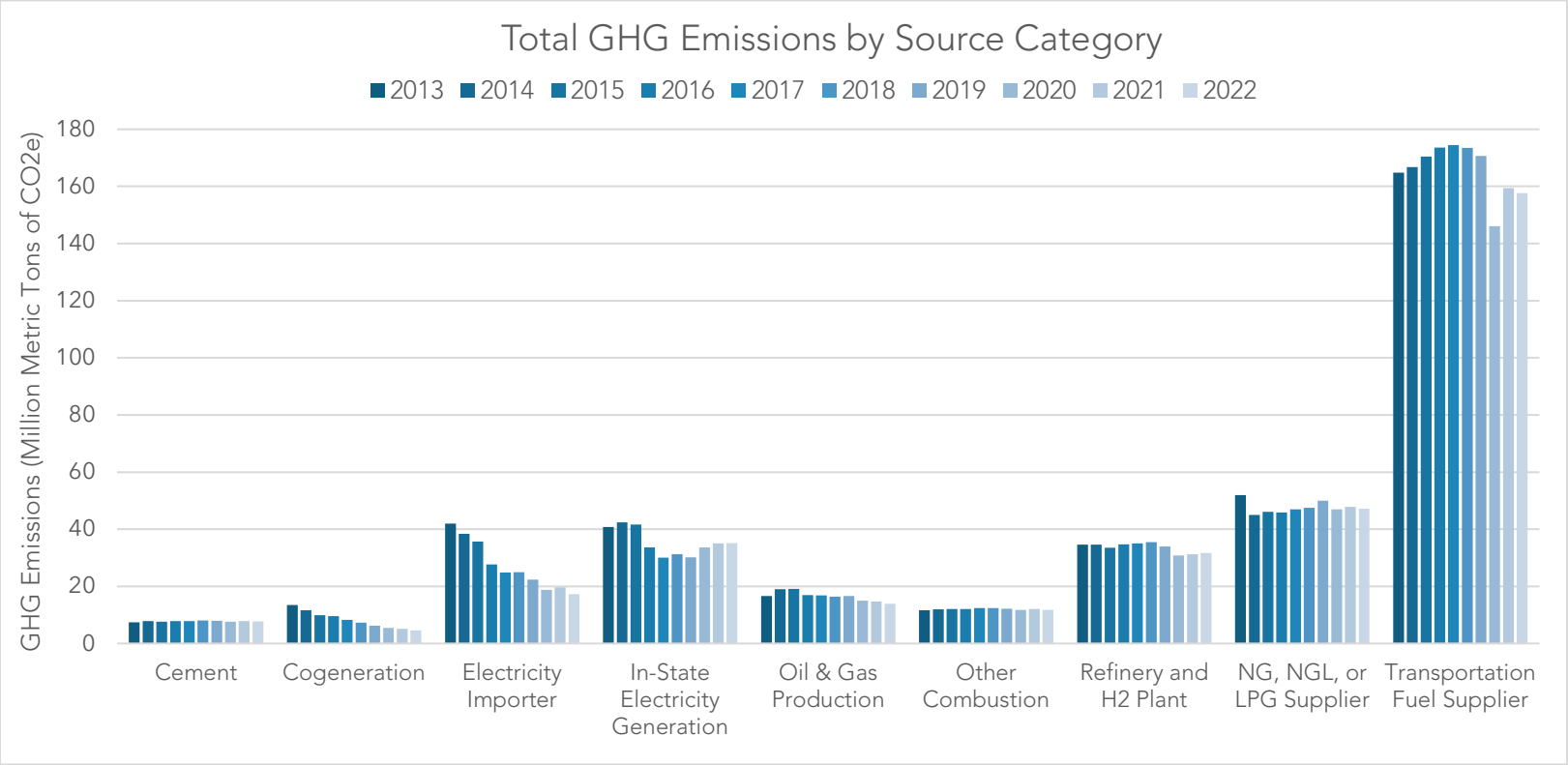
[3] For this analysis, the total GHG emissions provided in the public data spreadsheets are adjusted to remove emissions that are reported by both covered facilities and natural gas suppliers. The final FAQ in this document discusses this adjustment in detail.

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 47.5 million metric tons in 2022) are subtracted from the supplier's total and covered emissions to avoid double counting. In Figure 1, the 2022 total CO_2e emissions for the Supplier of Natural Gas, NGL, or LPG source category (approximately 47.2 million metric tons in 2022) reflect this accounting.

Figure 1. 2013-2022 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.