

What are the largest sources of global warming emissions in California?

The list is out

Paul Rogers, Bay Area News Group, 11-23-09

When it comes to global warming, California has started keeping score.

The state Air Resources Board last week finished tallying and made public the list of the largest greenhouse gas emitters in the state, and two East Bay refineries sit atop the list.

The first-of-its-kind rankings show that oil refineries, power plants and cement plants lead all industrial facilities statewide in pumping out carbon dioxide, a byproduct of burning fossil fuels that has been building up in the Earth's atmosphere in increasing concentrations.

The largest California emitter last year was the Chevron oil refinery in Richmond, which emitted 4.8 million metric tons of greenhouse gases. The Shell refinery in Martinez was second, with 4.5 million metric tons, followed by the BP and Chevron refineries in Carson and El Segundo, near Los Angeles. Rounding out fifth place was the Dynegy Power Plant at Moss Landing, a massive 1950s-era structure on the Monterey Bay that burns natural gas to create electricity for much of Northern California. The Valero Refinery in Benicia and the Tesoro Refinery in Martinez were seventh and eighth, respectively.

"This shows a commitment by California to move forward with real action to address climate change," said Stanley Young, a spokesman for the Air Resources Board. "We need accurate accounting to be sure we are getting the reductions that we are planning for."

All data were compiled and submitted by the facilities themselves. The accounting is required under Assembly Bill 32, the landmark global warming law Gov. Arnold Schwarzenegger signed in 2005.

Industrial sources and power plants make up 43 percent of California's greenhouse emissions, with transportation at 36 percent. A separate California law requires all new cars sold statewide to reduce greenhouse emissions 30 percent by 2016.

Environmentalists praised the reporting rules.

"What are the biggest emitters of greenhouse gases? It's important to know," said Jim Metropulos, a spokesman for Sierra Club California. "We should focus on the largest sources first. Spotlighting, transparency and holding people accountable are important."

The Air Resources Board worked to create uniform software for each industrial facility to tally its emissions. Verification by a third party — essentially a pollution accountant trained by the state — is also required under state law. Any industrial facilities that emit more than 25,000 metric tons a year of carbon dioxide or related greenhouse gases are required to report. In California last year, 605 facilities passed that threshold.

Five coal-burning power plants in Utah and Wyoming that sell electricity in California also are included, and topped all California industrial sources, including the Chevron Richmond refinery.

Young said the emissions totals will be used as a baseline as California prepares to launch a "cap and trade" market in 2012. Under such a market, which is used in Europe, companies are given a limit of the amount of pollution they can put out, and if they produce less, they can sell credits to other companies to help them meet their required amount.

A bill passed by the House in June and pending in the U.S. Senate would require similar mandatory greenhouse emissions limits and a trading market for the entire United States.

Oil industry officials said their facilities top the list because they use large amounts of natural gas to heat crude oil and convert it to gasoline, diesel and jet fuel — products Californians demand.

"We use about 45 million gallons of gasoline a day in California," said Tupper Hull, a spokesman for the Western States Petroleum Association. "It's easy to criticize refineries, but everyone forgets they produce the cleanest-burning gasoline on Earth and it is central to the economic vitality of the state."

Hull said that the oil industry already is working to make its facilities more efficient and investigating research into storing carbon dioxide underground. The industry, he added, also will participate in California's carbon trading market.

"The low-hanging fruit is to increase your efficiencies," he said. "Any time you can get more use out of natural gas, that will result in reduced greenhouse gas."

The top 10

- 1) Chevron Refinery "" Richmond: 4,792,052
- 2) Shell Oil Refinery "" Martinez: 4,570,475
- 3) BP Refinery "" Carson: 4,504,286
- 4) Chevron Refinery "" El Segundo: 3,603,446
- 5) Dynegy Power Plant "" Moss Landing: 2,962,149
- 6) Exxon Refinery "" Torrance: 2,852,374
- 7) Valero Refinery "" Benicia: 2,796,057
- 8) Tesoro Refinery "" Martinez: 2,703,145
- 9) Southern Calif. Edison-Mountainview Power Plant "" Redlands: 2,697,142
- 10) La Paloma Power Plant "" McKittrick: 2,544,398

Source: California Air Resources Board