CALIFORNIA AIR RESOURCES BOARD

November 4, 2020

Mandatory Greenhouse Gas Reporting
2019 Emissions Year Frequently Asked Questions

This document provides questions and answers related to the 2019 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 2019?

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 2019 compare to 2018 emissions?

Answer: Total 2019 GHG emissions reported under MRR decreased by approximately 6,867,000 metric tons of carbon dioxide equivalent (CO_2e), or 1.9 percent, in comparison to 2018.[3] Emissions that are covered by the Cap-and-Trade

[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] The total GHG emissions 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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Program decreased by approximately 8,690,000 metric tons of CO_2e, or 2.7 percent.

The electricity sector, which includes electricity imports, in-state electricity generation, and cogeneration sources, showed the greatest decline in GHG emissions in 2019 relative to 2018, decreasing by approximately 4,703,000 metric tons of CO_2e, or 7.4 percent. GHG emissions from four other sources also declined: tailpipe GHG emissions from transportation fuels declined by approximately 2,915,000 metric tons of CO_2e, or 1.7 percent; GHG emissions from refinery and hydrogen plants declined by approximately 1,477,000 metric tons of CO_2e, or 4.2 percent; GHG emissions from combustion sources not included in other source categories declined by approximately 321,000 metric tons of CO_2e, or 2.6 percent; and GHG emissions from cement plants declined by approximately 167,000 metric tons of CO_2e, or 2.1 percent.

Two sectors showed an increase in GHG emissions in 2019 relative to 2018. Oil and gas production emissions[4] increased by approximately 159,000 metric tons of CO_2e (1.0 percent), and emissions from supplied natural gas, natural gas liquids (NGLs), and liquefied petroleum gas (LPG) fuels increased by 2,557,000 metric tons CO_2e (5.4 percent). Almost the entirety of the increase in emissions from supplied natural gas, NGLs, and LPG fuels is accounted for by a rise in natural gas supplied to end-users not directly covered by the Cap-and-Trade Program (i.e., residential, commercial, non-covered industrial, and agricultural users whose emissions are covered upstream at the fuel supplier).

Question: When will the GHG Emissions Inventory be updated to reflect calendar year 2019 emissions?

Answer: An updated GHG Emissions Inventory that incorporates 2019 MRR emissions data will be available in summer of 2021.

Question: The 2018 GHG Emissions Inventory showed 425 million metric tons of statewide emissions. What does this say about the State's progress towards meeting its GHG reduction goals?

Answer: The 2018 GHG emissions in the 2020 Edition of the California GHG Emissions Inventory[5] showed that California has reduced emissions below the 2020 target established by AB 32 by a total of 6 million metric tons of CO_2e. The 2019 MRR data supports the conclusion that California remains below the 2020 emissions target and continues to make progress in decarbonizing key sectors of the economy.

[4] Oil and gas production emissions include only emitter emissions (columns I and J in the public data spreadsheet). All emissions reported by oil and gas production facilities that come from supplied natural gas and NGL fuels are included in the supplied natural gas, NGLs, and LPG fuels category.
[5] https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2018/ghg_inventory_trends_00-18.pdf

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.

Figure 1. 2013-2019 Total GHG Emissions by Source Category