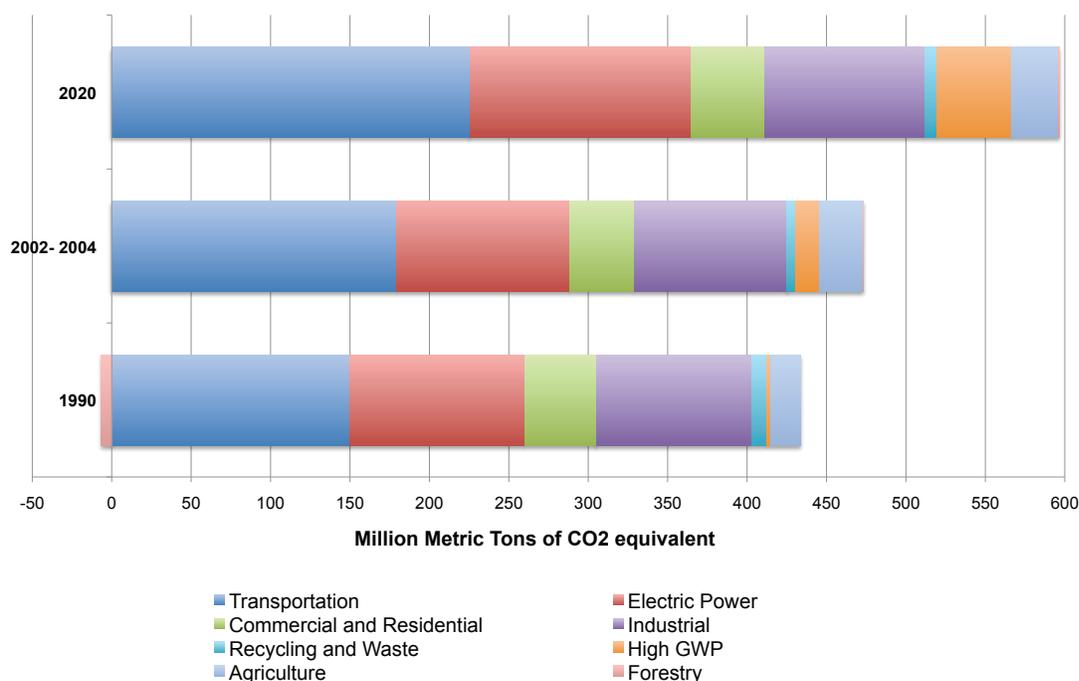


FACTS ABOUT

California Greenhouse Gas Emissions Inventory

The greenhouse gas (GHG) inventory provides information about the sources of greenhouse gas emissions to help target California's climate program and ARB's development of regulations. Forecasting the amount of emissions that would occur in 2020 if no actions are taken (known as "business-as-usual") was necessary to assess the scope of the reductions California has to make to return to the 1990 emissions level by 2020 as required by Assembly Bill 32 (AB 32). The chart below illustrates the 2020 GHG emissions inventory used in the development of the AB 32 Scoping Plan.

California GHG Inventory Forecast



The Forestry sector has negative emissions, indicating that forestry is a net sink – that is, more CO₂ is taken out of the air than emitted.

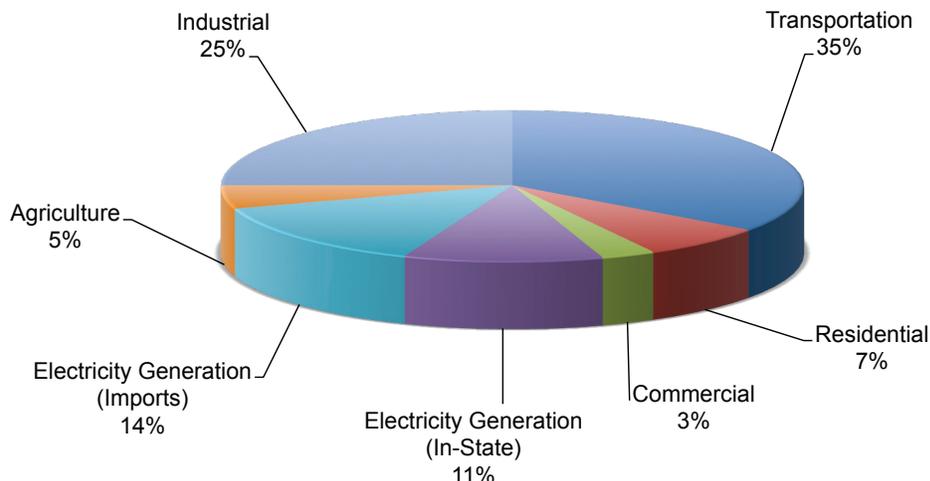
Greenhouse Gas Emission Inventory

ARB's current GHG emission inventory is based on statewide fuel use, industrial process and activity data to estimate emissions. These estimates use the actual amount of all fuels combusted in the state, which accounts for over 85 percent of the GHG emissions within California.

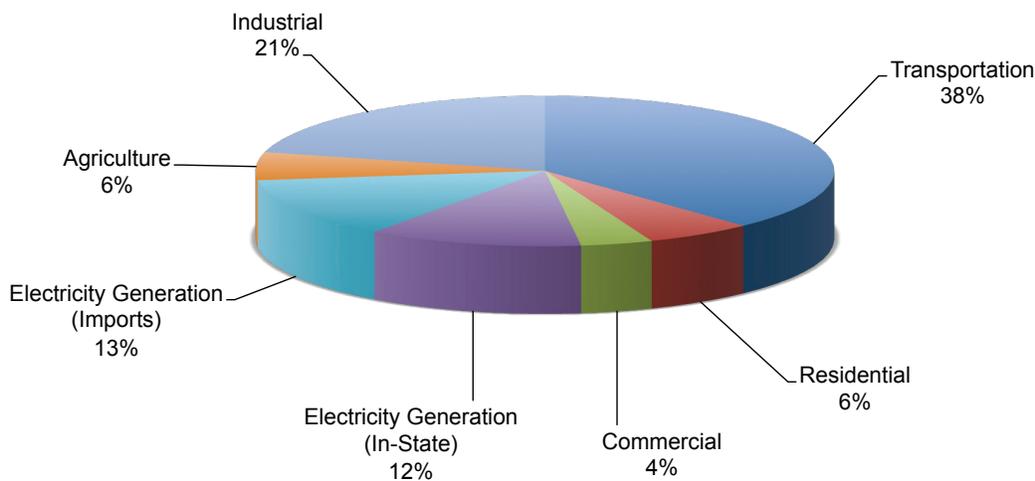
This approach to inventory development is referred to as "top-down" because data are collected in the aggregate for the entire state, not at the level of the individual facility or emission-point. In contrast, a "bottom-up" inventory uses data from individual sources to determine emissions and sums those emissions to form a statewide total. Through the mandatory reporting regulation, facility-specific data will become available and ARB will use the data to further improve the inventory. Current GHG emissions data can be found on the inventory data page: www.arb.ca.gov/cc/inventory/inventory.htm



1990 Emissions by Sector



2004 Emissions by Sector



Business-as-Usual 2020 Emissions

ARB staff estimated 2020 business-as-usual (BAU) GHG emissions that represent the emissions expected to occur in the absence of any GHG emission reduction actions. ARB staff estimates the statewide 2020 BAU GHG emissions would be 596 MMTCO₂e. Thus the total emission reductions needed to attain the 2020 emissions limit of 427 MMTCO₂e is 169 MMTCO₂e.

ARB derived the estimate for the 2020 BAU emissions by projecting emissions using growth factors specific to each economic sector. For the purposes of the Scoping Plan, ARB used three-year average emissions, by sector, for 2002-2004 to forecast emissions to 2020. At the time the Scoping Plan development began, 2004 was the most recent year for which actual data were available.

This 3-year average of known emissions will dampen unusual variations in any given year that would make the baseline year unrepresentative for forecasting. For example, an unusually hot, dry year might cause much higher power consumption and less hydroelectric power generation, and therefore increased emissions associated with power generation than would have otherwise been expected. Using a three-year average makes sure that unusual circumstances don't bias the data.

For More Information

For more information or to obtain this document in an alternative format or language please contact the ARB's Helpline at (800) 242-4450 or at helpline@arb.ca.gov. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.