

PETROLEUM WATCH

CALIFORNIA ENERGY COMMISSION

INSIDE

REFINERY NEWS

[Gasoline Retail Prices by Brand](#)

[Diesel Retail Prices by Region](#)

Product Highlight:
[Estimated Gasoline Price Breakdown and Margins Dashboard](#)

Phillips 66 Wilmington:

On February 25, the refinery experienced unplanned flaring, resulting in multiple stops and starts of operations during the week. Potential release of sulfur dioxide vapor into the atmosphere may have occurred as well. The issue was the result of a power outage in the area (CalOES).

CALIFORNIA GASOLINE RETAIL PRICES BY BRAND

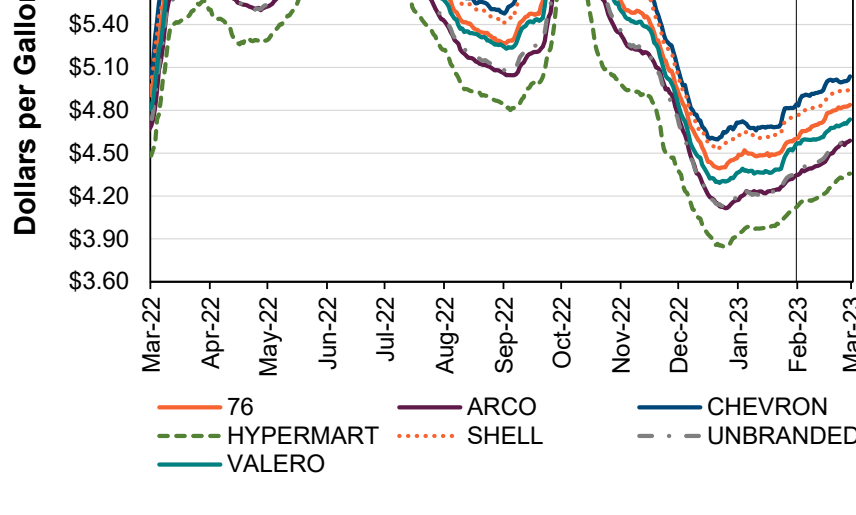
February 2023 vs. 2022

(Percentage Change)

76	1% lower
ARCO	2% lower
Chevron	0% no change
Hypermart	3% lower
Shell	0% no change
Unbranded	2% lower
Valero	1% lower

February 2023 Averages

76	\$4.74
ARCO	\$4.46
Chevron	\$4.96
Hypermart	\$4.24
Shell	\$4.87
Unbranded	\$4.49
Valero	\$4.64



Source: California Energy Commission (CEC) analysis of Oil Price Information Service (OPIS) data

CALIFORNIA DIESEL RETAIL PRICES BY REGION

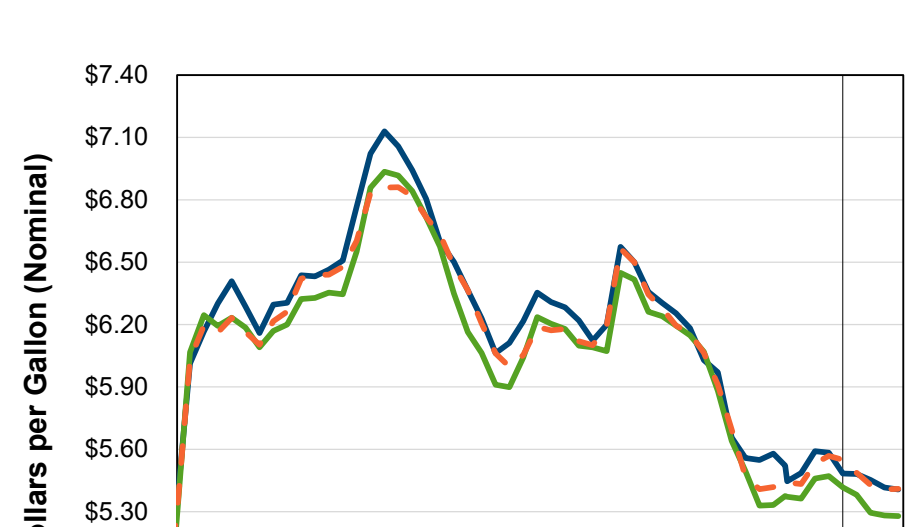
February 2023 vs. 2022

(Percentage Change)

Northern CA	9% higher
Central CA	8% higher
Southern CA	10% higher

February 2023 Averages

Northern CA	\$5.48
Central CA	\$5.37
Southern CA	\$5.49



Source: CEC analysis of OPIS data

PRODUCT HIGHLIGHT: ESTIMATED GASOLINE PRICE BREAKDOWN AND MARGINS

Under the Petroleum Industry Information Reporting Act (PIIRA) reporting, most petroleum industry companies are required to submit weekly, monthly, and annual data to the CEC. In addition, the CEC purchases daily pricing at wholesale racks in California from the Oil Price Information Service (OPIS). Wholesale rack prices are important to the cost breakdown of a gallon of gasoline. "Wholesale rack" is the price of finished gasoline at bulk volume after refining, but before transporting to a gas station.

The eight components of total cost for a gallon of gasoline are listed below.

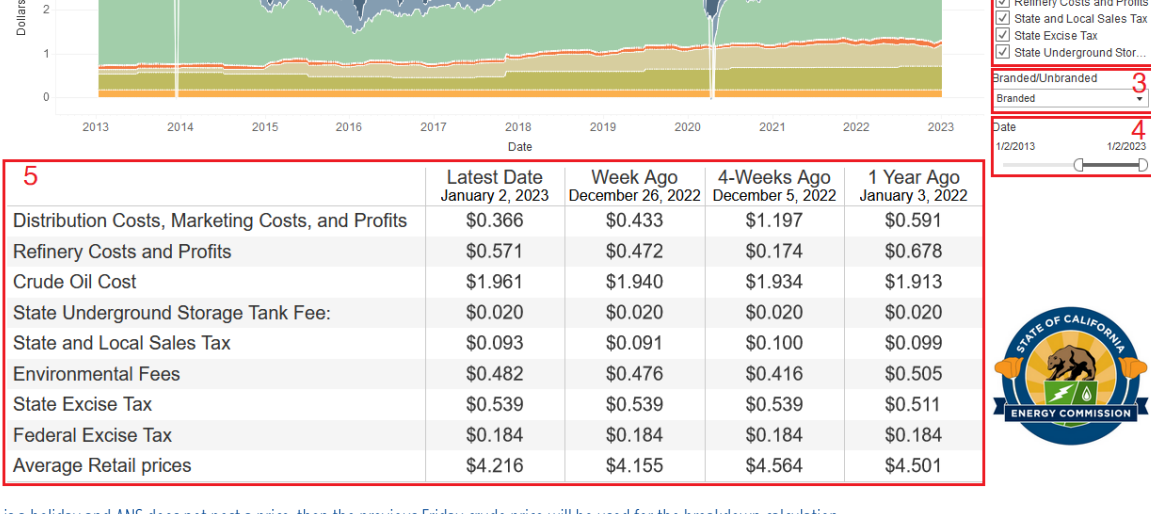
Previously, the Estimated Gasoline Price Breakdown and Margins web page had postings of two previous Monday cost breakdowns with unbranded and branded, along with a downloadable Excel file of all data since 1999. Now, the new gasoline margin web page has a dashboard that shows a graph of the components of the total cost for a gallon of gasoline. Using the sidebar on the dashboard, those cost, tax,

and profits prices are displayed with selected colors (1) and prices can be added/removed (2) to display on the graph. Users of the dashboard have the option of switching between unbranded and branded (3) retail breakdown. The dashboard includes data from January 1999 to present and users can modify the date range displayed by using the date slider bar (4). The table (5) is also new, and it compares the previous week, 4-week ago, and one year ago prices to the latest Monday price.

COMPONENTS OF TOTAL COST

- Distribution Costs, Marketing Costs, and Profits:** The costs associated with the distribution from terminals to stations and retailing of gasoline, including but not limited to franchise fees, and/or rents, wages, utilities, supplies, equipment maintenance, environmental fees, licenses, permitting fees, credit card fees, insurance, depreciation, advertising, and profit.
- Refinery Costs and Profits:** The costs associated with refining and terminal operations, crude oil processing, oxygenate additives, product shipment and storage, oil spill fees, depreciation, purchases of gasoline to cover refinery shortages, brand advertising, and profits.
- Crude Oil Costs:** The daily market price of Alaska North Slope (ANS) crude oil, which is used as a proxy for this composite crude oil acquisition cost for California refineries.
- State Underground Storage Tank Fee:** The state underground storage tank fee is currently 2.0 cents per gallon.
- State and Local Sales Tax:** An average state sales tax rate of 2.25% percent is used in the calculation of the distribution margin, although the actual sales tax rate does vary throughout California.
- Environmental Fees:** 4-Week Average of associated Low Carbon Fuel Standard (LCFS) and Cap and Trade Costs as reported in the wholesale rack prices from OPIS.
- State Excise Tax:** The California state excise tax is currently 53.9 cents per gallon.
- Federal Excise Tax:** The federal excise tax is currently 18.4 cents per gallon.

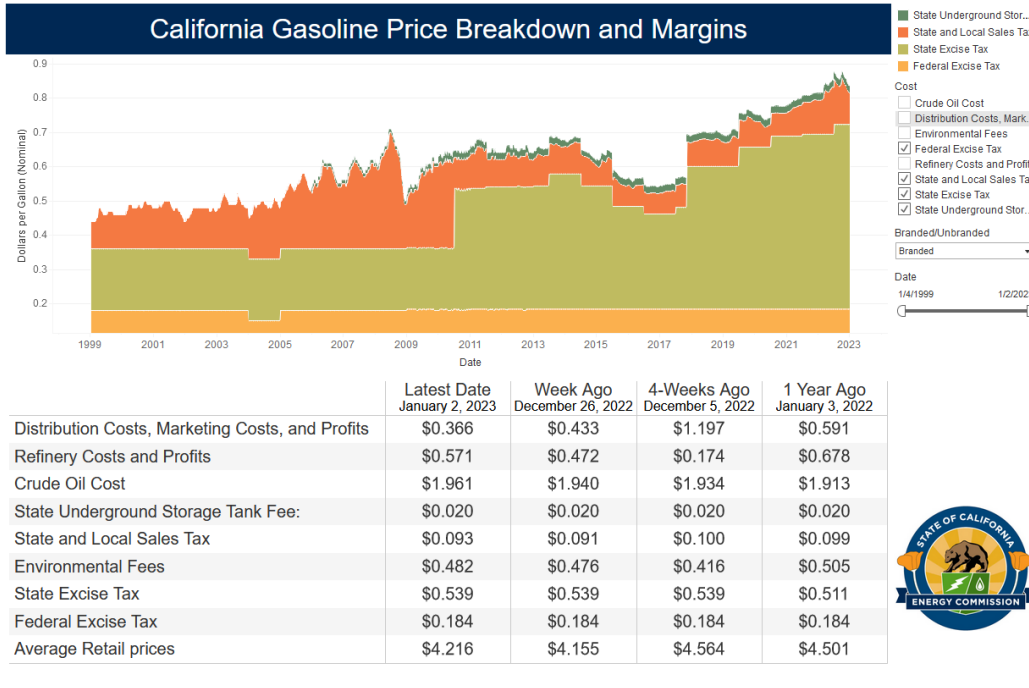
PRODUCT OVERVIEW



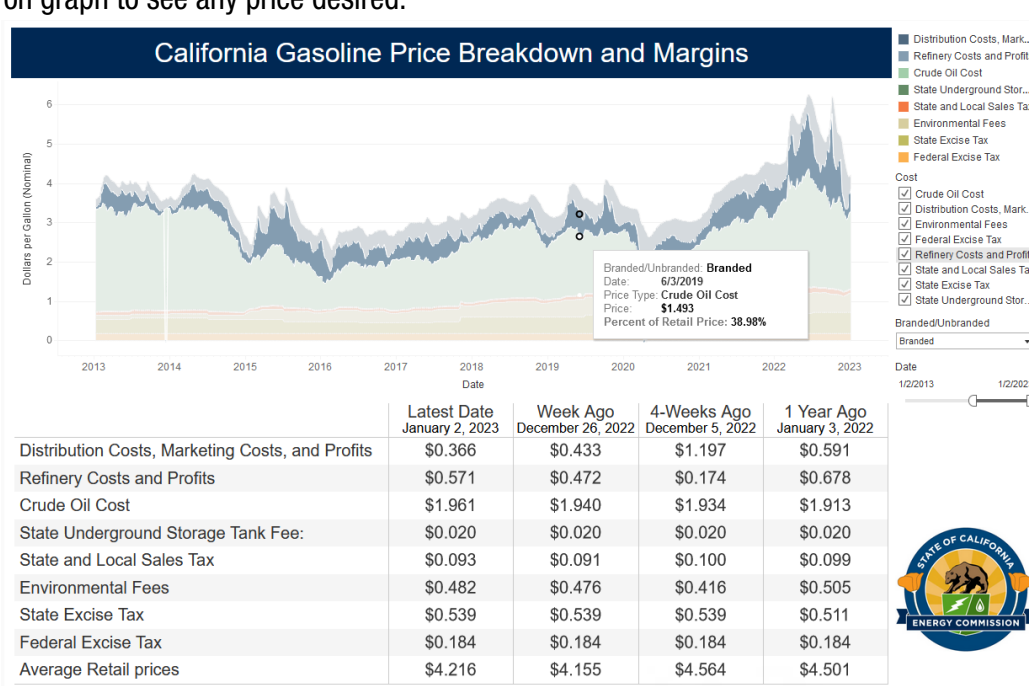
Note: When Monday is a holiday and ANS does not post a price, then the previous Friday crude price will be used for the breakdown calculation.

QUICK TIPS FOR ANALYSIS

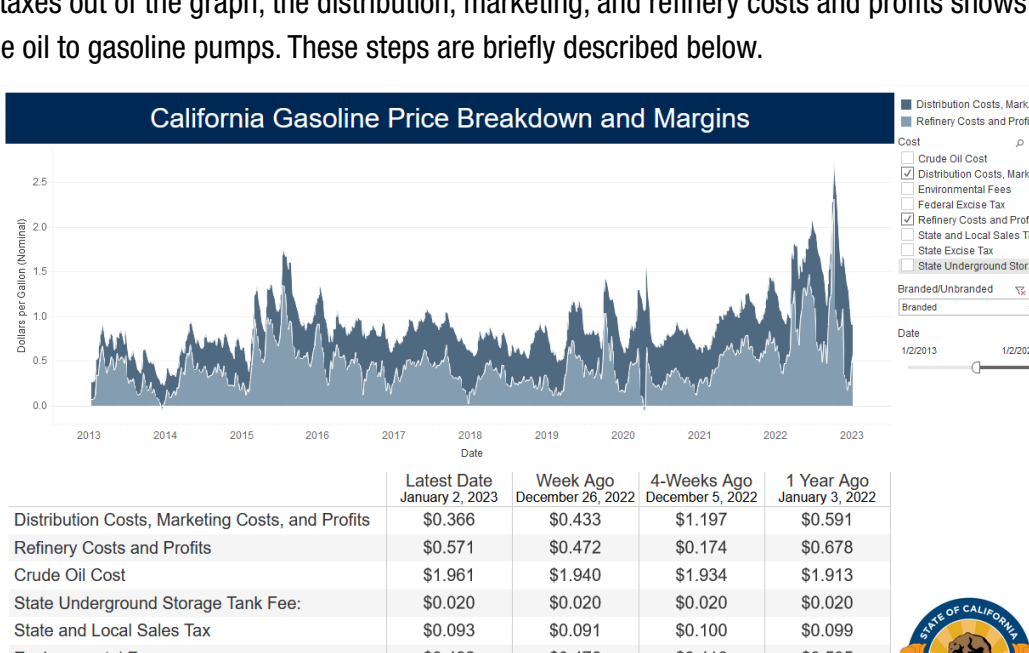
Total Taxes - Unselecting all non-taxes checkboxes makes it easier to find when and how much taxes have changed. As shown on the graph below, the State Excise Tax increased 17.3 cents, from 18 cents to 35.3 cents, in July 2010. At the same time, California's gasoline tax decreased from 8.25 percent to 2.25 percent and roughly offset that increase for total tax on gasoline. This also shows that State Excise Tax is the largest factor of gasoline taxes after July 2010.



Interactive Graph - Using the mouse pointer, the user can hover over the graph to see information at any price point. The information will show the date, price, price type, percentage of the retail average price, and whether branded or unbranded. Clicking on the refinery costs and profits, illustrated below, will lighten all other prices on graph. The user has the tools to click on graph to see any price desired.



Retail and Refinery Costs and Profits - Retail gasoline cost may increase and decrease depending on crude oil cost, production of gasoline (as show on the weekly fuels watch dashboard), and capability of California refineries. By taking crude oil and all taxes out of the graph, the distribution, marketing, and refinery costs and profits shows how much it costs to get crude oil to gasoline pumps. These steps are briefly described below.



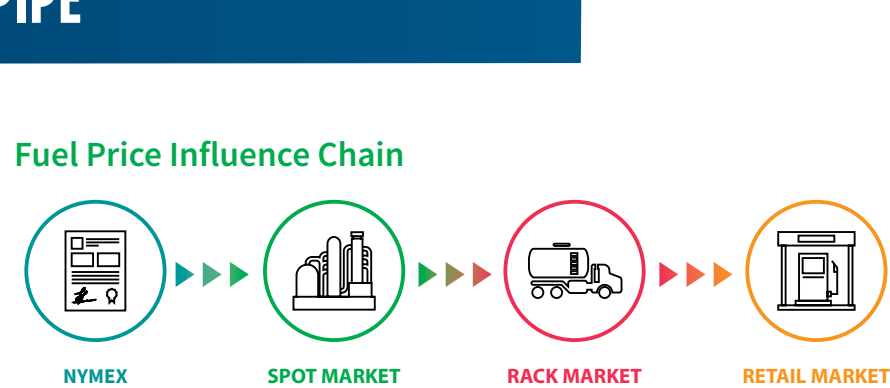
FUEL PRICE DOWN THE PIPE

Starting from the New York Mercantile Exchange (NYMEX), buyers and sellers negotiate the transfer of crude oil, natural gas, ultra-low-sulfur diesel, and other gasoline blendstocks.

These deals are contracts for future delivery between a month and 18 months in the future. The future contract price may be determined by currency market moves, geopolitical situations, supply reports, refinery health, weather events around the globe, and Organization of Petroleum Exporting Countries (OPEC) decisions.

There are seven U.S. spot markets where fuel is physically traded on the spot to be picked up at rack locations: San Francisco, Los Angeles, Pacific Northwest, Gulf Coast, Chicago, New York Harbor, and Group 3 (Tulsa, Oklahoma). These deals are through pipelines or on the water from a minimum of 5,000 barrels (210,000 gallons) up to 50,000 barrels (2.1 million gallons). Fuel prices are based on the NYMEX price and then set

Fuel Price Influence Chain



either higher or lower, known as the spot differential. The spot differential may determine how the market is reacting in the current fuel market. For example, a refinery outage can raise the spot price because fuel may be limited in the future.

The rack market, or wholesale rack, are smaller volumes, around 8,000 gallons, which can be purchased by jobbers, retailer, and end users. This fuel is transferred via pipeline from refineries to wholesale rack locations. OPIS reports that there are a total of 400 racks in the

United States. In California, there are **21 gasoline rack locations**.

The retailer is where end users go to retail markets or gas stations to refuel. In 2021, there were an estimated **10,423 retail fuel outlets in California**. Retail prices at this point vary by branded or unbranded fuel stations. Market and distribution costs may be a part of retail prices.

Visit our website for more information about [California's Petroleum Market](#).

The CEC welcomes feedback on Petroleum Watch. Please contact Media and Public Communications Office at mediaoffice@energy.ca.gov