CALIFORNIA AIR RESOURCES BOARD

November 4, 2021

Mandatory Greenhouse Gas Reporting
2020 Emissions Year Frequently Asked Questions

This document provides questions and answers related to the 2020 greenhouse gas (GHG) emissions reported by entities subject to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (MRR).[1] MRR collects data from the largest GHG emitters to support the Cap-and-Trade Program, the AB 32 Cost of Implementation Fee Regulation, and the statewide GHG Emissions Inventory. Thus, MRR data includes a subset of the statewide GHG emissions sources. The statewide GHG Emissions Inventory establishes historical emission trends and is the primary method for 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 2020?

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 2020 compare to 2019 emissions?

Answer: Total 2020 GHG emissions reported under MRR decreased by approximately 34,058,000 metric tons of carbon dioxide equivalent (CO_2e), or 9.7 percent, in comparison to 2019.[3] This decrease in emissions is likely due in large part to the impacts of the COVID-19 pandemic. Economic recovery from the pandemic may result in emissions increases over the next few years. As such, the total

[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.

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2020 reported emissions are likely an anomaly and any near-term increases in annual emissions should be considered in the context of the pandemic. Emissions that are covered by the Cap-and-Trade Program decreased by approximately 32,468,000 metric tons of CO_2e, or 10.4 percent.

GHG emissions declined for all source categories except in-state electricity generation. Tailpipe GHG emissions from transportation fuels showed the greatest absolute and relative decline in 2020 relative to 2019, decreasing by approximately 24,626,000 metric tons of CO_2e, or 14.4 percent. GHG emissions from oil and gas production declined by approximately 1,603,000 metric tons of CO_2e, or 9.7 percent, and emissions from refinery and hydrogen plants declined by approximately 3,147,000 metric tons of CO_2e, or 9.3 percent.

GHG emissions from supplied natural gas, natural gas liquids (NGLs), and liquefied petroleum gas (LPG) fuels declined by approximately 3,065,000 metric tons of CO_2e, or 6.1 percent, and GHG emissions from combustion sources not included in other source categories declined by approximately 418,000 metric tons of CO_2e, or 3.5 percent. GHG emissions from cement plants declined by approximately 271,000 metric tons of CO_2e, or 3.4 percent.

GHG emissions from the electricity sector, which includes electricity imports, in-state electricity generation, and cogeneration sources, declined by approximately 926,000 metric tons of CO_2e, or 1.6 percent. Within the electricity sector, in-state electricity generation showed an increase in GHG emissions of approximately 3,438,000 metric tons of CO_2e, or 11.4 percent, while emissions from cogeneration sources and imports declined by approximately 831,000 metric tons of CO_2e, or 13.3 percent, and approximately 3,533,000 metric tons of CO_2e, or 15.8 percent, respectively. It should be noted that the increase in in-state electricity emissions is partially due to the reclassification of former cogeneration facilities that transitioned to electricity-only generation. Reclassification of these existing facilities resulted in a decrease in cogeneration emissions and an increase in the in-state electricity generation emissions.

Question: When will the GHG Emissions Inventory be updated to reflect calendar year 2020 emissions?

Answer: An updated GHG Emissions Inventory that incorporates 2020 MRR emissions data is expected to be available in summer of 2022.

Question: The 2019 GHG Emissions Inventory showed statewide emissions of 418.2 million metric tons of CO_2e. What does this say about the State's progress towards meeting its GHG reduction goals?

Answer: The 2019 GHG emissions in the 2021 Edition of the California GHG Emissions Inventory[4] showed that California has reduced emissions below the 2020 target established by AB 32 by a total of 13 million metric tons of CO_2e. The 2020 MRR data supports the conclusion that California remains below the 2020 emissions target.

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 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 that 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 are subtracted from the supplier's total and covered emissions to avoid double counting. In Figure 1, the total CO_2e emissions for the Supplier of Natural Gas, NGL, or LPG source category reflect this accounting.

Question: Does this year's published emissions workbooks include any new data fields?

Answer: Yes. The 2020 emissions workbook includes a new tab, "2020 Emissions by GHG," which provides each reporter's total CO_2, CH_4, and N_2O emissions in units of metric tons (MT).

[4] https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf

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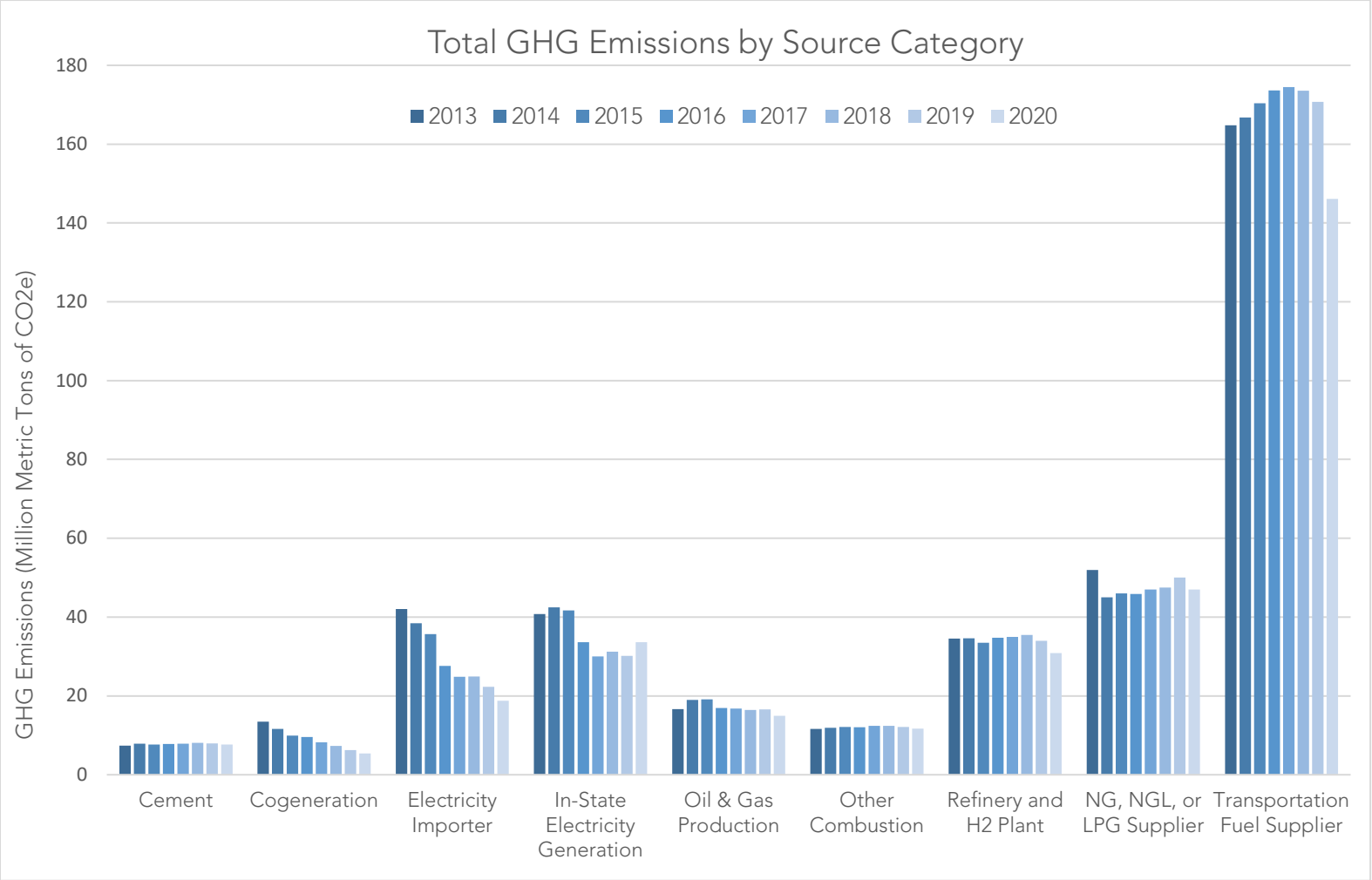
Figure 1. 2013-2020 Total GHG Emissions by Source Category



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 and process emissions); supplier emissions reported by Oil & Gas Production entities are included in the NG, NGL, or LPG Supplier category.