

Joint Legislative Committee on Climate Change Policies

California Air Resources Board: Panel 3

June 14, 2017

CARB Mapping Tool

https://www.arb.ca.gov/ei/tools/pollution_map/

Facility Search Criteria Hide Reset

- Facility Search ARBID, name, address, sector, etc
- Emission Year Year: Choose Years x 2015
- Geographic Region Basin: Choose Air Basins District: Choose Air Districts County: Choose Counties City: Choose Cities Zipcode: Choose Zip Codes
- Primary Sector Sector: Choose Sectors
- Cap-and-Trade Covered in 2013? All
- Air Pollutant Pollutant: Choose Pollutants x CO₂E_TOTAL
- Emission Level (MT) CO₂E_TOTAL: [Slider]

California Environmental Protection Agency AIR RESOURCES BOARD CARB Pollution Mapping Tool

Handwriting Help

Adaptive Management GHG Emission Inventory REPORTED Emissions Data

Switch Theme Revert

Maps Charts Data Help Group by Facilities Map Layers Reset Maps Hide Markers Get Image Get Data

Search a Place or Business on the Map

Map Satellite

Map data ©2017 Google, INEGI 100 km Terms of Use

Emissions by Facility CO₂E_TOTAL (MT)

FACILITY	CO ₂ E_TOTAL (MT)
Tesoro Refining & Marketing Company LLC - Los Angeles Refinery - Carson	6,029,225
Chevron Products Company - Richmond Refinery, 94802	4,420,335
Shell Oil Products US - Martinez	4,131,880
Chevron Products Company - El Segundo Refinery, 90245	3,573,799
Aera Energy San Joaquin Basin	3,342,461
Chevron AAPG 745 San Joaquin Basin	3,139,861
Valero Refining Company - California, Benicia Refinery and Benicia Asphalt Plant	2,839,357
Southern California Edison (SCE) - Mountainview Generating Station	2,275,820
Berry Petroleum Company - San Joaquin Basin	2,143,958
La Paloma Generating Company, LLC	2,068,035
Southern California Gas Co - Aliso Canyon Facility	2,067,975
Phillips 66 Company - Los Angeles Refinery - Wilmington Plant	2,056,865
Tesoro Refining and Marketing Co - Martinez	2,056,107
California Resources Elk Hills, LLC - 35R Gas Plant	2,029,891
Cemex Construction Materials Pacific LLC - Victorville Plant	1,932,090
Calpine - Delta Energy Center, LLC	1,812,158
Calpine - Pastoria Energy Facility L.L.C.	1,778,765
Dynegy Moss Landing, LLC	1,657,629
ExxonMobil Oil Corporation - Torrance Refinery	1,524,766
Searles Valley Minerals Inc.	1,503,410
Sacramento Municipal Utility District (SMUD) - Cosumnes Power Plant	1,494,225
Hink Desert Power Project, LLC	1,442,685

CARB Pollution Mapping Tool (ver 1.1) questions? contact us

9:26 AM 6/12/2017

Data Presentation Features

Screenshot of the CARB Pollution Mapping Tool interface.

Facility Search Criteria:

- Facility Search: ARBID, name, address, sector, etc.
- Emission Year: Choose Years (2015 selected)
- Geographic Region: Air Basins, Air Districts, Counties, Cities, Zipcodes
- Primary Sector: Sectors (Refinery selected)
- Cap-and-Trade: Covered in 2013? (All selected)
- Air Pollutant: Pollutants (CO2E_TOTAL selected)
- Emission Level (MT): CO2E_TOTAL

Map Layers: Facilities, Map Layers (Search bar: Search a Place or Business on the Map).

Facilities Trend: GHG Emissions Trend (MT/year) for Tesoro Refining and Marketing Co. - Martinez.

YEAR	CO2	CH4	N2O	CO2E_TOTAL	CO2E_COVERED
2008	~2,800,000	~100,000	~100,000	~2,900,000	~2,900,000
2009	~2,600,000	~100,000	~100,000	~2,700,000	~2,700,000
2010	~2,400,000	~100,000	~100,000	~2,500,000	~2,500,000
2011	~2,500,000	~100,000	~100,000	~2,600,000	~2,600,000
2012	~2,400,000	~100,000	~100,000	~2,500,000	~2,500,000
2013	~2,600,000	~100,000	~100,000	~2,700,000	~2,700,000
2014	~2,500,000	~100,000	~100,000	~2,600,000	~2,600,000
2015	~2,400,000	~100,000	~100,000	~2,500,000	~2,500,000

Emissions by Facility:

FACILITY	CO2E_TOTAL (MT)
1. Alon Bakersfield Refinery - Area 3	0
2. Alon Bakersfield Refinery - Areas 1&2	31,340
3. Chevron Products Company - El Segundo Refinery, 90245	3,573,789
4. Chevron Products Company - Richmond Refinery, 94802	4,420,336
5. Edgington Oil Company	4
6. ExxonMobil Oil Corporation - Torrance Refinery	1,524,766
7. Geka Santa Maria Refinery	23,250
8. Kern Oil Refinery	148,056
9. Lunday-Thagard Company, DBA World Oil Refining	38,913
10. Paramount Petroleum Corporation Refinery	11,978
11. Phillips 66 Company - Los Angeles Refinery - Carson Plant	1,120,944
12. Phillips 66 Company - Los Angeles Refinery - Wilmington Plant	2,056,865
13. Phillips 66 Company - San Francisco Refinery	1,320,782
14. Phillips 66 Company - Santa Maria Refinery	207,243
15. San Joaquin Refining Company	95,900
16. Shell Oil Products US - Martinez	4,131,880
17. Tesoro Refining & Marketing Company LLC - Los Angeles Refinery - Carson	6,029,225
18. Martinez Refinery	2,056,107
19. Tricor Refining, LLC	25,419
20. Ultramar Inc - Valero Wilmington Refinery	858,937
21. Valero Refining Company - California, Benicia Refinery and Benicia Asphalt Plant	2,839,357
22. Valero Wilmington Asphalt Plant	12,202

Map: A map of California and Nevada showing facility locations and emissions trends. The map includes state and national forest boundaries, major cities like San Francisco, Los Angeles, and Las Vegas, and major roads. A callout box highlights the emissions trend for the Tesoro Refining and Marketing Co. - Martinez facility.

Community Emissions Calculator

Screenshot of the CARB Pollution Mapping Tool interface.

Facility Search Criteria:

- Facility Search: ARBID, name, address, sector, etc.
- Emission Year: Choose Years (2015 selected)
- Geographic Region:
 - Basin: Choose Air Basins
 - District: Choose Air Districts
 - County: Choose Counties
 - City: Choose Cities
 - Zipcode: Choose Zip Codes
- Primary Sector: Choose Sectors
- Cap-and-Trade: Covered in 2013? All
- Air Pollutant: Choose Pollutants (CO2E_TOTAL selected)
- Emission Level (MT): CO2E_TOTAL slider

Map View: Google map of the San Francisco Bay Area and surrounding regions, showing air quality zones and facility locations.

Toolbars and Buttons:

- climate CHANGE, Scoping Plan Implementation, Cap-and-Trade
- AR.B.GOV California Environmental Protection Agency AIR RESOURCES BOARD
- Adaptive Management, GHG Emission Inventory, REPORTED Emissions Data
- Handwriting, Help, Home, Star, Settings

Map Layers: Maps, Charts, Data, Help, Group by, Facilities, Map Layers, Reset Maps, Hide Markers, Get Image, Get Data.

Chart Overlay: Comparing GHG emissions (MT) and criteria emissions (ton) from 2008 to 2015.

YEAR	CO2	CH4	N2O	CO2E_TOTAL	CO2E_COV
2008	~10,000,000	~9,000,000	~6,000,000	~12,000,000	~4,500
2009	~9,500,000	~8,500,000	~5,500,000	~13,500,000	~4,000
2010	~9,000,000	~8,000,000	~5,000,000	~12,000,000	~3,500
2011	~8,500,000	~7,500,000	~4,500,000	~10,500,000	~3,000
2012	~8,000,000	~7,000,000	~4,000,000	~9,500,000	~2,500
2013	~7,500,000	~6,500,000	~3,500,000	~8,500,000	~2,000
2014	~7,000,000	~6,000,000	~3,000,000	~7,500,000	~1,500
2015	~6,500,000	~5,500,000	~2,500,000	~6,500,000	~1,000

Emissions by Facility:

FACILITY	CO2E_TOTAL (MT)
1 3M Corona	14,809
2 ABI Foundry	15,857
3 ACE Cogeneration	0
4 AES Alamitos, LLC	684,896
5 AES Huntington Beach, LLC	432,210
6 AES Redondo Beach LLC	318,370
7 Aemetis Advanced Fuels Keyes, Inc.	69,826
8 Aera Energy Belridge Gas Plant 32	33,441
9 Aera Energy Coastal Basins	231,065
10 Aera Energy San Joaquin Basin	3,342,461
11 Aera Energy Ventura Basin (opt-in 2014)	12,976
12 Aera Energy Ventura Gas Plant	4,923
13 Aerojet Rocketdyne	9,511
14 Air Liquide El Segundo Hydrogen Plant	552,487
15 Air Liquide Large Industries US L.P. - Rodeo Hydrogen Plant	819,886
16 Air Products & Chemicals, Inc., Martinez	196,728
17 Air Products Carson Hydrogen Plant	673,014
18 Air Products Manufacturing Corporation, Sacramento	44,205
19 Air Products Wilmington Hydrogen Plant	633,296
20 Algonquin Power Sanger, LLC	58,207
21 All American Asphalt - Corona	12,783
22 All American Asphalt Irvine	10,406
23 All American Oil and Gas Company	173,969
24 Allergan	9,080
25 Alon Bakersfield Refinery - Area 3	0
26 Alon Bakersfield Refinery - Areas 1&2	31,340
27 AltaGas Pomona Energy Inc (San Gabriel Cogeneration Facility)	53,742
28 AltaGas Ripon Energy Inc.	24,547
29 Ameresco Chiquita Energy LLC	33,279
30 Ameresco Forward LLC	16,644
31 Ameresco Half Moon Bay	45,483

AB 197 Analyses Summary for 2030

- Social Cost of Carbon - Avoid economic damages in 2030 from the implementation of the Scoping Plan: \$2,400 - \$11,000 million dollars
- In the proposed Scoping Plan, ARB has attempted to estimate the air quality cobenefits of Scoping Plan measures per the requirements of AB 197.
- This estimation is an ongoing process which needs further work and ARB is working to refine these estimates moving forward.

Additional Information

- Scoping Plan

<http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm>

- Cap-and-Trade Program

<http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm>

- Mapping Tool

https://www.arb.ca.gov/ei/tools/pollution_map/pollution_map.htm