FREQUENTLY ASKED QUESTIONS FOR

The 2016 Edition California Greenhouse Gas Emission Inventory

The California Air Resources Board (ARB) annually publishes a greenhouse gas (GHG) emission inventory to track the State's progress in reducing GHG emissions.[1] The 2016 Edition of California's GHG inventory covers emissions for 2000 through 2014 and includes inventory improvements and accounting method updates. The GHG inventory is a critical piece, in addition to AB 32 program data, in demonstrating the State's progress in achieving the 2020 statewide GHG target. As part of the 2030 Target Scoping Plan Update, to better track progress towards achieving our statewide GHG targets, we will be exploring how to structure a separate accounting framework that uses the GHG inventory, but incorporates GHG emissions related to land use conversion when biofuels are produced and supplied to California as a result of our Low Carbon Fuel Standard. We will also be exploring how flows of cap-and-trade program compliance instruments between California and Québec can be incorporated into such an accounting framework. This document provides additional information related to the inventory.

1. What is our progress towards meeting the 2020 target?

In 2014, total GHG emissions were 441.5 million metric tons of CO2 equivalent (MMTCO2e), a decrease of 2.8 MMTCO2e compared to 2013. This declining trend, coupled with programs that will continue to provide additional GHG reductions going forward, demonstrate that California is on track to meet the 2020 target of 431 MMTCO2e. These programs include:

- Continued growth in renewable energy generation as California implements policies to meet the Renewable Portfolio Standard.
- Growing use of renewable fuels through implementation of LCFS.
- New vehicle efficiency standards for passenger cars through the Advanced Clean Cars regulation, along with U.S. EPA's Phase 2 GHG requirements for heavy duty trucks will begin to be implemented starting in 2017.
- Declining caps implemented under California's Cap and Trade program.

2. What notable updates have been made to this edition of the inventory?

The two most significant updates include:

- Reclassification of CO_2 from combustion of transportation biofuels (ethanol, biodiesel, renewable diesel, and biomethane) as "biogenic CO_2." These biogenic CO_2 emissions are tracked separately as informational items (see Question 2 for more information)
- Reclassification of petroleum seeps as excluded emissions (see Question 3 for more information)

A complete description of methodology and data updates is documented in the Inventory Updates Documentation released with the 2016 Edition inventory data. Please see this separate documentation for more detail.[2] A comprehensive technical support document for all emission categories (inclusive of those that did not change this year) will be released in Summer 2016.

[1] California GHG emission inventory can be accessed at: www.arb.ca.gov/cc/inventory/data/data.htm
[2] Available at http://www.arb.ca.gov/cc/inventory/data/data.htm

3. Why are transportation biofuel CO_2 emissions reclassified as biogenic CO_2 in this edition of the inventory?

Reclassification of transportation biofuels as a biogenic source of emissions aligns with the existing treatment of stationary biofuel combustion in the inventory, as well as Intergovernmental Panel on Climate Change (IPCC) Guidelines for GHG inventory development,[3] the U.S. Environmental Protection Agency (U.S. EPA) national GHG inventory, and other nations' inventories submitted to the United Nations Framework Convention on Climate Change (UNFCCC). Following the IPCC Guidelines ensures consistency and comparability with other subnational and national inventories.

Transportation biofuel CO_2 emissions will continue to be tracked as separate informational line items in the "excluded" items in the inventory. Users can access excluded emission categories in the published inventory summary tables as wells as the detailed inventory spreadsheets, available on the GHG emission inventory program webpage.[4]

4. Why are petroleum seeps emissions reclassified as excluded emissions in this edition of the inventory?

Petroleum seeps are a natural emission source. The IPCC Guidelines do not identify petroleum seeps as an emission source to be quantified, nor are they included in U.S. EPA's national GHG inventory. Reclassification of 0.6 $MMTCO_2e$ of petroleum seeps as "excluded" emissions is therefore consistent with the IPCC framework and the inventories of U.S. EPA and other nations. Petroleum seeps emissions will continue to be accounted for as a separate informational item in the "excluded" inventory.

5. Do these methodology updates to the inventory need to be reflected in the 2020 statewide GHG target of 431 MMTCO2e?

No, transportation biofuel volumes were negligible and petroleum seeps emissions were very small in 1990. The reclassification of these emissions has a negligible impact on inventory scope for the purpose of comparing 2020 emissions with the 1990 levels as mandated by AB 32.

6. Do the methodology updates to the inventory have any implications for the allowance caps included in the Cap-and-Trade Regulation?

No, the caps in the Cap-and-Trade Regulation were established based on anticipated covered GHG emissions. In the Cap-and-Trade Program, biogenic CO_2 from biomass-derived fuels does not have a compliance obligation. The emissions covered by the Cap-and-Trade Program are a subset of the data included in the inventory. The Cap-and-Trade Program covers approximately 85 percent of the total inventory.

7. Will the inventory include methane emissions from the Aliso Canyon natural gas storage facility leak, which occurred between October 2015 and February 2016?

The current GHG inventory includes emissions from 2000 to 2014, which precede the Aliso Canyon leak. ARB plans to account for the Aliso Canyon methane emissions from the natural gas storage leak in future inventory editions as a line item, starting with the 2017 edition GHG emission inventory. Because the GHG emission inventory is compiled on a calendar-year cycle, the 2017 edition will reflect the estimated emissions released between the discovery of the leak in October of 2015 and the end of

[3] 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 1. http://www.ipcc-nggip.iges.or.jp/public/2006gl/

[4] Published inventory summary tables and detail inventory spreadsheets are available on ARB GHG emission inventory webpage: http://www.arb.ca.gov/cc/inventory/data/data.htm

the calendar year. The emissions released after January 1, 2016 will be reflected in the 2018 edition of the inventory.

8. Why are GHG emission estimates for a given calendar year different between inventory editions?

Consistent with the IPCC Guidelines,[5] recalculations are made to incorporate new methods or reflect updated data for all years from 2000 to 2014, to maintain a consistent inventory time series. Therefore, emission estimates for a given calendar year may be different between editions as methods are updated or if the data source agencies revise their data series.