



Last reviewed on August 29, 2013

## Greenhouse Gas Inventory - 2020 Emissions Forecast

### Overview

2020 estimates of California's greenhouse gas emissions have been updated to account for new estimates for future fuel and energy demand as well as other factors. This updated forecast accounts for the effects of the recent economic recession. [Data sources, methods and assumptions](#) are available below. The previous 2020 GHG emissions forecast, used in the AB32 Scoping Plan, is still available on the [archived forecast](#) page.

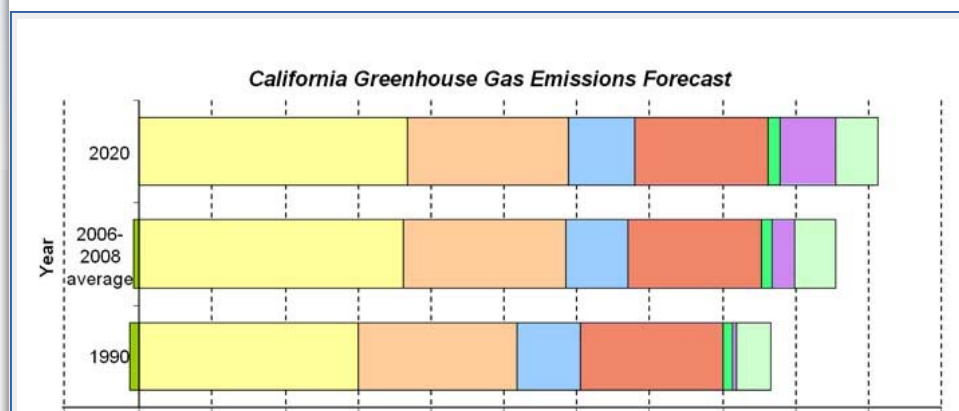
The forecast is an estimate of the emissions expected to occur in the year 2020 if none of [the foreseeable measures included in the Scoping Plan](#) were implemented. The base year used for forecasting emissions is the average of statewide emissions in the GHG inventory for 2006, 2007, and 2008; except for In-state electricity generation and industrial sources emitting >25,000 MTCO<sub>2</sub>e/year, for which 2008 data from ARB's GHG mandatory reporting program were used. Using the average of the last three years of known emissions dampens variations in any given year that may make it unsuitable as the basis for forecasting. For example, using a hot and dry year, with higher power consumption and less hydroelectric power generation as the forecasting base year, would skew the expected emissions associated with power generation.

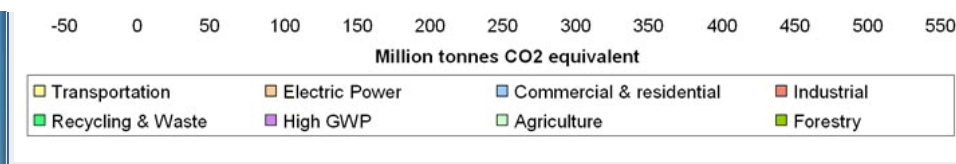
The 2020 greenhouse gas emissions forecast provides a baseline for the proposed [Cap-and-Trade \(C&T\) regulation](#). The forecast of total emissions expected in 2020 includes reductions anticipated from Pavley I and the RPS (38 MMTCO<sub>2</sub>e total). With these reductions in the baseline, the estimated [2020 statewide greenhouse gas emissions forecast](#) is 507 MMTCO<sub>2</sub>e.

### Links to forecasts and methods:

- [2020 GHG Emissions Forecast](#)
- [Data Sources, Methods, and Assumptions](#)
- [Emissions Reductions from Scoping Plan Measures](#)

### 2020 GHG Emissions Forecast





(Forecast last updated: 28 October 2010)

Forecast by Scoping Plan	
Categories	2020
Million tonnes of CO <sub>2</sub> equivalent	Emissions
<b>Transportation</b>	<b>183.9</b>
<i>On Road</i>	<b>168.1</b>
- Passenger Vehicles	127.0
- Heavy Duty Trucks	41.2
<i>Ships &amp; Commercial Boats</i>	<b>6.0</b>
<i>Aviation (Intrastate)</i>	<b>3.3</b>
<i>Rail</i>	<b>3.6</b>
<i>Unspecified</i>	<b>2.9</b>
<b>Electric Power</b>	<b>110.4</b>
<i>In-State Generation</i>	<b>56.8</b>
- Natural Gas	48.9
- Other Fuels	7.9
<i>Imported Electricity</i>	<b>53.5</b>
- Unspecified Imports	26.8
- Specified Imports	26.8
<b>Commercial and Residential</b>	<b>45.3</b>
<i>Residential Fuel Use</i>	<b>31.0</b>
- Natural Gas	28.9
- Other Fuels	2.1
<i>Commercial Fuel Use</i>	<b>13.9</b>
- Natural Gas	12.5
- Other Fuels	1.5
<i>Commercial Cogeneration Heat Output</i>	<b>0.4</b>
<b>Industrial</b>	<b>91.5</b>
<i>Refineries</i>	<b>35.0</b>
<i>General Fuel Use</i>	<b>14.8</b>
- Natural Gas	9.5
- Other Fuels	5.3
<i>Oil &amp; Gas Extraction</i>	<b>15.8</b>
- Fuel Use	15.0
- Fugitive Emissions	0.7
<i>Cement Plants</i>	<b>9.2</b>
- Clinker Production	5.6
- Fuel Use	3.6
<i>Cogeneration Heat Output</i>	<b>9.7</b>
<i>Other Process Emissions</i>	<b>7.0</b>

<b>Recycling and Waste</b>	<b>8.5</b>
<i>Landfills</i> <sup>1</sup>	8.5
<b>High GWP</b>	<b>37.9</b>
<i>Ozone Depleting Substance Substitutes</i>	36.1
<i>Electricity Grid SF6 Losses</i> <sup>2</sup>	1.0
<i>Semiconductor Manufacturing</i> <sup>1</sup>	0.8
<b>Agriculture</b>	<b>29.1</b>
<i>Livestock</i>	16.4
- Enteric Fermentation (Digestive Process)	8.7
- Manure Management	7.7
<i>Crop Growing &amp; Harvesting</i>	8.5
- Fertilizers	7.1
- Soil Preparation and Disturbances	1.4
- Crop Residue Burning	0.1
<i>General Fuel Use</i>	4.2
- Diesel	3.1
- Natural Gas	0.8
- Gasoline	0.4
- Other Fuels	0.0
<b>Forestry</b>	<b>0.2</b>
<i>Wildfire (CH4 &amp; N2O Emissions)</i>	0.2
<b>TOTAL GROSS EMISSIONS</b>	<b>506.8</b>
<b>Forestry Net Emissions</b>	<b>0.0</b>
<b>TOTAL NET EMISSIONS</b>	<b>506.8</b>

<sup>1</sup> These categories are under the Industrial Sector in ARB's GHG Emission Inventory

<sup>2</sup> This category is under the Electric Power Sector in ARB's GHG Emission Inventory