## 2008 to 2012 Emissions for Mandatory Greenhouse Gas Emissions Reporting Summary

The table and graphs below show the greenhouse gas (GHG) emissions reported under the California Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (MRR) from 2008-2012.

Note: The 2011–2012 emissions are based on updated GHG reporting requirements which were promulgated to harmonize with the U.S. EPA greenhouse gas reporting rule and to support the California Cap-and-Trade program. The 2011–2012 emissions data includes new methods, additional process emissions reporting, and more complete fugitive and vented emissions reporting compared to the emissions data reported in 2008 through 2010.

Source Category*	2008	2009	2010	2011	2012
California Facilities					
Cement Plants	8,745,004	5,930,929	5,625,902	6,221,403	7,054,289
In-State Electricity Generation**	46,270,742	43,449,800	39,765,162	30,732,215	41,610,182
Cogeneration	18,058,423	17,338,491	16,374,326	14,471,752	14,398,100
Other Combustion Sources***	10,522,295	9,226,370	9,077,145	9,818,507	11,230,113
Refinery and Hydrogen Plants	36,724,823	34,393,790	34,754,066	34,212,970	33,755,850
Oil and Gas Production	11,349,054	11,237,758	10,972,797	14,591,066	15,181,254
Total Facilities	131,670,341	121,577,137	116,569,398	110,047,913	123,229,788
Electricity Imports and Fuel Suppliers					
Electricity Imports	NA	NA	NA	46,684,882	44,397,471
Transportation Fuel and CO <sub>2</sub> Suppliers	NA	NA	NA	171,404,802	164,568,890
Natural Gas, NGL, and LPG suppliers****	NA	NA	NA	101,149,851	105,646,007
Total Electricity Imports and Fuel Suppliers	NA	NA	NA	319,239,535	314,612,368
Grand Totals	131,670,341	121,577,137	116,569,398	429,287,448	437,842,156

## 2008 to 2012 Facility and Entity Emissions

CO<sub>2</sub>e, metric tons/year (carbon dioxide equivalents, metric tons/year)

\* Facilities are allocated to identical source categories across all years, which may cause shifts in emissions between categories for previously posted 2008-2010 data.

\*\* Out-of-state electricity generation sources were excluded from the 2008-2010 historic data to maintain consistency with the current GHG Mandatory Reporting Regulation, which does not require reporting by out-of-state electricity generators.

\*\*\* This source category represents facilities with primarily combustion emissions, although they may also include relatively small amounts of "process" emissions, which are typically GHG emissions resulting from chemical reactions (versus fuel combustion or fugitive emissions).

\*\*\*\* This represents total reported emissions, and may include double counting of electricity and combustion source emissions.

Minor differences when summing data are due to rounding.

## Information About 2008 to 2012 Facility and Entity Emissions

- Question: Why did emissions rise in 2012?
- Answer: Overall, reported industrial emissions increased slightly. The rise in total emissions is primarily due to emission increases from California electricity generation using natural gas as a fuel. The majority of this additional natural gas electricity generation is due to a decrease in available hydroelectric generation for 2012 and a reduction in nuclear generated power from the closure of the San Onofre Nuclear Generating Station.
- Question: Why did emissions from other sources (besides electricity generation) increase in 2012?
- Answer: This is predominantly due to the inclusion of about 100 additional facilities that became newly subject to GHG mandatory reporting for 2012 data. Under the applicability phase-in, most facilities that emit over 10,000 metric tons of CO<sub>2</sub>e, but less than 25,000 metric tons of CO<sub>2</sub>e, were not subject to reporting until 2013, providing their 2012 emissions data. The inclusion of these smaller facilities adds about another 1.4 million metric tons of CO<sub>2</sub>e to the inventoried sources.
- Question: Why is the updated 2011 summary spreadsheet different from previously posted 2011 data?
- Answer: Twenty reporting entities missed the deadlines for reporting 2011 data and the emissions from these additional entities are reflected in the summary spreadsheet.
- Question: Why is the format changed for major source categories? Answer: The format was changed to reflect the most accurate sector identification for each reporting entity.
- Question: Why are there no emissions data for Electricity Imports and Fuel Suppliers for 2008 through 2010?
- Answer: These sectors were not subject to reporting requirements until January 1, 2012 for 2011 data.
- Question: Is the detailed data available, which was used to develop the summary data and graphs?
- Answer: Yes. Detailed spreadsheets with the 2008-2012 emissions data for individual reporting entities are available here: <u>http://www.arb.ca.gov/cc/reporting/ghg-rep/reported\_data/ghg-reports.htm</u>.



Facility Sector Emissions Comparison: 2008 to 2012

(non-biomass + biomass + process emissions)

Total for All Facilities: 2008 to 2012 (Facilities Only – Does Not Include Electricity Imports or Fuel Suppliers)

