

PETROLEUM WATCH

CALIFORNIA ENERGY COMMISSION

INSIDE

REFINERY NEWS

Gasoline Retail Prices by Brand

Diesel Retail Prices by Region

Product Highlight:

Weekly Fuels Watch Dashboards

• No news to report

CALIFORNIA GASOLINE RETAIL PRICES BY BRAND

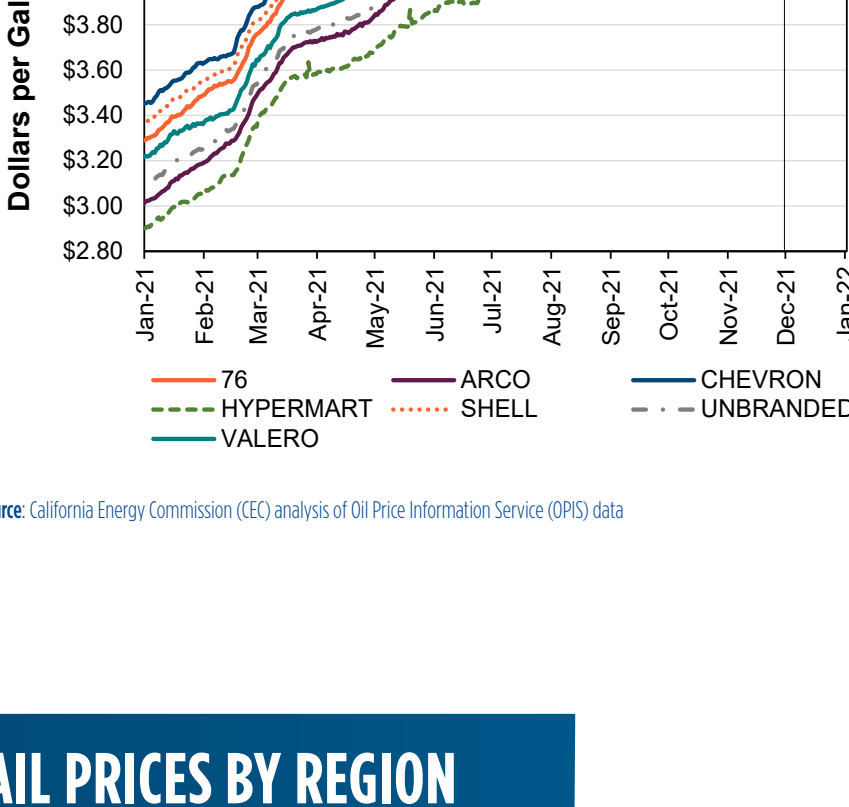
December 2021 vs. 2020

(Percentage Change)

76	46% higher
ARCO	52% higher
Chevron	43% higher
Hypermart	50% higher
Shell	44% higher
Unbranded	48% higher
Valero	46% higher

December 2021 Averages

76	\$4.73
ARCO	\$4.51
Chevron	\$4.86
Hypermart	\$4.28
Shell	\$4.80
Unbranded	\$4.53
Valero	\$4.66



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

CALIFORNIA DIESEL RETAIL PRICES BY REGION

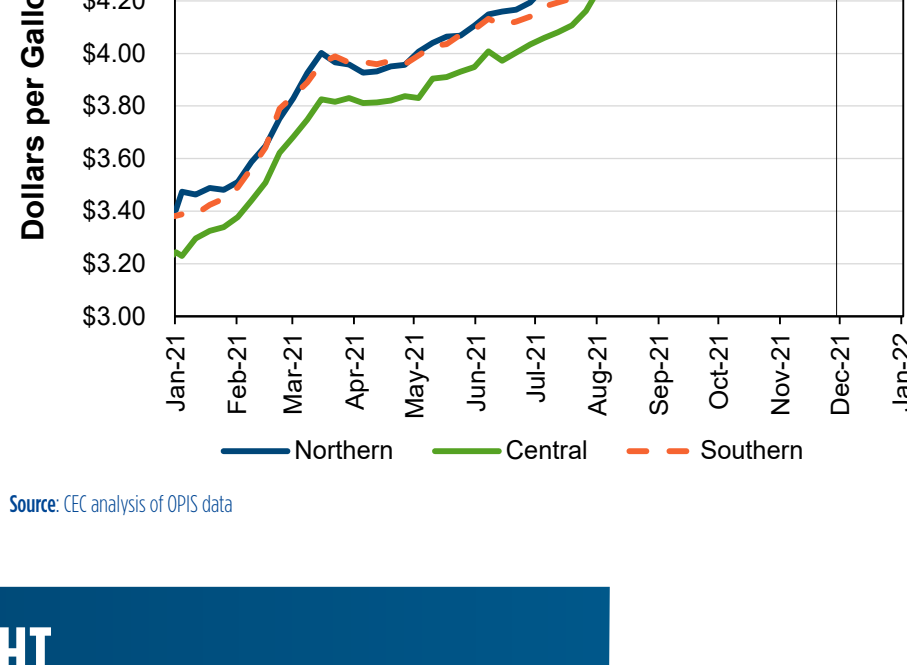
December 2021 vs. 2020

(Percentage Change)

Northern CA	42% higher
Central CA	47% higher
Southern CA	43% higher

December 2021 Averages

Northern CA	\$4.79
Central CA	\$4.67
Southern CA	\$4.73



Source: CEC analysis of OPI data

CEC PRODUCT HIGHLIGHT

WEEKLY FUELS WATCH DASHBOARDS

The California Energy Commission (CEC) provides weekly data on refinery production and inventory in California. This data is collected under the Petroleum Industry Reporting Act (PIIRA). PIIRA requires qualifying petroleum industry companies to submit weekly, monthly, and annual data to the CEC. Analysis of data collected under PIIRA is an important part of the CEC's responsibility to create a thorough understanding of the operations of the petroleum industry in California.

The information also helps develop and assess energy policies in the interest of the state's economy and the public's well-being.

WHAT'S NEW?

There are two new Weekly Fuels Watch dashboards: Refinery Inputs and Production and Refinery Stocks. The former Weekly Fuels Watch report consisted of a table containing data on the current week, previous week, and one year ago, along with PDF charts that were a one-year timespan. The new dashboards report the same information, but provide

a complete history of data (since 2005) with the functionality to:

- Compare current data with historic data (15 years)
- View every product type regionally (Northern California and Southern California)
- View products individually or compare multiple products in one graph view
- Apply additional visualization analysis like moving average and percentile ranges

Below is an overview of these features.

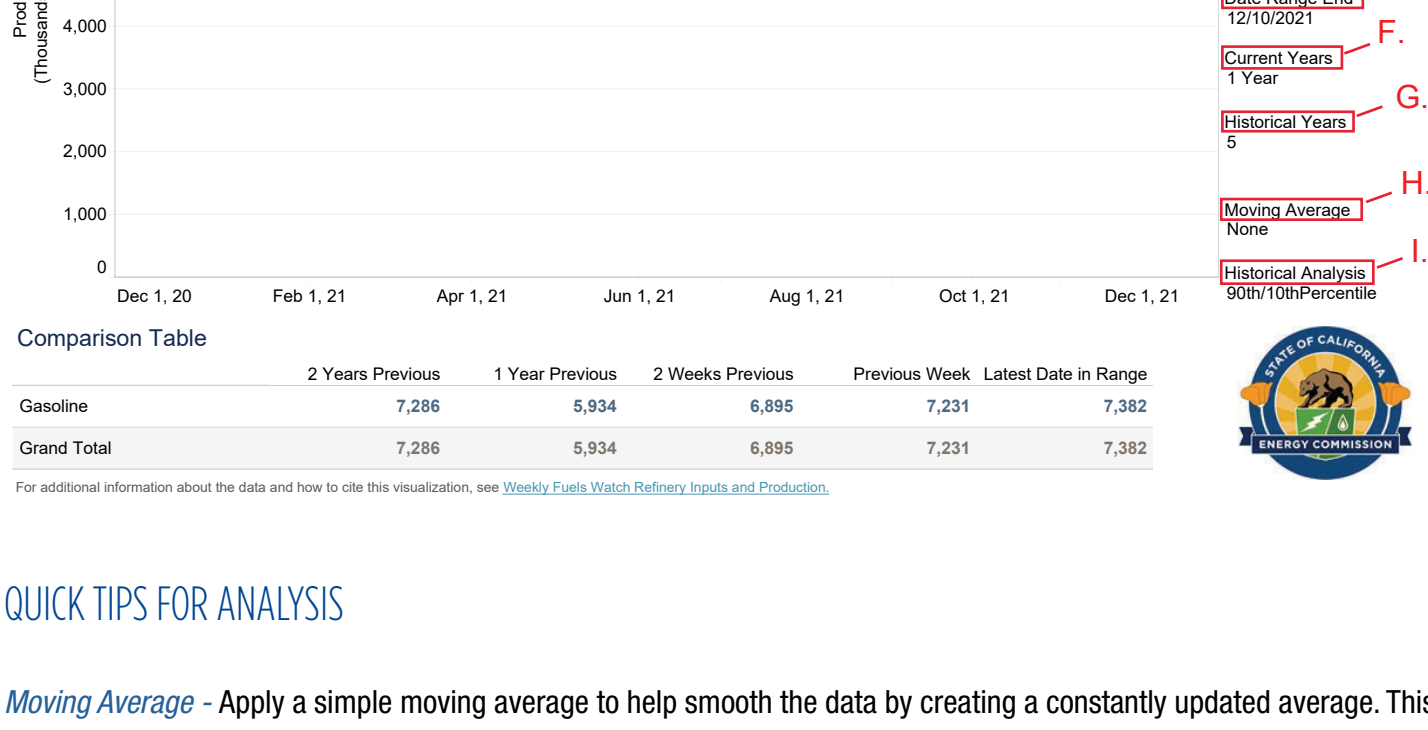
To view the dashboards, please visit the [Weekly Fuels Watch webpage](#).

FEATURES

- A. Product category:** crude oil, gasoline, diesel, jet fuel, residual
- B. Product type:** crude oil, CARB (California Air Resources Board) reformulated gasoline, non-California gasoline, CARB diesel, other diesel fuel, jet fuel, residual, gasoline blending components*
- C. Level of detail:** fuel category, fuel type, region
- D. Region:** Northern California, Southern California
- E. Date-range end:** the latest date on the x-axis of the chart or latest date in range on the table; all dates fall on a Friday
- F. Current years:** the range of years on the x-axis of the chart; available in 1, 2, or 5 year time span
- G. Historical years:** the range of historical years for the specified week shown in the shaded bands on the chart; available in odd increments from 5 to 15 years
- H. Moving average:** analysis applied to current and historical data in two, three, or four-week averages on the chart
- I. Historical analysis:** analysis applied to historical year ranges; available in maximum and minimum historical values for the current week, or the 90th and 10th percentile historical values for the current week

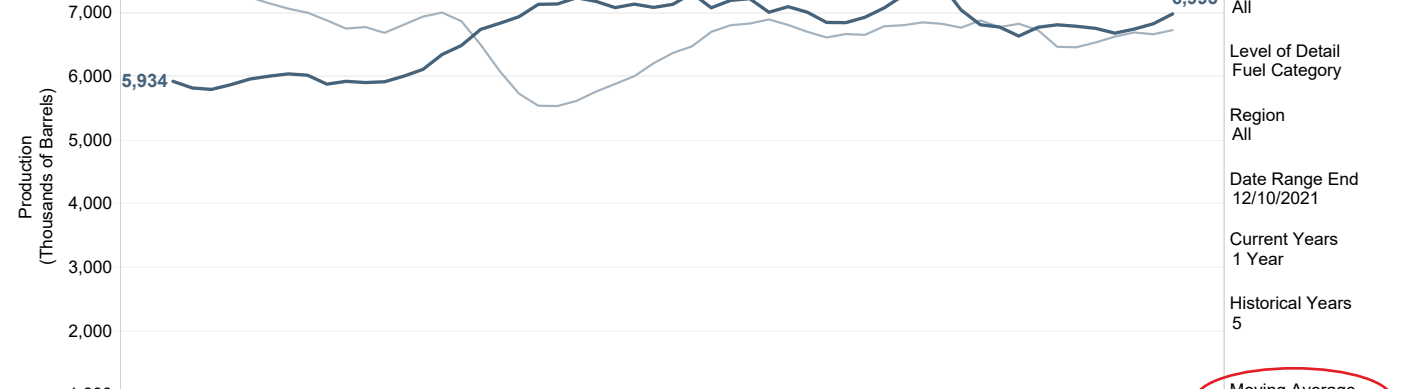
*Note: Gasoline blending components are only included in the stocks dashboard because they are used for blending into finished gasoline and are not produced by refineries.

California Refinery Inputs and Production

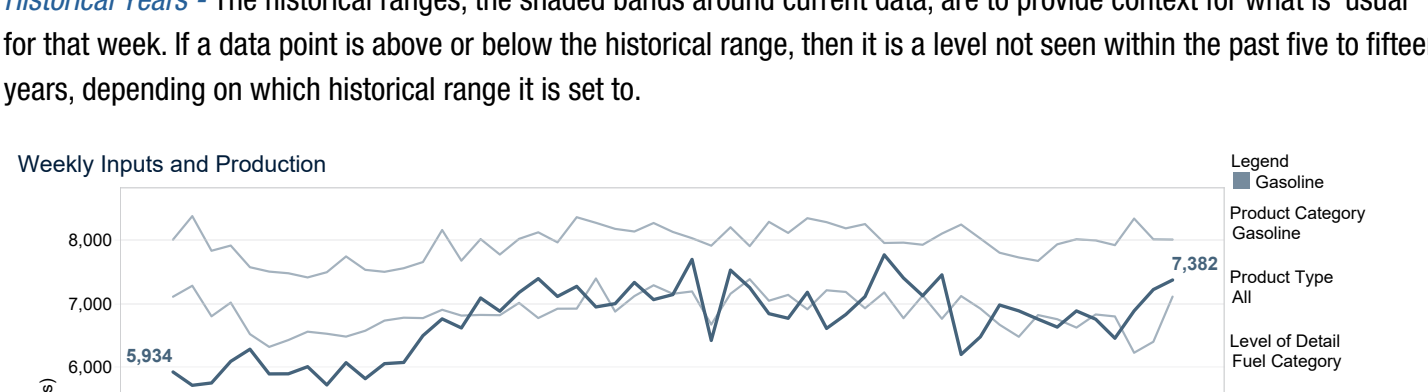


QUICK TIPS FOR ANALYSIS

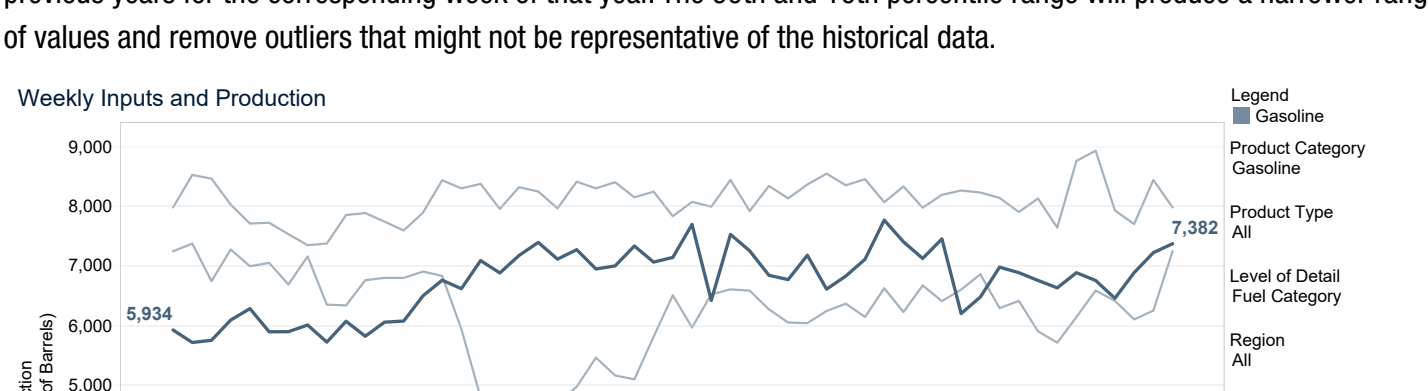
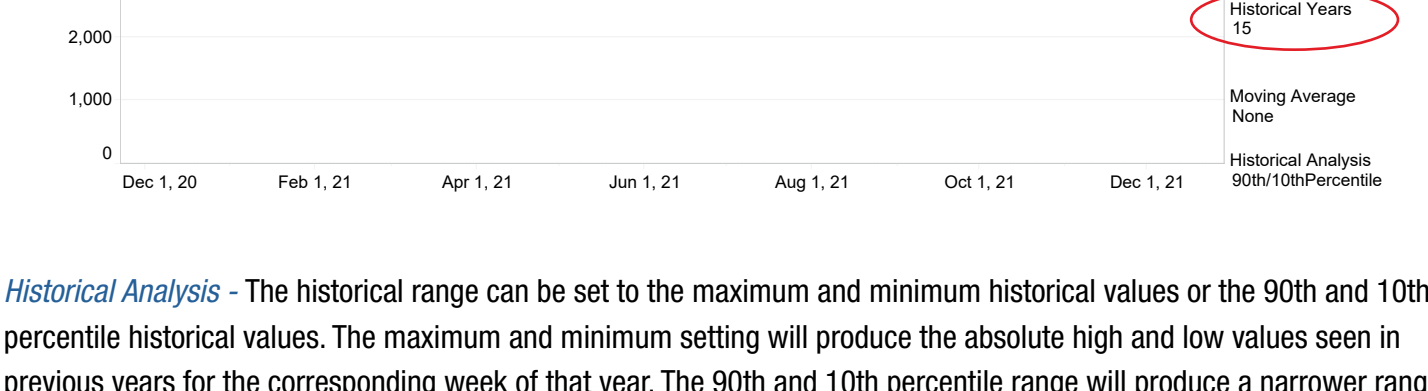
Moving Average - Apply a simple moving average to help smooth the data by creating a constantly updated average. This makes it easier to see trends by resisting temporary ups and downs (also known as data noise). Averaged values better visualize the center of the data.



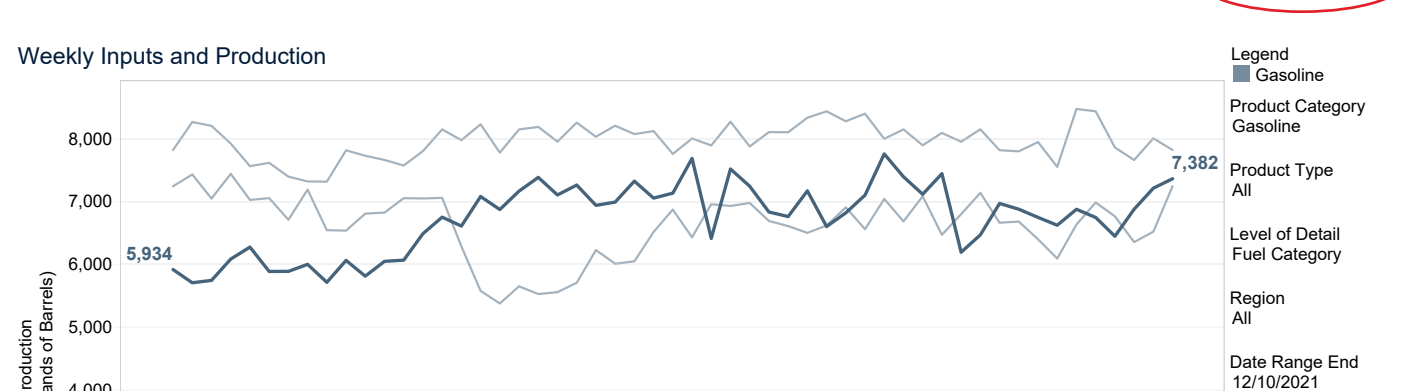
Historical Years - The historical ranges, the shaded bands around current data, are to provide context for what is 'usual' for that week. If a data point is above or below the historical range, then it is a level not seen within the past five to fifteen years, depending on which historical range it is set to.



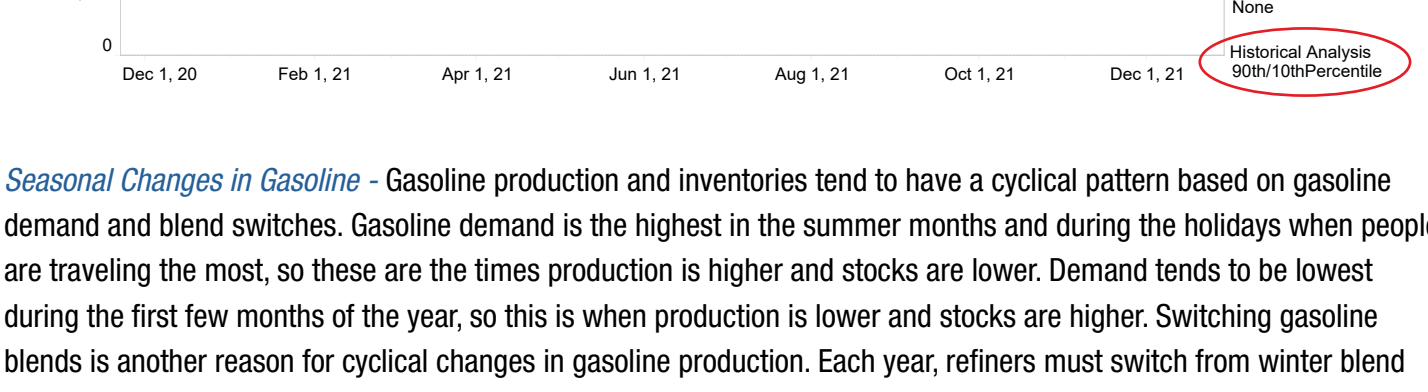
Historical Analysis - The historical range can be set to the maximum and minimum historical values or the 90th and 10th percentile historical values. The maximum and minimum setting will produce the absolute high and low values seen in previous years for the corresponding week of that year. The 90th and 10th percentile range will produce a narrower range of values and remove outliers that might not be representative of the historical data.



Seasonal Changes in Gasoline - Gasoline production and inventories tend to have a cyclical pattern based on gasoline demand and blend switches. Gasoline demand is the highest in the summer months and during the holidays when people are traveling the most, so these are the times production is higher and stocks are lower. Demand tends to be lowest during the first few months of the year, so this is when production is lower and stocks are higher. Switching gasoline blends is another reason for cyclical changes in gasoline production. Each year, refiners must switch from winter blend gasoline to summer blend gasoline that has different properties to keep it from evaporating in the warmer summer months. This switch requires process units to be shut down, resulting in temporary decreased production. For more information on gasoline blends refer to [September 2020 Petroleum Watch](#).



Week-Over-Week Changes in Diesel - Often there are large percent increases or percent decreases in week-over-week diesel production. This has to do with out-of-state diesel exports. In Northern California, these changes are related to foreign exports. In Southern California, these changes are related to pipeline exports to Las Vegas and Phoenix. For more information on out-of-state exports refer to [March 2020 Petroleum Watch](#) and [August 2021 Petroleum Watch](#).



ABOUT THE DATA

The Weekly Fuels Watch report uses aggregated weekly refinery data. The data is collected from three weekly forms: EIA 800, CEC W800, and CEC W08. The EIA 800 is the federal government form distributed by the Energy Information Administration (EIA), while the CEC W800 and CEC W08 are state government forms distributed by the CEC.

The CEC W800 looks at California specific fuels, which are subject to different fuel standards than U.S. standards. The CEC W08 is used for collecting information from terminals in California. Terminals are bulk tank or storage facilities that provide storage for 50,000 barrels or more of any combination of crude oil, petroleum products, or oxygenates during any month of the year.

The complete list of refineries and terminals included in the report is listed on our [website](#). The reporting period for the weekly forms is Friday 12:00 a.m. to Thursday 11:59 p.m. Pacific Time (PT). New data is published to the dashboards every Wednesday.

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.

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