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STAFF REPORT

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ABSTRACT

California Public Resources Code Section 25358 requires the California Energy Commission (CEC) to prepare a report every quarter that summarizes and analyzes petroleum industry supply, production, transportation, delivery and distribution, demand, and prices. This report looks at information collected by the CEC through the Petroleum Industry Information Reporting Act of 1980 and the associated regulations for analyzing trends in liquid fuel production, storage, and distribution. CEC staff developed new metrics using these data to help better inform the California public on the operations of the liquid transportation fuels supply chain. In addition, staff analyzed other data sources to provide a more comprehensive discussion of California's liquid transportation fuel issues.

Topics included in this report:

- California, United States, and world crude oil prices
- Inventories of crude oil at California refineries
- Quantity of crude oil processed at California refineries
- Production of liquid transportation fuels
- Inventories of liquid transportation fuels
- Prices of liquid transportation fuels
- Import and export volumes of liquid transportation fuels for California

Keywords: California Energy Commission, transportation, gasoline, petroleum, diesel, liquid fuels

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EXECUTIVE SUMMARY

This report describes the trends and relevant issues faced by California's liquid transportation fuels market. Using information from the Petroleum Industry Information Reporting Act of 1980 and associated data collection regulations, as well as from public and proprietary sources, California Energy Commission (CEC) staff details the flows of liquid fuels and volumes of the product that is being moved and produced in California. The following are key observations of market activity in the last quarter:

Crude Oil

- Crude oil prices for the various benchmarks, Brent North Sea, West Texas Intermediate, and California estimated refinery acquisition cost, declined over the quarter from the peak of early July, which witnessed second highest benchmark prices in 2024.
- California estimated refinery acquisition costs ended the third quarter nearly 18 percent lower than they started, ending at \$68.22 per barrel.
- Crude oil inputs remained steady over the quarter while inventories increased to 13.6 million barrels.

Gasoline

- Production started the first week of the quarter at 5.5 million barrels and ended the last week of the quarter at 5.0 million barrels.
- Inventories started the first week of the quarter at 10.4 million barrels and ended the last week of the quarter at 9.4 million barrels.
- Lower crude oil prices reduced refinery crude acquisition costs and helped decrease retail prices, averaging \$0.52 per gallon less than the previous quarter.
- Lower crude oil prices also helped increased refiner margins, growing from \$0.51 per gallon in July to \$0.60 in August to \$0.80 in September.
- Gasoline prices declined from July to September, increased during the first half of September, then declined again to end the third quarter. This is different from the past two years when gas prices increased throughout the summer and peaked in late September.

Diesel

- Diesel production and inventories varied through the third quarter, but ended lower than they began, at 981,000 barrels per week and 1.7 million barrels, respectively.
- Diesel prices declined through the quarter, with a slight increase during the beginning of September. The slight increase is typical behavior as diesel consumption is usually highest during harvest season, which puts upward pressure on prices.
- The overall trend of lower diesel prices illustrates the effect lower crude oil prices have on the price of finished petroleum products.

CHAPTER 1:

Crude Oil

This chapter discusses crude oil market data changes for the quarter, including international and national prices, monthly production at California refineries, volume of crude oil stored at refineries, volume of crude oil used at refineries (referred to as “inputs”), and the movement of crude oil using data collected under Public Resources Code section 25354 (a) and (f), and Public Resources Code section 25357.

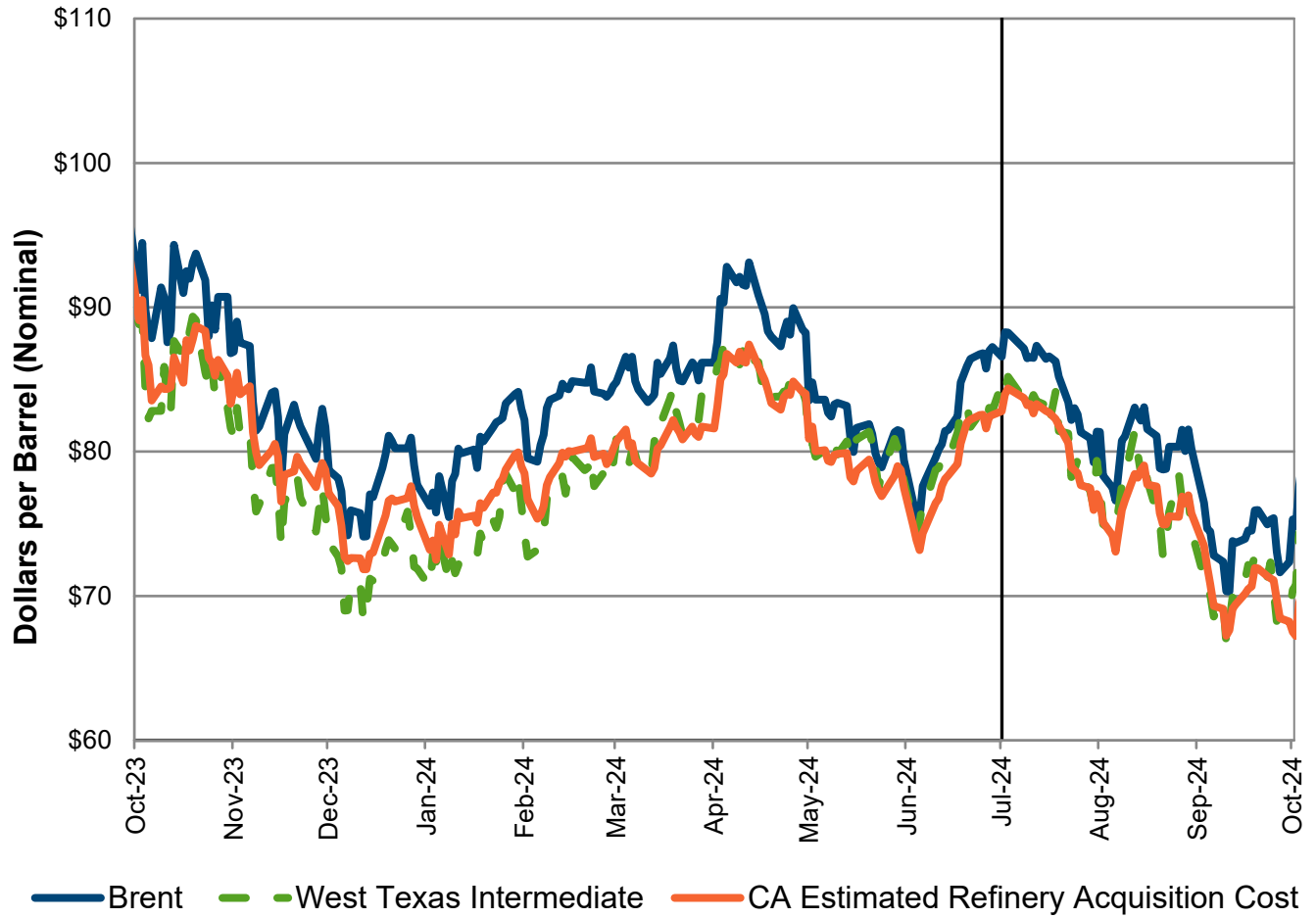
Prices

Figure 1 shows the daily West Coast spot crude oil prices for Brent North Sea (Brent), West Texas Intermediate (WTI), and the California estimated refinery acquisition cost (CA-RAC). Brent crude oil, an international benchmark, is the best surrogate price for foreign sources of crude oil processed at California refineries. WTI is included as it is the domestic benchmark. The CA-RAC is a weighted average of the prices of California (San Joaquin Valley) crude, Alaskan crude, and foreign crude. California crude continued trading lower than WTI during the third quarter, which helped maintain a lower price for CA-RAC compared to Brent. Near the end of the quarter, WTI trended downward as Brent trended upward.

For the third quarter of 2024:

- The Brent price started the third quarter at \$86.57 per barrel and ended the third quarter at \$72.35, with a peak price of \$88.28 on July 2. In the first month of the quarter, Brent trended downward with price spikes in August followed by a large drop heading into September.
- The WTI price started the third quarter at \$84.70 and ended at \$68.75, with a peak price of \$85.19 on July 3. The average difference between WTI and Brent crude was \$3.54 for the third quarter and ranged between \$1.61 and \$6.01.
- The CA-RAC price started the third quarter at \$82.79 and ended at \$68.22, with a peak price of \$84.40 on July 3. The average difference between CA-RAC and Brent crude was \$3.81 for the third quarter and ranged between \$2.61 and \$4.86.

Figure 1: Daily Spot Crude Oil Prices



Note: Black vertical line on graphs indicates end of previous quarter's data. Areas to the right indicate new data since last quarter.

Source: U.S. Energy Information Administration (EIA), Oil Price Information Service (OPIS)

Monthly Production

Figure 2 below shows the monthly crude oil production as reported by the State Oil and Gas Supervisor. Monthly production during the third quarter of 2024 was 9.4 million, 9.5 million, and 9.1 million barrels, for July, August, and September, respectively. Crude oil production was lower by 2.8 million barrels compared to the third quarter of 2023 (30.8 million barrels). Total production in the third quarter of 2024 was 28.0 million barrels, the same total production as during the second quarter of 2024.¹ The year-over-year decreases observed in Figure 2 illustrate California's continued crude oil production decline. California crude oil production has been in steady decline since 1985.² This decline is due to the geological properties of the crude, the age of the wells, and the associated production costs.³ While in-state production has declined, the percent of crude oil from California oil fields processed by California refineries during 2024 has stayed similar to 2023.⁴

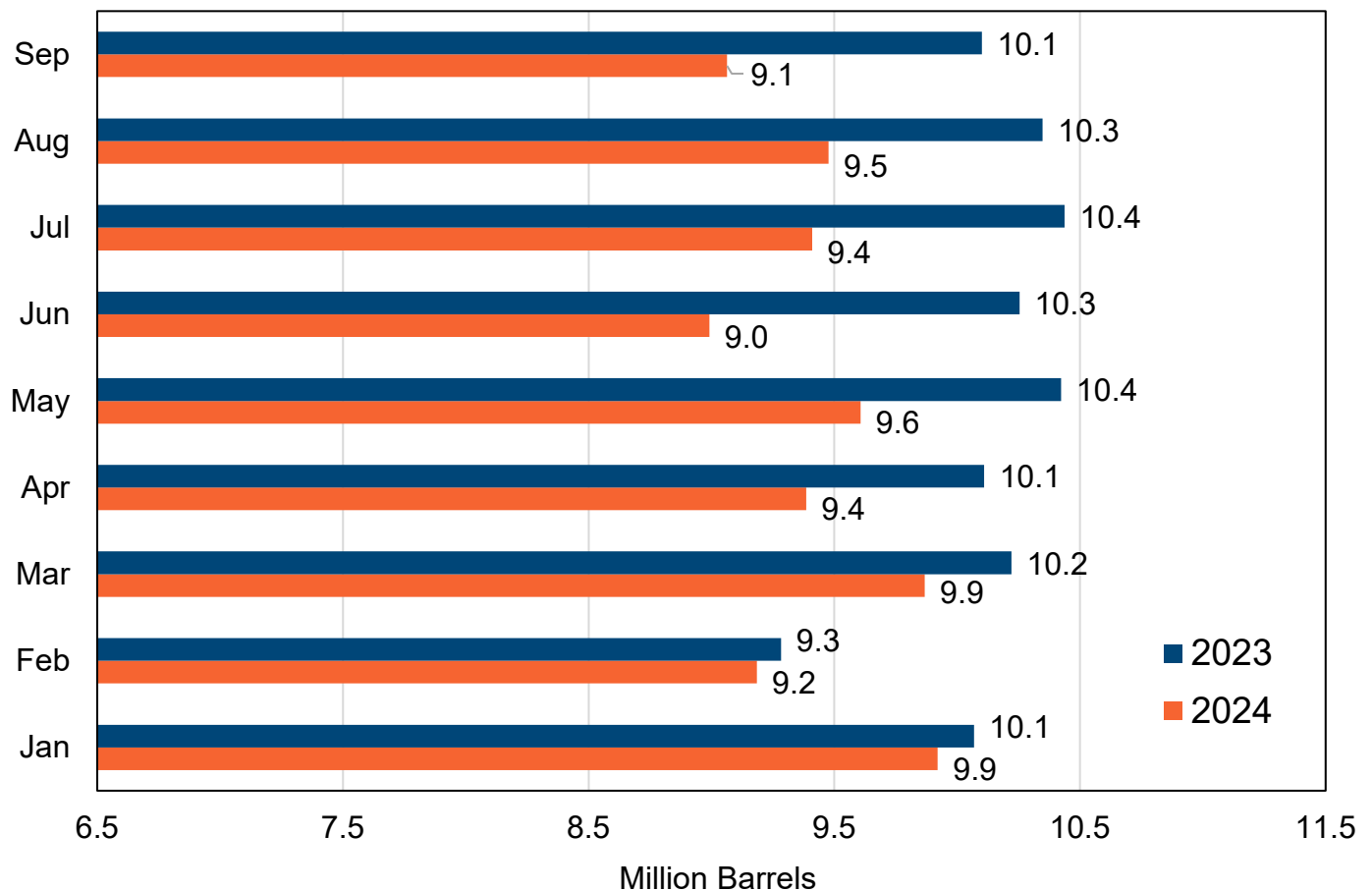
1 California Energy Commission, [Monthly oil supplies to California refineries](https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/annual-oil-supply-sources-california-1), available at <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/annual-oil-supply-sources-california-1>.

2 U.S. Energy Information Administration. ["Petroleum and Other Fluids,"](https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MCRFPCA1&f=A) available at <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MCRFPCA1&f=A>.

3 Geological properties of crude oil include but are not limited to density, sulfur content, viscosity, hydrocarbon makeup, dissolved gases, salinity, wax content, and trace metals.

4 California Energy Commission, [Annual oil supplies to California refineries](https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/annual-oil-supply-sources-california), available at <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/annual-oil-supply-sources-california>.

Figure 2: Monthly Crude Oil Production Report



Source: [California Geologic Energy Management Division \(CalGEM\) WellSTAR data dashboard](https://www.conservation.ca.gov/calgem/Online_Data/Pages/WellSTAR-Data-Dashboard.aspx)
(https://www.conservation.ca.gov/calgem/Online_Data/Pages/WellSTAR-Data-Dashboard.aspx)

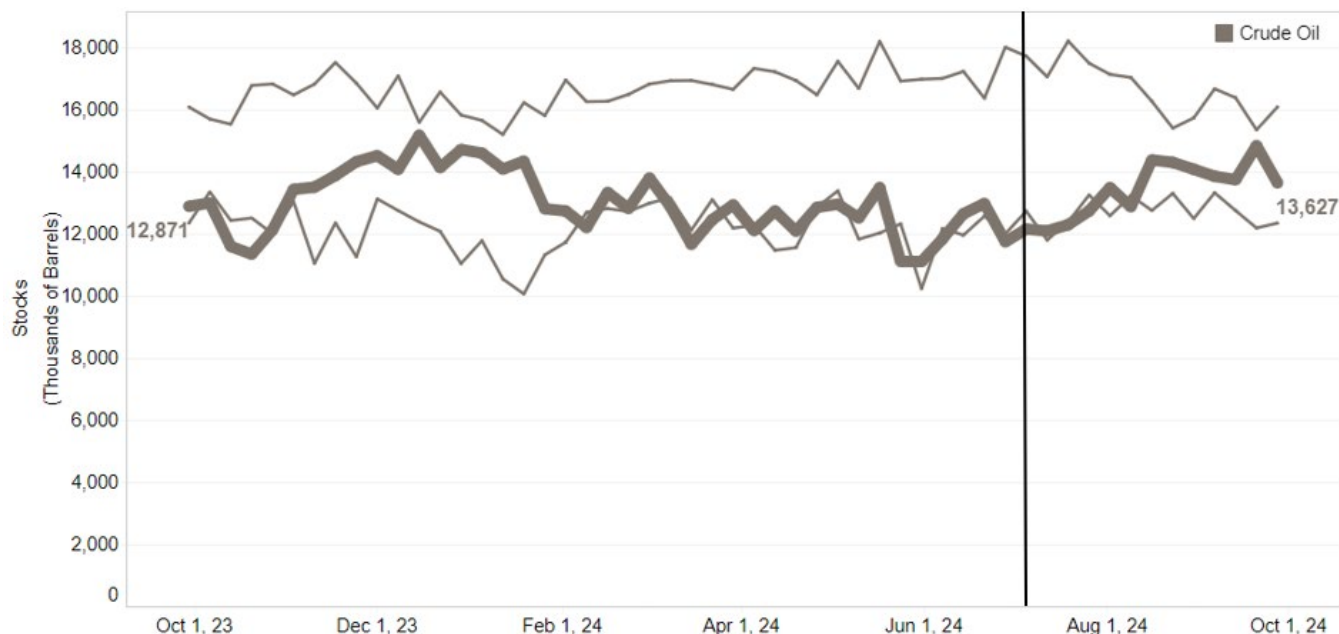
Inventory

Figure 3 shows the volume of crude oil inventories at California refineries. In the third quarter of 2024 (July-September), crude oil inventories started the period below the 10-year low and fluctuated around it until the middle of the quarter. Inventories were at the quarterly high of 14.8 million barrels on September 20, 2.7 million barrels higher than the quarterly low of 12.1 million barrels July 12. Crude oil inventories are likely to remain below the 10-year high due to reduced storage capacity following recent refinery conversions, including the P66 Rodeo conversion to renewables.

For the third quarter of 2024:

- Crude stocks started the quarter at 12.1 million barrels, 14.5 percent lower than the previous year (14.2 million barrels).
- Crude stocks ended the quarter at 13.6 million barrels, 5.9 percent higher than the previous year (12.9 million barrels).

Figure 3: California Refinery Crude Oil Inventories (With 10-Year High-Low Band)



Note: Inventory, input, and production charts include 10-year high-low bands. These bands provide a rolling average of the highs and lows and allow comparison of the current inventory, input, or production to the highs and lows of the historical trends.

Source: CEC Petroleum Industry Information Report Act (PIIRA) data — [Weekly Fuels Watch](https://www.energy.ca.gov/data-reports/reports/weekly-fuels-watch/refinery-stocks), available at <https://www.energy.ca.gov/data-reports/reports/weekly-fuels-watch/refinery-stocks>

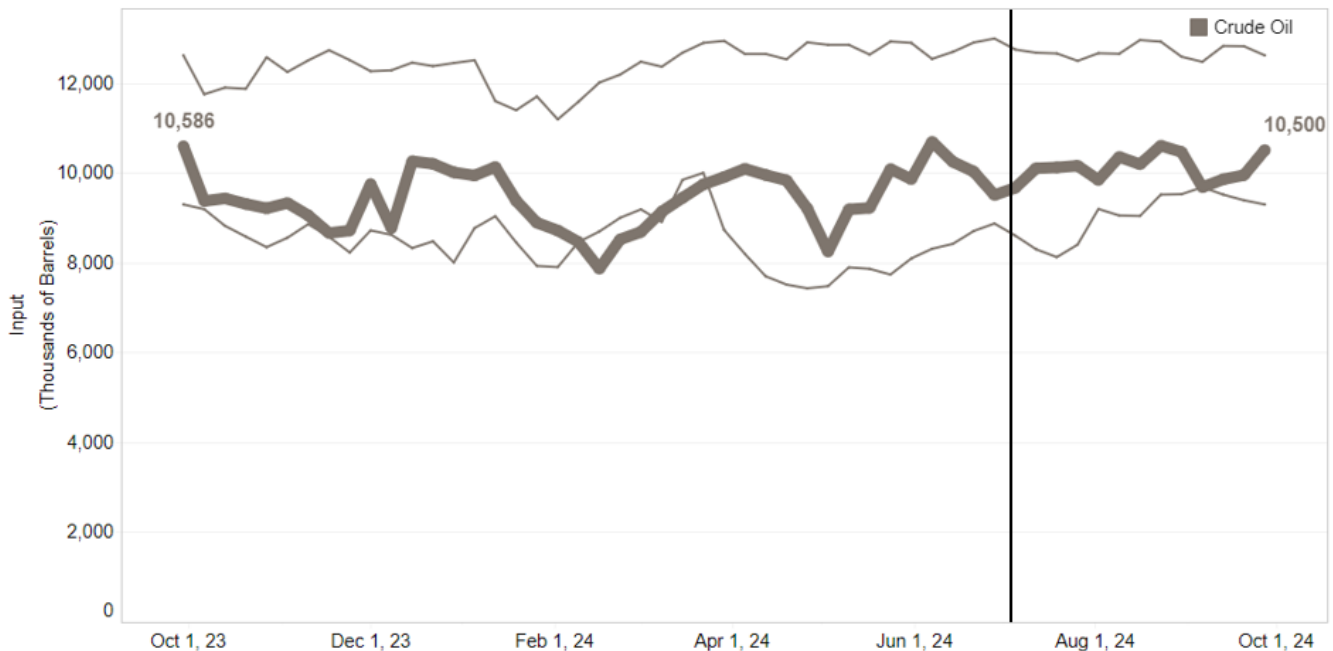
Inputs

Figure 4 shows the volume of crude oil used at refineries, referred to as “inputs.” Crude oil inputs started the quarter above the 10-year low and stayed within the historical range for the entire quarter. The quarterly low of 9.7 million barrels occurred the week of September 6, while the quarterly high of 10.6 million barrels occurred the week of August 23.

For the third quarter of 2024:

- Inputs started the first week of the quarter at 9.7 million barrels, 12.8 percent lower than the previous year (11.1 million barrels).
- Inputs ended the last week of the quarter at 10.5 million barrels, 0.8 percent lower compared to the same quarter of the previous year (10.6 million barrels).
- Average weekly input for the quarter was 10.1 million barrels, 2.4 percent lower compared to last year’s quarterly average of 10.4 million barrels per week.

Figure 4: California Refinery Crude Oil Inputs (With 10-Year High-Low Band)



Source: CEC PIIRA data – [Weekly Fuels Watch](https://www.energy.ca.gov/data-reports/reports/weekly-fuels-watch/refinery-inputs-and-production), available at <https://www.energy.ca.gov/data-reports/reports/weekly-fuels-watch/refinery-inputs-and-production>.

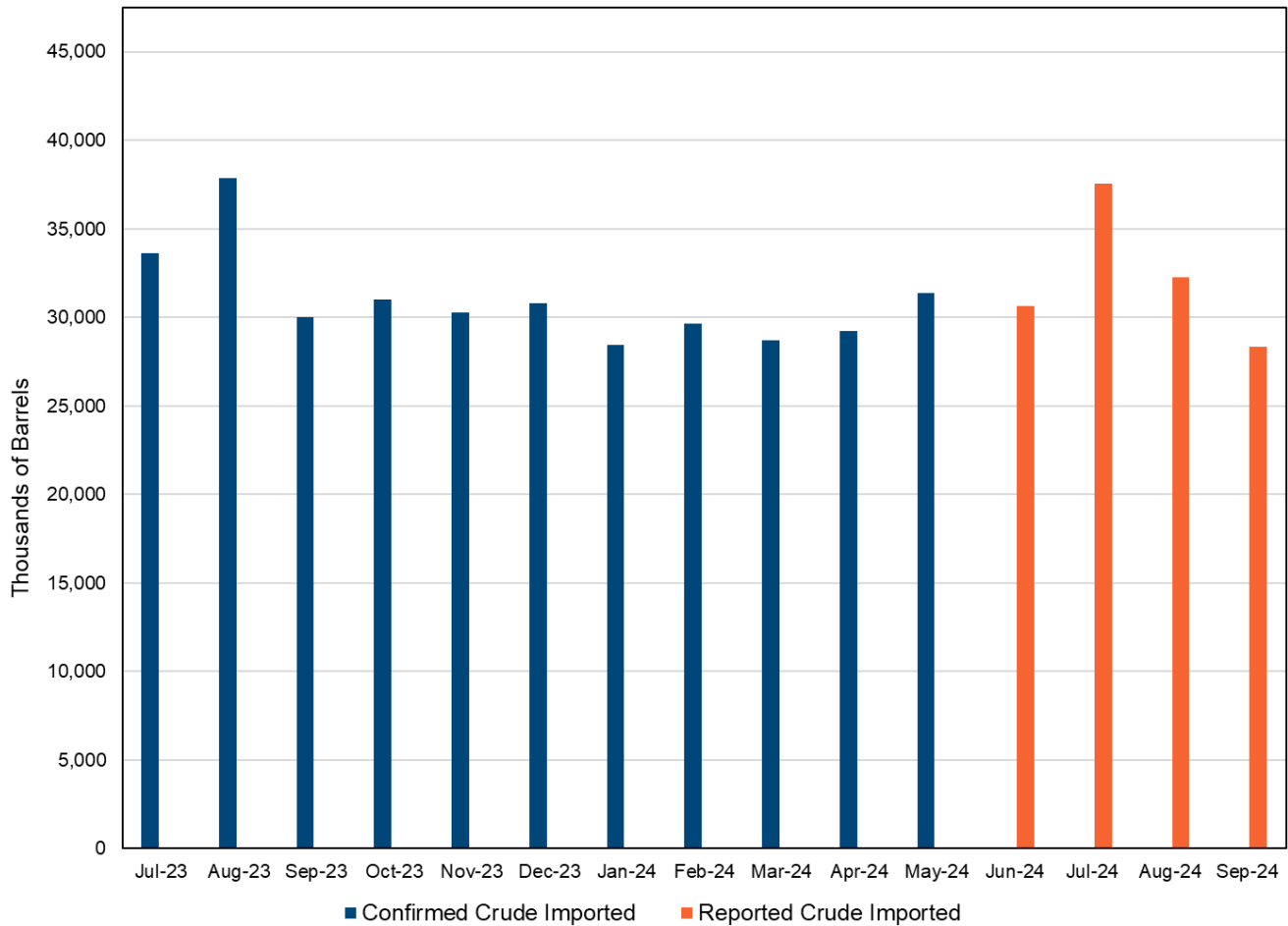
Imports

Figure 5 shows crude oil imports to California refineries. Imports include domestic and foreign sources received by marine and rail. Imports are shown as reported and confirmed. Reported imports are aggregated, or combined, reported raw data from a single form. Confirmed imports are data that have been cross-checked with additional sources of data and represent a more accurate estimate of imports.

For the third quarter of 2024:

- Reported crude oil imports decreased from July through September. Imports in July 2024 were 37.5 million barrels, followed by 32.2 million barrels in August 2024, and 28.3 million barrels in September 2024.
- The three-month period of July, August, and September were just below the total from the previous three months. From April 2024 to June 2024, California refineries imported 105.5 million barrels of crude oil compared to the 98.1 million barrels from July to September 2024.
- Reported imports decreased 3.4 million barrels compared to the third quarter of the previous year, a 3.3 percent decrease.

Figure 5 Crude Oil Imports



Note: "Reported Crude Oil Imported" data are reported directly to the CEC through Form M700. "Confirmed Crude Oil Imported" is Form M700 data that are confirmed with Port Import/Export Reporting Service (PIERS), California State Lands Commission (SLC), and U.S. Energy Information Administration (EIA) data through May 31, 2024.

Source: CEC PIIRA data — California Imports, Exports, and Intrastate Movements Monthly Report, Form M700

Figure 6 shows the routes used to import crude oil into California by rail car. Crude-by-rail imports are driven by refinery orders, and the refineries that have recently ordered crude oil by rail are in Southern California. Crude oil is transferred from rail car to pipeline in Bakersfield to complete the journey to Southern California refineries. These rail lines are not exclusive to crude oil transport but are used to transport all commodities and ferry passengers.

Figure 6: Crude Rail Lines of Southern California



Source: California Department of Transportation, BNSF, CEC

Table 1 shows the amount of crude oil imported into California by rail by route. A single rail tank car carries about 700 barrels. Since the beginning of 2023, crude oil by rail came exclusively from Arizona as crude traveling from Nevada dropped to zero. There were no crude imports by rail in July 2024.

Table 1: Crude Oil Imports by Rail Lines of Southern California

Date	Needles to Barstow (Barrels)	Las Vegas to Barstow (Barrels)	Barstow to Bakersfield (Barrels)
Jul-23	56,357	0	56,357
Aug-23	58,681	0	58,681
Sep-23	53,943	0	53,943
Oct-23	53,943	0	53,943
Nov-23	53,943	0	53,943
Dec-23	55,599	0	55,599
Jan-24	55,599	0	55,599
Feb-24	61,095	0	61,095
Mar-24	55,502	0	55,502
Apr-24	60,424	0	60,424
May-24	52,561	0	52,561
Jun-24	64,672	0	64,672
Jul-24	0	0	0
Aug-24	59,397	0	59,397
Sep-24	57,909	0	57,909

Source: CEC PIIRA data — California Imports, Exports, and Intrastate Movements Monthly Report, Form M700

CHAPTER 2:

Gasoline

This chapter discusses the volume of California reformulated gasoline (CaRFG) produced at California refineries, inventories of CaRFG and blendstocks, gasoline prices, and movement of gasoline using data collected under Public Resources Code section 25354 (a), (h), and (i). Since 2011, CaRFG contains 10 percent ethanol, which is included in the production and inventory totals shown in this chapter.

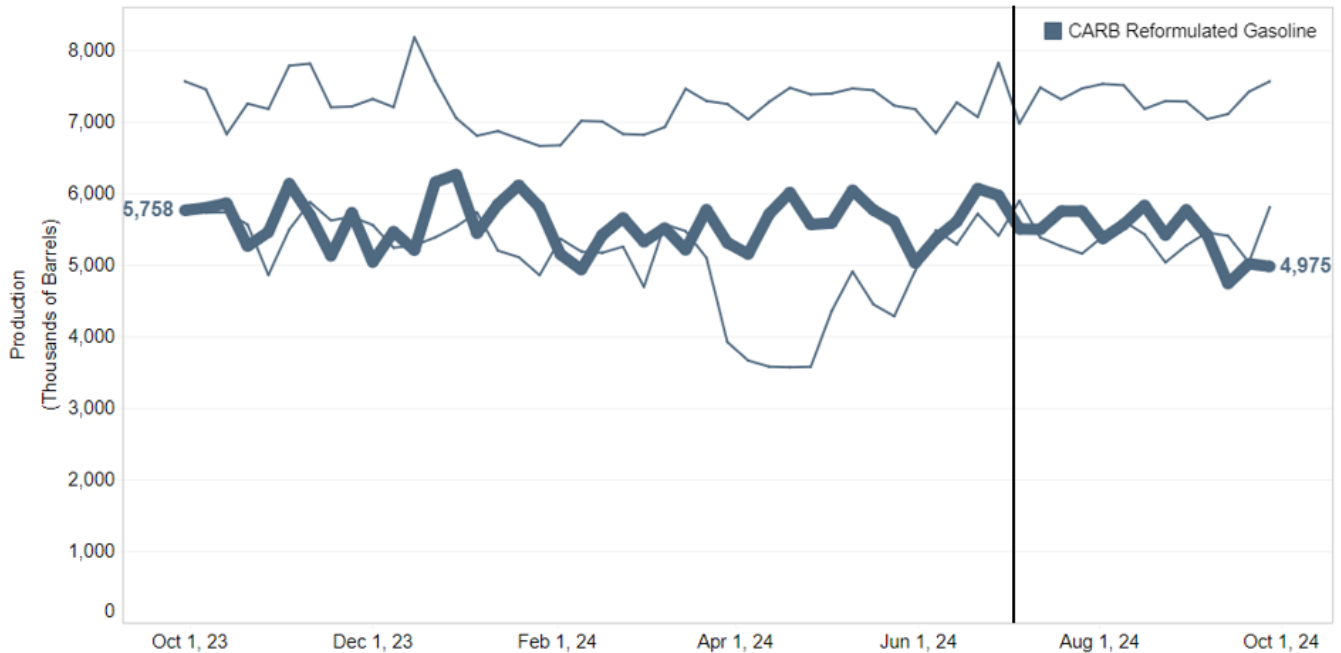
Production

Figure 7 shows CaRFG production for the previous year with the 10-year high-low band. CaRFG production fluctuated throughout the quarter, ending lower than it started, with peaks on August 16 and 30, and lows on September 13 and 27. Part of the reason for these lows is the Phillips 66 Rodeo facility conversion from conventional fuel production to renewable fuels in the first quarter of 2024, which has reduced refining capacity and lowered overall gasoline production.

For the third quarter of 2024:

- CaRFG production peaked for the quarter at 5.8 million barrels the week ending August 16.
- The quarterly low of 4.7 million barrels occurred the week ending September 13.
- CaRFG production began the quarter at 5.5 million barrels, 11.2 percent less than the previous year's third quarter start of 6.2 million barrels.
- CaRFG production ended the quarter at 5.0 million barrels, 13.6 percent less than the previous year's third quarter close of 5.8 million barrels.

Figure 7: CaRFG Production (With 10-Year High-Low Band)



Source: CEC PIIRA data — [Weekly Fuels Watch](https://www.energy.ca.gov/data-reports/reports/weekly-fuels-watch/refinery-inputs-and-production) available at <https://www.energy.ca.gov/data-reports/reports/weekly-fuels-watch/refinery-inputs-and-production>

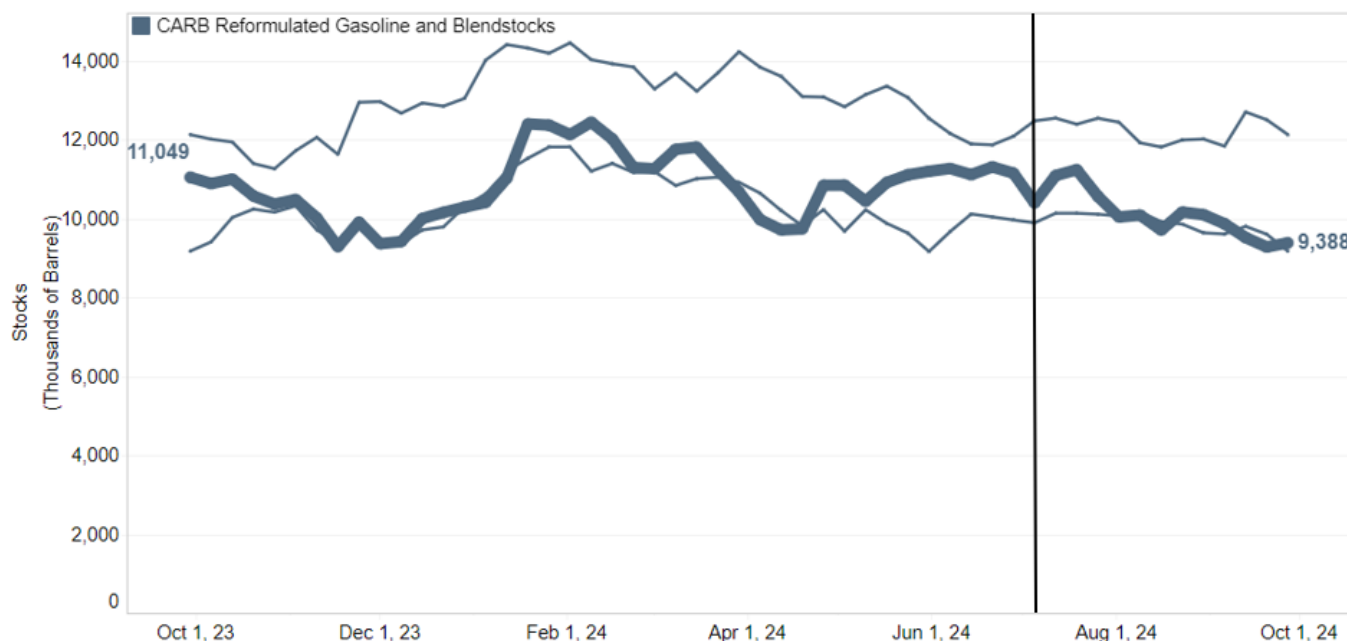
Inventory

Figure 8 shows the CaRFG and blendstock inventories for the previous year with the 10-year high-low band. At the start of the quarter, CaRFG and blendstock inventories were above the 10-year low. Inventories rose to a quarterly high of 11.2 million barrels the week of July 19, 2.0 million barrels higher than the quarterly low (9.3 million barrels) the week of September 20.

For the third quarter of 2024:

- CaRFG and blendstock inventories experienced moderate fluctuations during the quarter.
- CaRFG and blendstock inventories ended the quarter lower (9.4 million barrels) than they began (10.4 million barrels).
- CaRFG and blendstock inventories were roughly 1.7 million barrels lower than they were a year ago (11.0 million barrels).

Figure 8: CaRFG and Blendstock Inventories (With 10-Year High-Low Band)



Source: CEC PIIRA data — [Weekly Fuels Watch](https://www.energy.ca.gov/data-reports/reports/weekly-fuels-watch/refinery-stocks), available at <https://www.energy.ca.gov/data-reports/reports/weekly-fuels-watch/refinery-stocks>

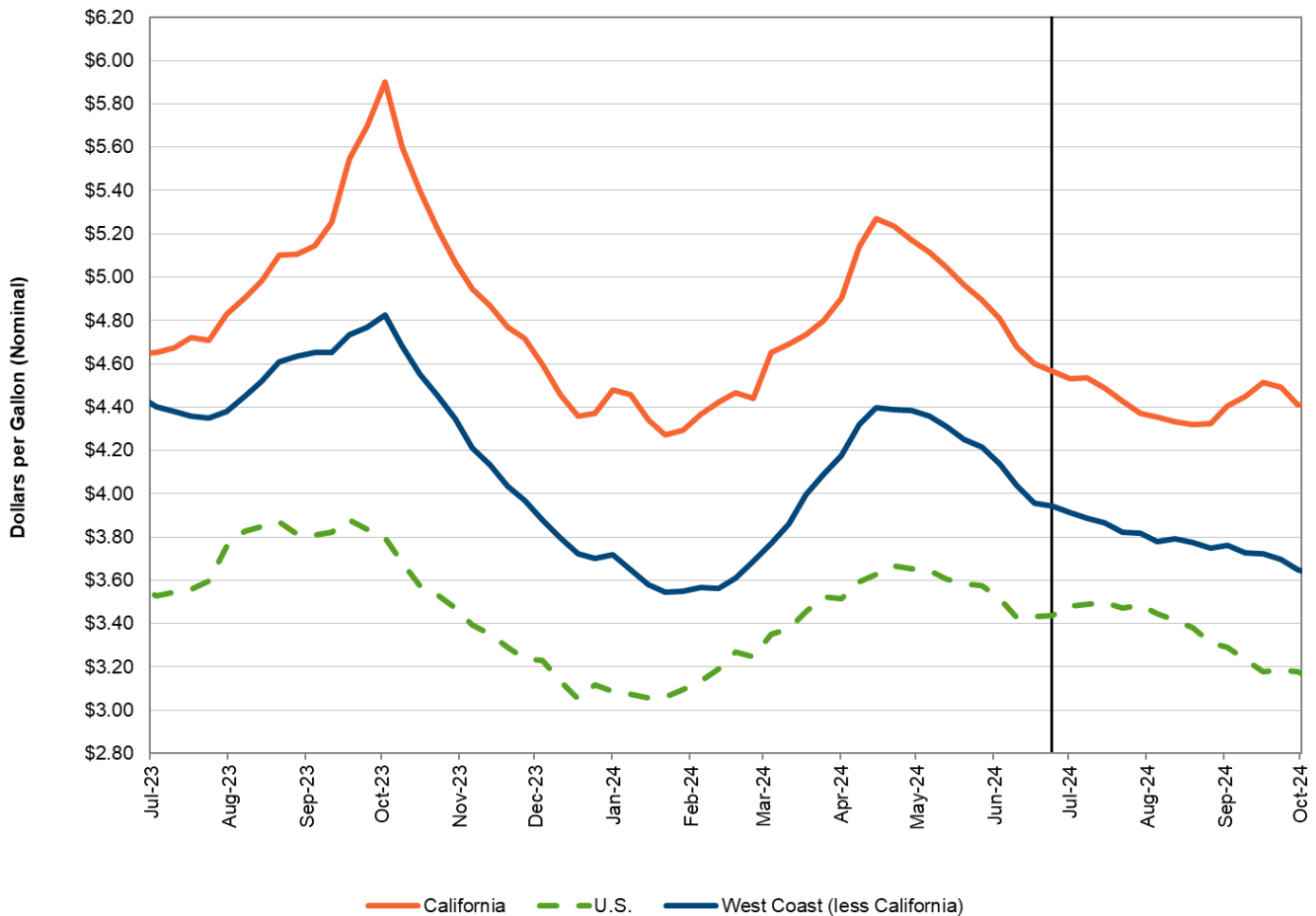
Prices

Figure 9 shows regular grade gasoline retail prices through the third quarter. Since CaRFG differs from gasoline sold nationally, all gasoline prices refer to regular grade regardless of specification. During the third quarter, gasoline prices across in the United States and West Coast (less California) regions decreased. California gasoline price followed the same trend, but price increased during the last month of third quarter.

For the third quarter of 2024:

- The U.S. price decreased a total of \$0.30 from July 1 at \$3.48 to \$3.18 on September 30. Meanwhile, the price difference between California and the United States increased from \$1.05 to \$1.23.
- California price averaged \$4.43 during the third quarter, decreasing from second quarter of an average price of \$4.95. The high price for the quarter was on July 8 at \$4.54 and the low price was on August 19 at \$4.32.
- West Coast (less California) retail prices declined over the quarter, decreasing \$0.26 from \$3.91 on July 1 to \$3.65 on September 30.

**Figure 9: Regular Grade Gasoline Retail Prices:
California vs. West Coast vs. United States**



Source: U.S. EIA

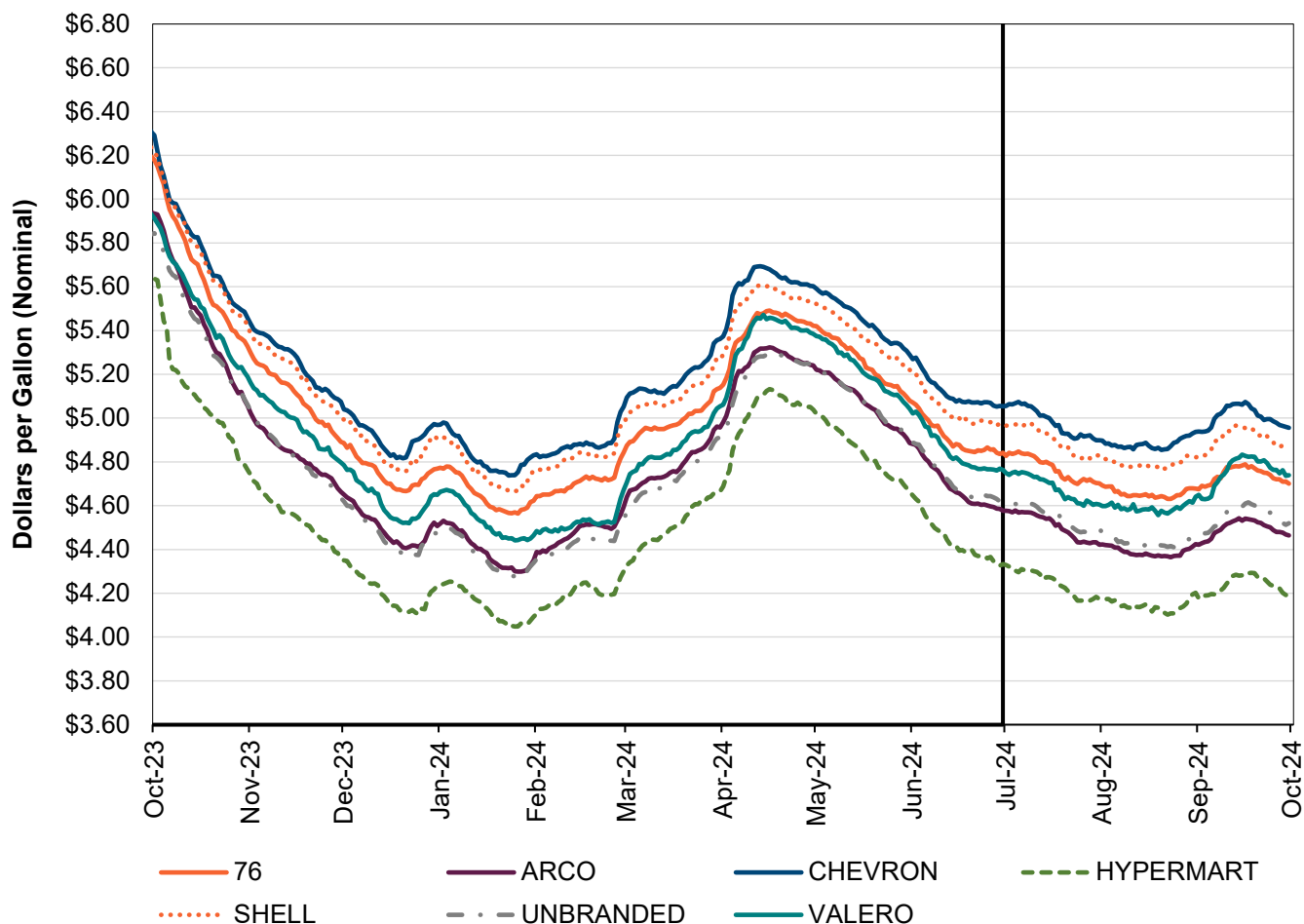
Figure 10 shows California regular grade gasoline retail prices by brand. Chevron continues to be the highest priced brand and Shell the second highest. Hypermarts continue to offer the lowest prices, followed by ARCO and unbranded stations. A hypermart station (Costco, Safeway, and so forth) is defined as a station that is company-owned or company-operated by a supermarket or wholesale chain store that sells its own fuel at the same location.

For the third quarter of 2024:

- The highest average price during the third quarter at Chevron was \$5.07 on September 16, 2024. The lowest average price during the third quarter at Chevron was \$4.85 on August 20, 2024.
- The lowest average price during the third quarter at hypermarts was \$4.10 on August 22, 2024. The highest average price during the third quarter at hypermarts was \$4.33 on July 1, 2024.
- Price difference among various brands ranged from \$0.70 and \$0.82.

- The difference of monthly average price between Chevron and hypermarkets started the third quarter at \$0.74 and ended the third quarter at \$0.77.

Figure 10: California Gasoline Retail Prices by Brand



Source: CEC analysis of OPIS data

Imports and Exports

Figure 11 shows gasoline imports and exports from July 2023 through September 2024. These imports and exports include CaRFG and non-California specification gasoline. These totals do not include ethanol.⁵ Imports are shown as reported and confirmed. Reported imports are aggregated reported raw data from a single reporting source. Confirmed imports

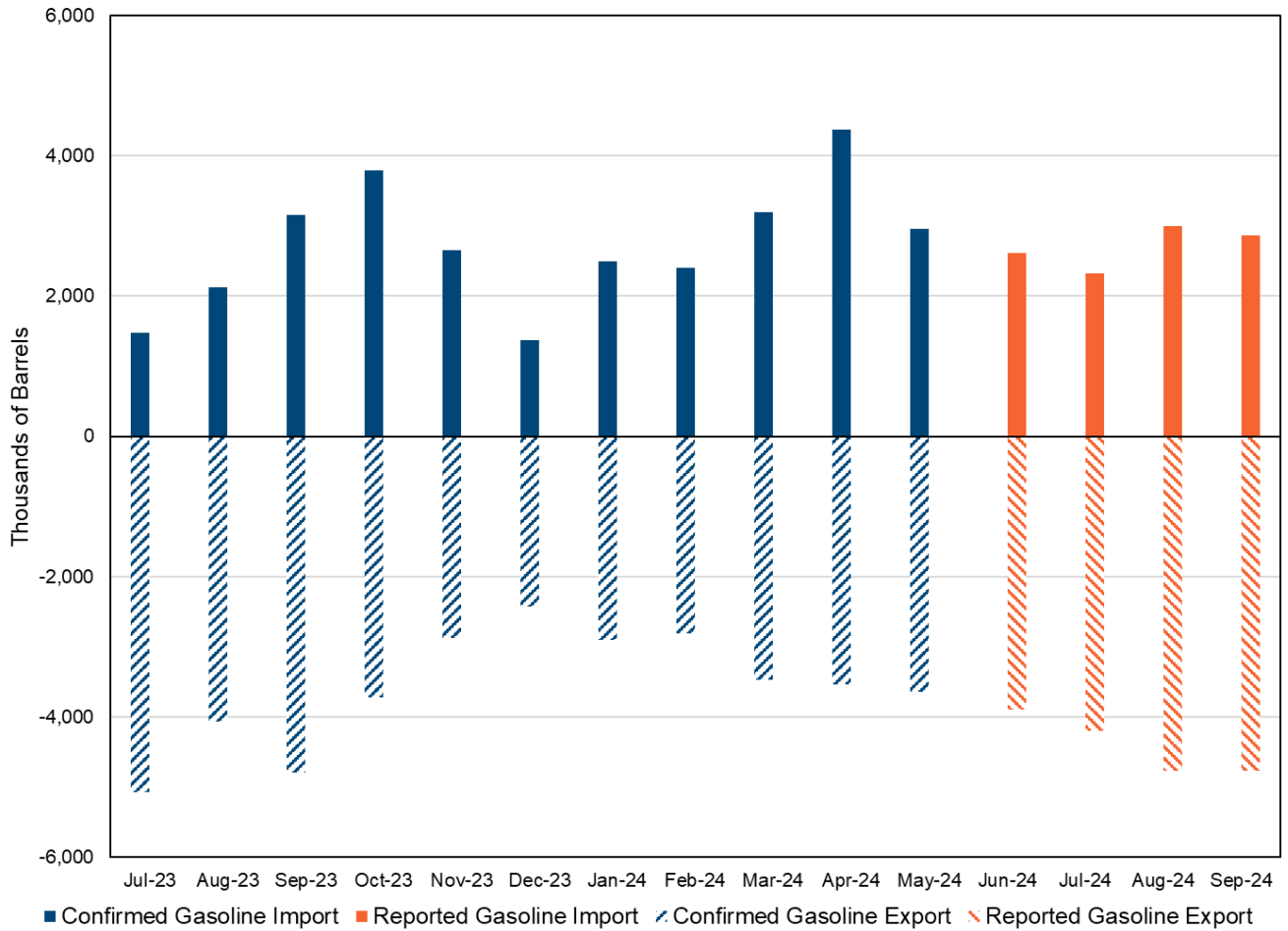
⁵ California Energy Commission, [Petroleum Watch: Ethanol Imports](https://www.energy.ca.gov/sites/default/files/2023-03/2023-02_Petroleum_Watch_ada.pdf), February 2023, https://www.energy.ca.gov/sites/default/files/2023-03/2023-02_Petroleum_Watch_ada.pdf.

are data that have been cross-checked with additional sources of data and represent a more accurate estimate of imports. During the third quarter of 2024, gasoline imports decreased in July, increased in August, and slightly decreased in September.

For the third quarter of 2024:

- The volume of gasoline imports over the third quarter was higher than the previous quarter. April 2024 to June 2024 totaled 5.6 million barrels of imports, while July to September 2024 saw 8.2 million barrels of imports.
- The largest year-over-year monthly difference was in September. In September 2023, imports to California totaled 4.0 million barrels, while imports totaled only 2.9 million barrels in September 2024.
- Gasoline exports increased over the third quarter compared to the previous quarter. California entities exported 12.5 million barrels from April to June compared to 13.7 million barrels from July to September.
- Gasoline exports are down compared to 2023. From July to September 2023, California entities exported 15.1 million barrels compared to the 13.7 million barrels in 2024, a difference of 1.4 million barrels.

Figure 11: California Gasoline Imports and Exports



Note: "Reported Gasoline" data are reported directly to the CEC through Form M700. "Confirmed Gasoline" is Form 700 data that are confirmed with Port Import/Export Reporting Service (PIERS), California State Lands Commission (SLC), and Energy Information Administration (EIA) data through May 31, 2024.

Source: CEC PIIRA data — California Imports, Exports, and Intrastate Movements Monthly Report, Form M700

CHAPTER 3:

Diesel

This chapter discusses the volume of diesel produced at California refineries, inventories of diesel, diesel prices, and movements of diesel using data collected under Public Resources Code section 25354 (a), (h), and (i). California regulates the amount of sulfur allowed in diesel fuel, and this regulation applies to essentially all diesel fuel supplied, sold, or offered for sale in California.⁶ Therefore, ultra-low-sulfur diesel, No. 2 diesel, and any other diesel products produced and sold in California are referred to in this chapter as “diesel.” The category “other diesel” includes renewable diesel, non-California Air Resource Board specification diesel, and high sulfur diesel. Production of biodiesel specification B100 cannot be sufficiently aggregated to meet confidentiality requirements and is therefore not included in this report.

Production

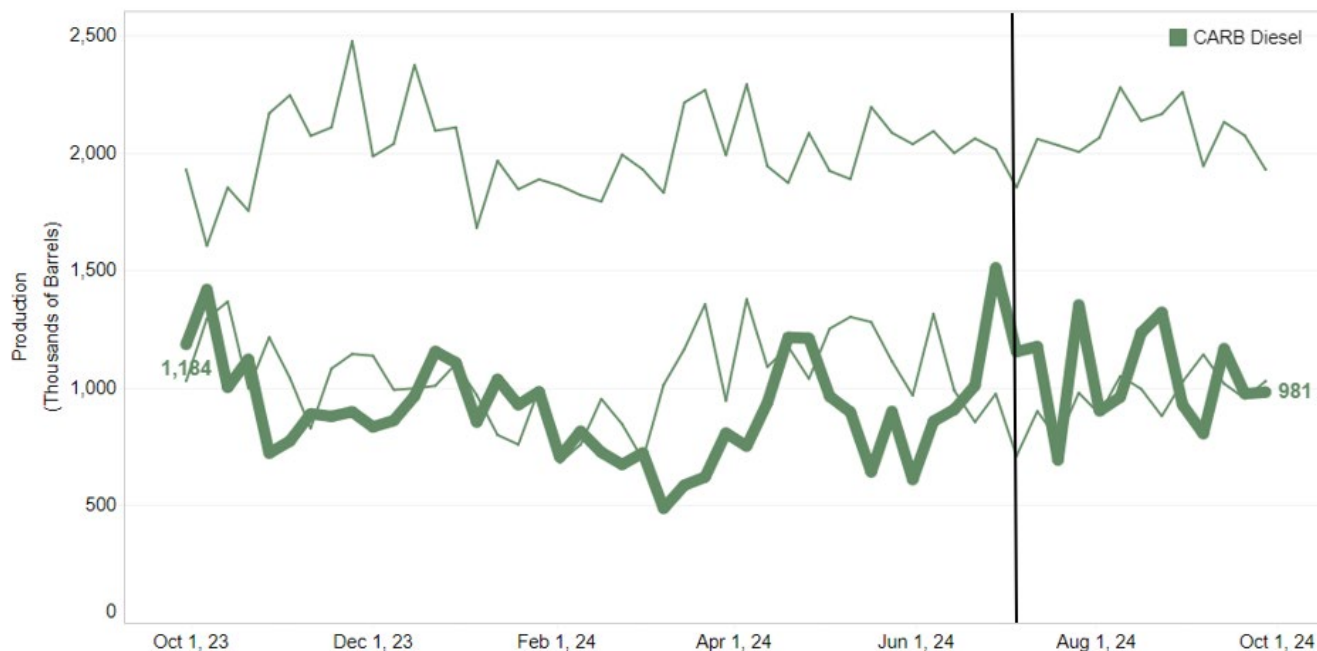
Figure 12 shows diesel production for the previous year with the 10-year high-low band. Diesel production started the quarter above the 10-year low at 1.2 million barrels. Production fluctuated significantly throughout the third quarter, ending at 981,000 barrels. The permanent idling of Marathon Martinez in August 2020 and the completion of Phillips 66 Rodeo’s conversion from conventional fuel production to renewable fuels in the first quarter of 2024 reduced refining capacity and lowered overall diesel production.

For the third quarter of 2024:

- Diesel production fell to a low of 692,000 barrels the week of July 19 and closed the quarter at 981,000 barrels.
- Diesel production was 981,000 barrels at the end of the quarter, a 17.1 percent decrease compared to the end of the same quarter last year (1.2 million barrels).

⁶ California Air Resources Board. [“Diesel Fuel: About,”](https://ww2.arb.ca.gov/our-work/programs/diesel-fuel/about) <https://ww2.arb.ca.gov/our-work/programs/diesel-fuel/about>.

Figure 12: Diesel Production (With 10-Year High-Low Band)



Source: CEC PIIRA data – [Weekly Fuels Watch](https://www.energy.ca.gov/data-reports/reports/weekly-fuels-watch/refinery-inputs-and-production) available at <https://www.energy.ca.gov/data-reports/reports/weekly-fuels-watch/refinery-inputs-and-production>

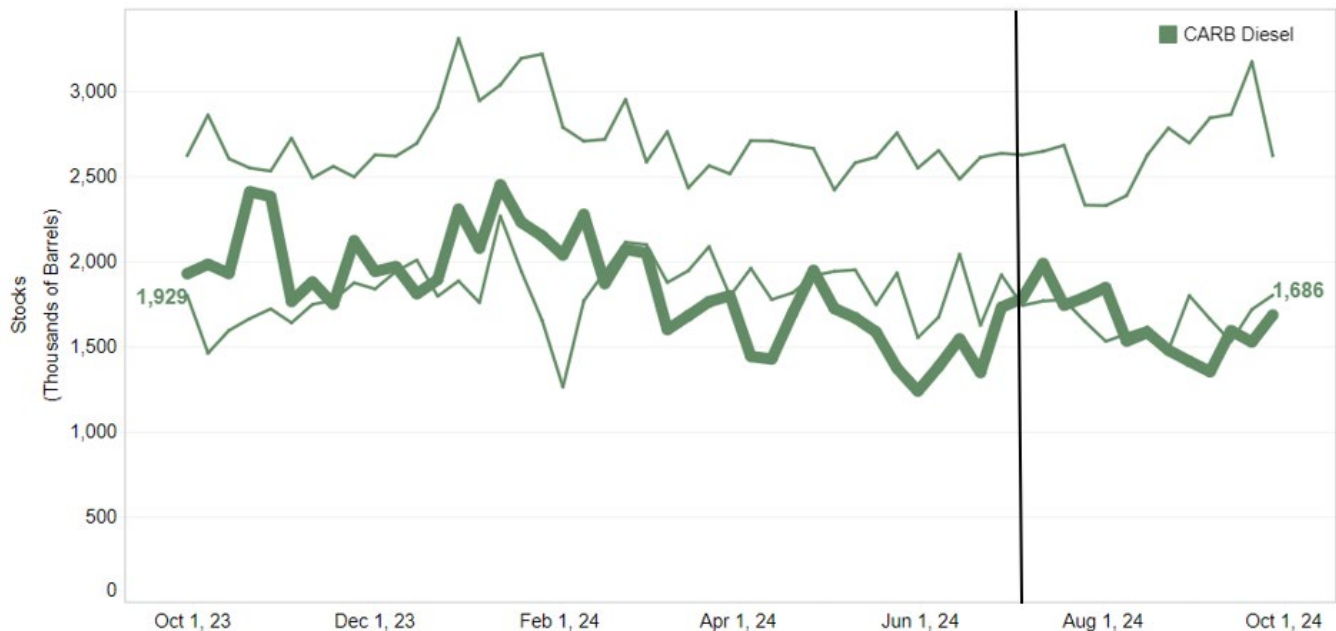
Inventory

Figure 13 shows diesel inventories for the previous year with the 10-year high-low band. At the start of the quarter, diesel inventories were above the 10-year low at 1.8 million barrels. Inventories fluctuated significantly throughout the quarter, ending at 1.7 million barrels, down by 98,000 barrels from the start of the quarter.

For the third quarter of 2024:

- Diesel inventories fluctuated around the 10-year low. Part of the reason for these lows is the Phillips 66 Rodeo facility conversion from conventional fuel production to renewable fuels in the first quarter of 2024.
- July 12 marked the third quarter high at 2.0 million barrels, while September 6 marked the low at 1.4 million barrels.
- At the end of the quarter, diesel inventories stood at 1.7 million barrels, a decrease of roughly 243,000 barrels compared to the same time last year (1.9 million barrels).

Figure 13: Diesel Inventories (With 10-Year High-Low Band)



Source: CEC PIIRA data – [Weekly Fuels Watch](https://www.energy.ca.gov/data-reports/reports/weekly-fuels-watch/refinery-stocks), available at <https://www.energy.ca.gov/data-reports/reports/weekly-fuels-watch/refinery-stocks>

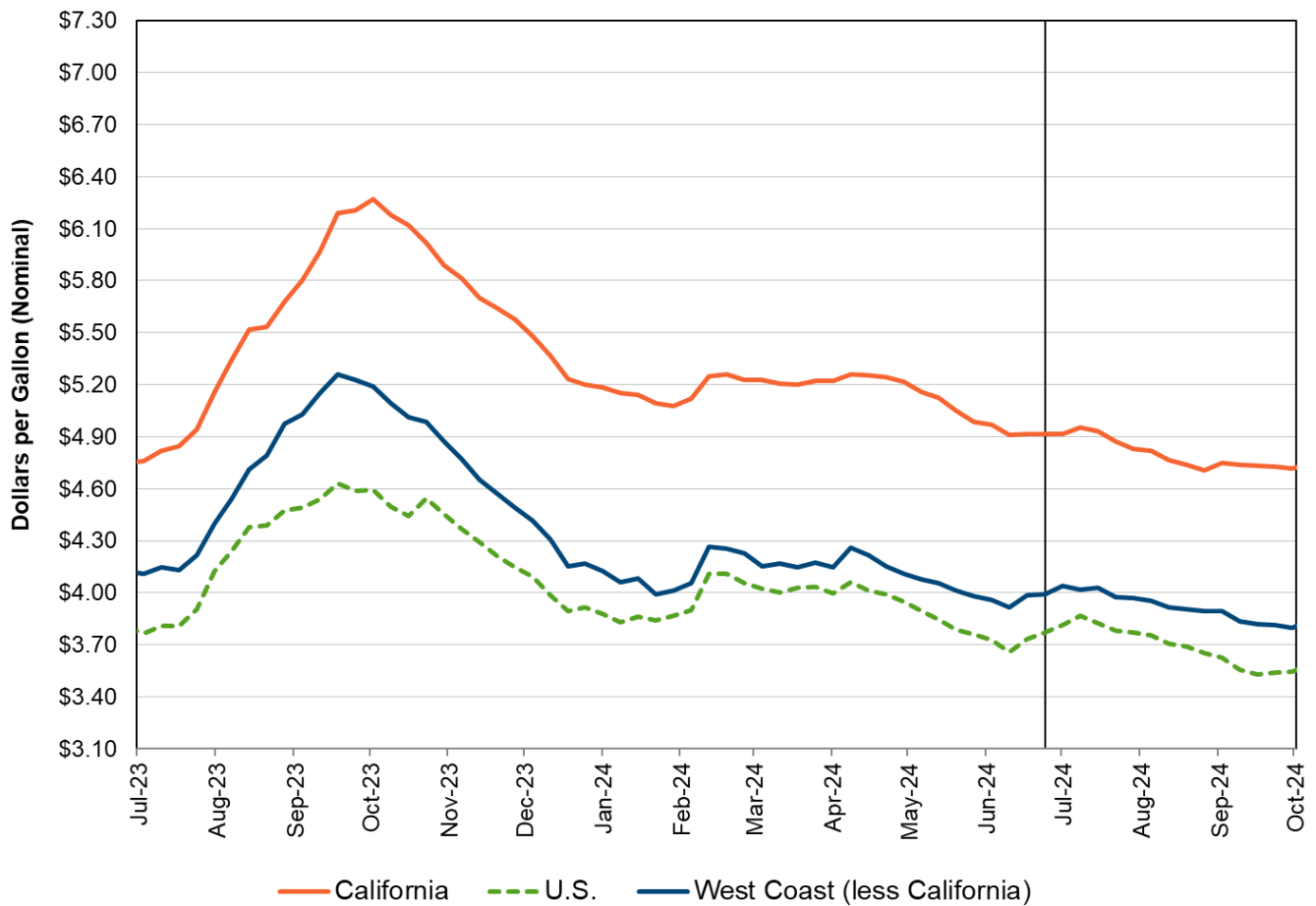
Prices

Figure 14 shows diesel retail prices for the third quarter. Diesel prices were steady from second quarter and decreased slightly through the third quarter of 2024. Diesel prices in all regions during the third quarter of 2024 were less than during the third quarter of 2023.

For the third quarter of 2024:

- California diesel prices started higher than the previous year, \$4.92 on July 1, 2024 compared to \$4.76 on July 3, 2023, but then trended in the opposite direction and ended lower than the previous year. California diesel prices averaged \$4.80 and remained \$1.11 more than U.S. prices during the third quarter.
- U.S. diesel prices decreased to a new low for 2024 at \$3.53 on September 16, the lowest since October 4, 2021, when price was \$3.48.
- The price for West Coast averaged \$3.92 during the third quarter and averaged \$0.23 less than California diesel prices.

Figure 14: Diesel Prices: California vs. West Coast vs. United States



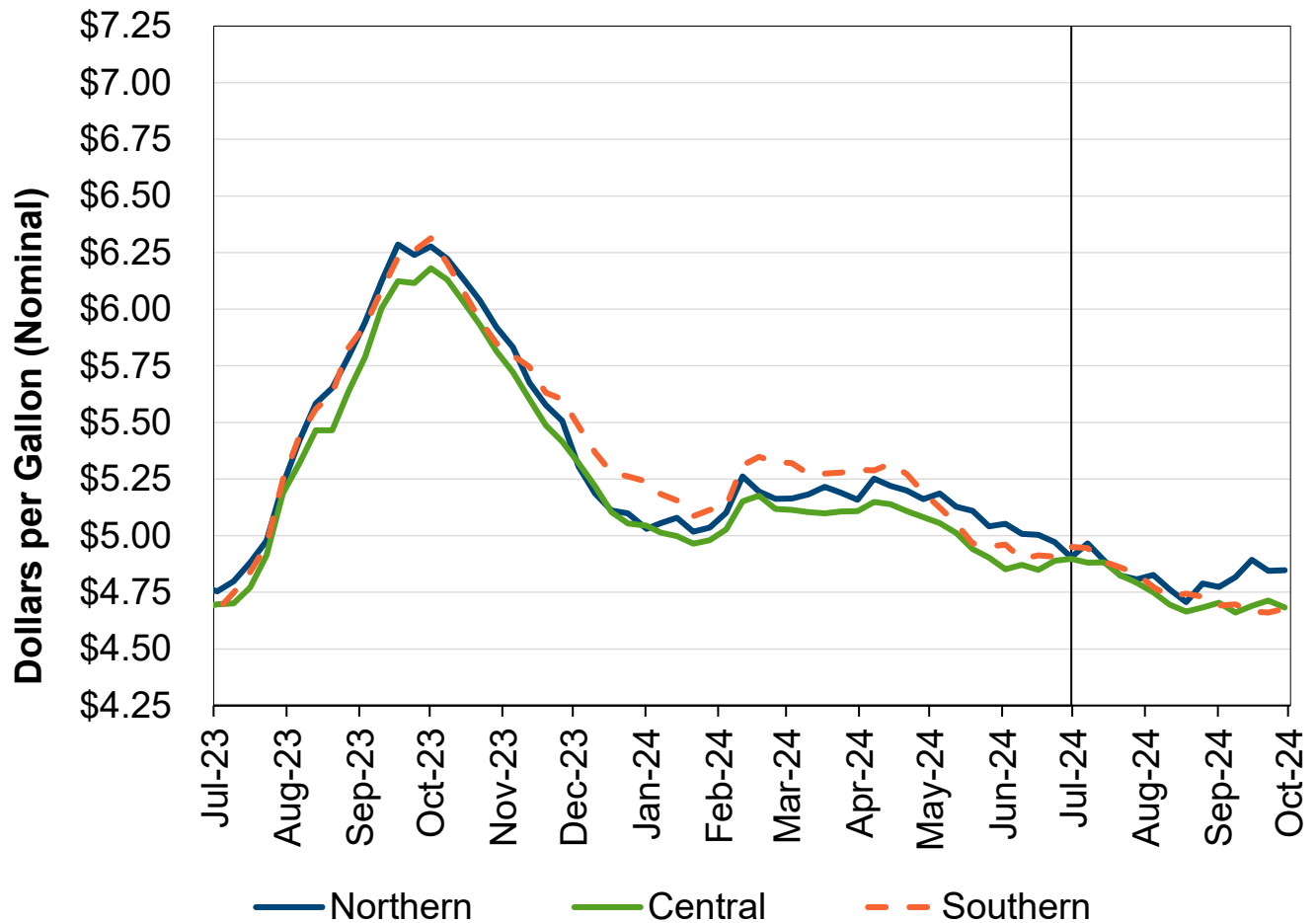
Source: U.S. EIA – Diesel (On-Highway) Ultra-Low-Sulfur (15 ppm and under).

Figure 15 shows diesel retail prices by region. Prices for all regions during the third quarter of 2024 all had a similar downward trend until September when northern California prices started to increase. As a result, northern California had the highest average price, averaging at least \$0.16 higher than the other two regions.

For the third quarter of 2024:

- Diesel prices in all regions averaged \$0.66 lower during third quarter of 2024 than 2023. Prices during the third quarter averaged \$4.74 in central, \$4.83 in northern, and \$4.76 in southern California.
- Northern California diesel prices averaged \$4.85 during September, an \$0.08 increase from August when the price averaged \$4.77.
- Southern California started the quarter at \$4.95 on July 1 as the highest priced region but decreased over the quarter to end as the lowest priced region with an average price in September of \$4.68.

Figure 15: Diesel Retail Prices by Region



Source: CEC analysis of OPIS data

Imports and Exports

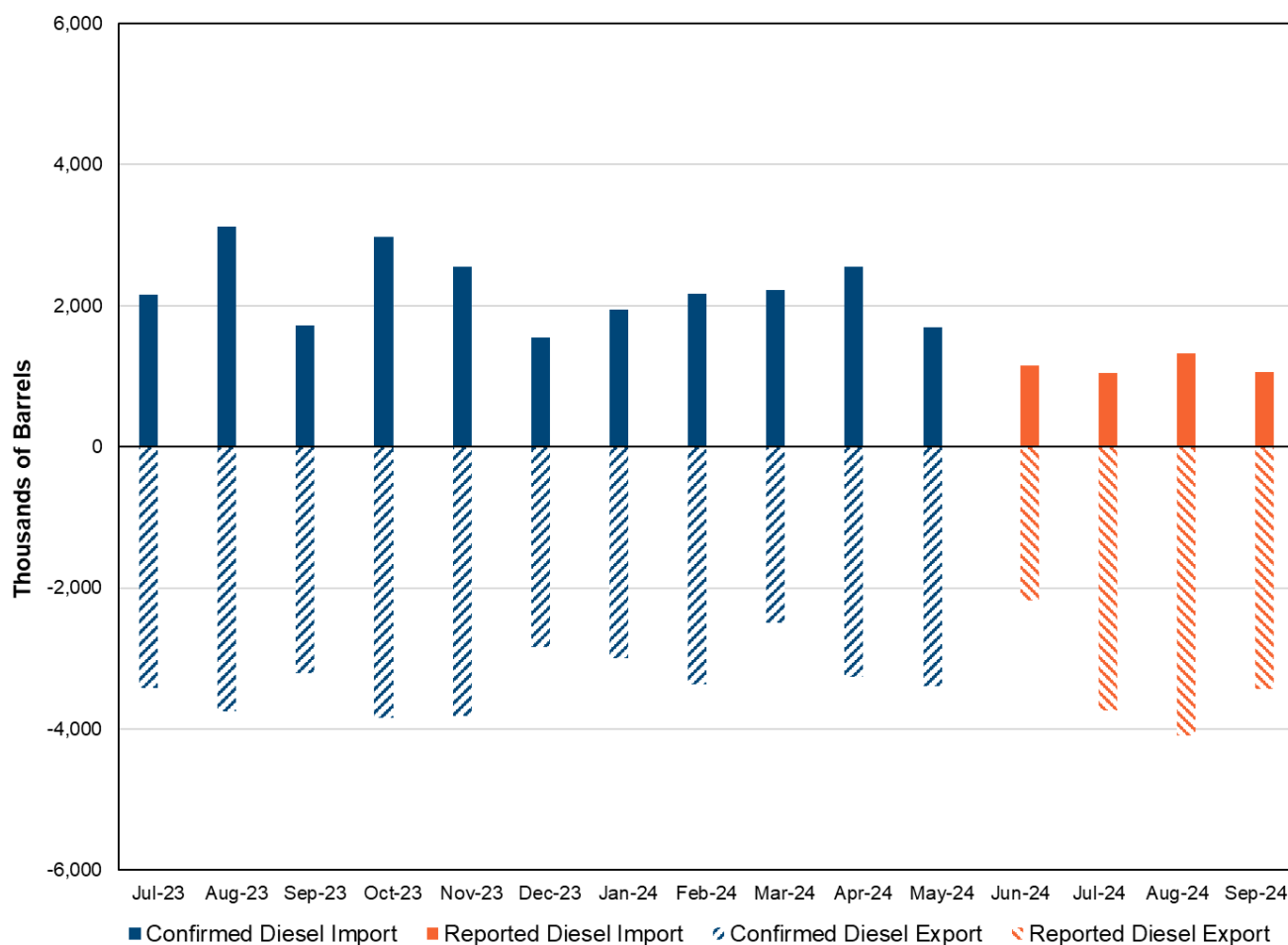
Figure 16 shows California's diesel imports and exports. Imports are shown as reported and confirmed. Reported imports represents the aggregated import data reported to the CEC. Confirmed imports represents reported imports data that has been cross-checked with additional sources of data and represents a more accurate estimate of imports.

For the third quarter of 2024:

- Diesel imports declined quarter-over-quarter. From April to June 2024, California diesel imports totaled 6.0 million barrels compared to the 3.4 million barrels from July to September 2024.
- Third quarter diesel imports also declined year-over-year. Third quarter 2024 imports totaled 3.4 million barrels compared to 7.2 million barrels imported from July to September 2023.

- Diesel exports increased compared to the previous quarter. From April to June 2024, exports totaled 9.3 million barrels compared to 11.3 million barrels exported from July to September 2024.
- Third quarter 2024 diesel exports totaled 11.3 million barrels, a 1.9 million barrel increase over export totals from July to September 2023, which was 9.4 million barrels.

Figure 16: California's Diesel Imports and Exports



Note: "Reported Diesel" data are reported directly to the CEC through Form M700. "Confirmed Diesel" is Form M700 data that are confirmed with Port Import/Export Reporting Service (PIERS), California State Lands Commission (SLC), and Energy Information Administration (EIA) data through May 31, 2024.

Source: CEC PIIRA data — California Imports, Exports, and Intrastate Movements Monthly Report, Form M700

CHAPTER 4:

Annual Data

This chapter discusses crude oil and petroleum product storage capacities, transportation methods, pipeline capacities, and thermally enhanced oil recovery at oil fields using data collected annually under Public Resources Code section 25354 (b). Annual data are collected in February each year, so there is no new data to report for this quarter. The annual data are published in the [first quarterly report of 2024](https://www.energy.ca.gov/publications/2024/quarterly-petroleum-supply-and-pricing-report-january-2024-through-march-2024):

<https://www.energy.ca.gov/publications/2024/quarterly-petroleum-supply-and-pricing-report-january-2024-through-march-2024>.

CHAPTER 5:

Senate Bill X1-2

This chapter discusses new data collected under Senate Bill X1-2 (Skinner, Chapter 1, Statutes of 2023 First Extraordinary Session).⁷ This includes refining margins (CEC M1322), daily spot contracts (CEC Form D354_TRADING, CEC Form D354_SETTLEMENT), refining maintenance and turnarounds (CEC Form EBR1P, CEC Form EBR1U), and 96-hour imports (CEC EBR700) using data collected under Public Resources Code section 25354 (j), (l), and (m) and section 25355.

Monthly Refining Margin

Senate Bill 1322 (Allen, Chapter 374, Statutes of 2022) requires all refiners of gasoline products in the state to provide monthly data about various price and volume information. The CEC must publish aggregated, volume-weighted reports of these data within 45 days of the end of each calendar month.

This information is published [online](https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/california-oil-refinery-cost-disclosure) at <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/california-oil-refinery-cost-disclosure>.

The gross volume-weighted gasoline refining margin for July, August, and September were \$0.51, \$0.60, and \$0.80 per gallon, respectively.

Daily Spot Contracts

This data set is under review by the Division of Petroleum Market Oversight. Filers on both sides of a deal are responsible for submitting a report at both the trade and settlement phase of a transaction. In other words, for every transaction, each party files a separate report for both the initial trade and final settlement. Therefore, every deal should be associated with four reports to the CEC. A reporting form may contain any number of separate trade or settlement reports. In July 2024, 22 companies filed a total of 600 reporting forms containing 5,695 trade and settlement reports. In August 2024, 19 companies filed 792 reporting forms containing 7,414 trade and settlement reports. In September 2024, 21 companies filed 615 reporting forms containing 5,985 trade and settlement reports .

⁷ California Energy Commission, "[Senate Bill X1-2 Implementation](https://www.energy.ca.gov/proceeding/senate-bill-x1-2-implementation)," available at <https://www.energy.ca.gov/proceeding/senate-bill-x1-2-implementation>.

California Refinery Planned and Unplanned Maintenance

Refiners conduct maintenance to maintain the safety and reliability of their crude oil processing units. Planned maintenance usually occurs during the spring and fall when refineries switch from winter to summer blend or vice versa. This information is specific to individual refiners and is confidential.

96-Hour Planned Imports

The CEC was already collecting imports in its Form EBR700, California Imports, Exports, and Intrastate Movements Weekly Report. SB X1-2 authorized the collection of this information prospectively and on a smaller time interval. This prospective reporting provides visibility into near-term imports before they occur. These data can also be used as a comparison to data reported after the imports have occurred. However, when used retrospectively, such as in this quarterly report, the 96-hour reporting does not provide significantly different data than what is reported in other chapters. For imports of crude oil, gasoline, and diesel, see Chapters 1, 2, and 3, respectively.

APPENDIX A:

Glossary

Term	Definition
Blendstocks	Any material that is blended in an oil refinery to make a product, especially for making gasoline.
Brent North Sea (Brent)	A blended crude stream produced in the North Sea region that serves as a reference or "marker" for pricing a number of other crude streams.
California Air Resources Board (CARB)	The "clean air agency" in California government. CARB's main goals include attaining and maintaining healthy air quality, protecting the public from exposure to toxic air contaminants, and providing innovative approaches for complying with air pollution rules and regulations.
California Energy Commission (CEC)	<p>The state agency established by the Warren-Alquist State Energy Resources Conservation and Development Act in 1974 (Public Resources Code, Sections 25000 et seq.) responsible for energy policy. The Energy Commission's seven major areas of responsibilities are:</p> <ul style="list-style-type: none">• Forecasting statewide energy demand.• Licensing of power plants and transmission lines sufficient to meet those needs.• Promoting energy conservation and efficiency measures.• Promoting the development of renewable energy.• Promoting the transition to clean transportation fuels.• Investing in energy innovation.• Planning for and supporting the state's response to energy emergencies.

Term	Definition
California Energy Commission (CEC)	Funding for the Commission's activities comes from the Energy Resources Program Account, Federal Petroleum Violation Escrow Account, and other sources.
California Estimated Refinery Acquisition Cost (CA-RAC)	A weighted average of the prices of California (San Joaquin Valley) crude, Alaskan crude, and foreign crude.
California State Lands Commission (SLC)	The state agency that provides the people of California with stewardship of the lands, waterways, and resources entrusted to its care based on the principles of equity, sustainability, and resiliency, through preservation, restoration, enhancement, responsible economic development, and the promotion of public access.
Hypermart	A station that is a company-owned or -operated supermarket or wholesale chain store that sells its own fuel at the same location
Oil Price Information Service (OPIS)	A company that provides crude oil and petroleum pricing data.
Petroleum Industry Information Reporting Act (PIIRA)	Legislation enacted in 1980 that enables a complete response to possible shortages of fuel or other disruptions. The information also helps develop and administer energy policies in the interest of the state's economy and the public's well-being.
Port Import/Export Reporting Service (PIERS)	A company that provides import and export data at the bill-of-lading level.
United States Energy Information Administration (EIA)	An independent agency within the U.S. Department of Energy that develops surveys, collects energy data, and analyzes and models energy issues. The agency must meet the requests of Congress, other elements within the Department of Energy, Federal Energy Regulatory Commission, the Executive Branch, its own independent needs, and assist the public, or other interest groups, without taking a policy position. See more information about EIA at http://www.eia.gov/about/
West Texas Intermediate (WTI)	A crude stream produced in Texas and southern Oklahoma that serves as a reference or "marker" for pricing several other crude streams and which is traded in the domestic spot market at Cushing, Oklahoma.