**FEBRUARY 22, 2023** 

# **Overview of Gasoline Prices and Key Considerations for the Special Session**

Presented to: Senate Committee on Energy, Utilities, PRESENTED TO: and Communications Hon. Steven Bradford, Chair LEGISLATIVE ANALYST'S OFFICE

#### **Background on Gasoline Markets and Prices**

*Crude Oil Prices.* Price paid by refiners to purchase crude oil from extraction companies. Most of the crude oil used in California refineries is imported from out of state.

*Wholesale Gasoline Prices.* Refineries process crude oil and turn it into gasoline, diesel, and other fuels. The price for bulk gasoline after it leaves the refinery, but before it reaches the pump, is the wholesale price. Most gasoline consumed in California is refined in-state, but some is imported from other states or countries.

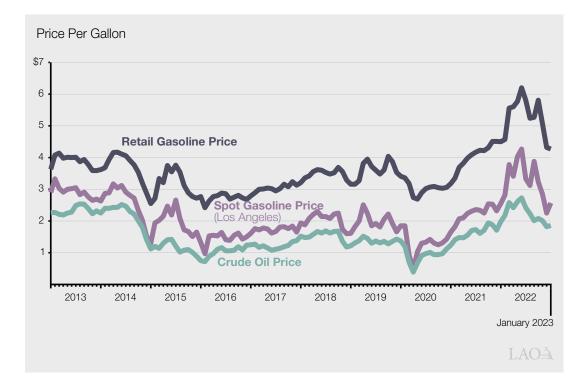
- There are two main types of wholesale gasoline prices:
  - Spot Prices. The price for gasoline sold by refiner and other entities at a refinery hub before it enters a pipeline.
  - "Rack" Prices. The price for gasoline sold by a refiner or other entity as it is loaded onto tanker trucks at "the rack" for delivery to gas stations.
- Wholesale gasoline prices generally include the cost of crude oil, costs to refine crude oil into gasoline, and refinery profits.
- Rack prices include costs related to environmental programs, including cap-and-trade and the Low Carbon Fuel Standard. Spot prices generally do not include these costs.

*Retail Prices.* Retailers purchase wholesale gasoline and sell it to drivers at gas stations. The price for gasoline sold directly to drivers is the retail price.

- Retail prices include the costs of purchasing wholesale gasoline, costs related to transporting the gasoline to the station, state taxes and fees, federal taxes, and retailer profits.
- Many retail gasoline stations are independently owned (not owned by the refiner), even if the stations are associated with "branded" names (such as Chevron, Shell, and 76). However, gasoline stations can have long-term contracts with branded refiners and other gasoline suppliers.

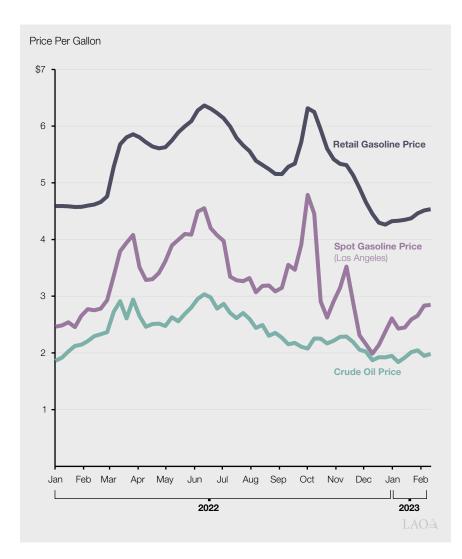


## **Trends in Crude Oil and Gasoline Prices**





#### **Recent Trends in Gasoline and Crude Oil Prices**





### How Does the Legislature Define the Problem?

We suggest the Legislature clearly identify the problem it is trying to address. Identifying the problem is important because it can help focus policy actions towards strategies that most directly target the problem. This makes it more likely that (1) the proposed policy is effective at addressing the problem and (2) reduces the risk of unintended adverse effects. Below, we identify some examples of *potential* problems that the Legislature might identify and some key questions that it might want to explore in this hearing:

- Gasoline price spikes?
- Consistently higher retail prices in California compared to the rest of the national average?
- "Excessive" profits going to business?



### **Gasoline Price Spikes**

If the problem is short-term increases in retail gasoline prices (price spikes), then the Legislature will want to identify what is likely driving the price spikes. For example, part of this process could include identifying where in the supply chain these price spikes first occur: crude oil prices, wholesale prices, or retail prices?

- **Crude Oil Prices.** Crude oil is traded on a global market and the state has limited options available to affect these prices.
- Wholesale Prices. Wholesale gasoline price spikes are often driven by factors related to supply and/or demand for gasoline. They typically last a few weeks or less. For example, short-term refinery outages and insufficient gasoline storage can help explain many short-term spikes in gasoline prices. In theory, spikes could also be driven or exacerbated by market power in less competitive gasoline markets.
- Retail Prices. Retail price changes generally follow wholesale price changes, but there is some evidence that retail prices decline more slowly than wholesale prices. This could be driven by a variety of factors, including consumer behavior and/or market power.
- Key Questions:
  - Are price spikes driven by basic supply-demand balance in a competitive market?
  - Why have businesses not invested in additional refining capacity and/or storage capacity that would allow them to take advantage of these price spikes?
  - Are there other issues, such as market power due to limited competition, that are driving some of the spikes?
  - What legal or regulatory approaches might help address these problems? Potential policy solutions could include requiring suppliers to maintain a minimum level of gasoline reserves or allowing more flexibility to use different types of gasoline when there are supply shortages. The Legislature would need to weigh trade-offs—such as potential environmental trade-offs—when evaluating these options that could help maintain adequate supply.



## **Consistently Higher Prices Compared to the National Average**

Since 2019, California retail gasoline prices have averaged about \$4.00 per gallon—roughly \$1.00 higher than the national average during the same period. If the problem is retail gasoline prices that are *consistently* higher than the national average, then the Legislature will want to identify what is likely driving the difference so it can assess and target any potential policy solutions.

- Taxes and Environmental Program Costs Drive a Portion of the Difference. Some factors contributing to higher retail gasoline prices are well-known. For example, state excise taxes are about 26 cents per gallon higher than the national average. Plus, estimated costs related to some environmental programs, such as cap-and-trade (12 cents to 24 cents per gallon) and the Low Carbon Fuel Standard (10 cents to 20 cents per gallon), are also well-known.
- Unexplained Differences. In recent years, even after adjusting for taxes and environmental program costs, California gasoline prices are often about 30 cents to 60 cents higher than the national average. This difference is sometimes referred to as the "Mystery Gasoline Surcharge." It is currently unclear what drives this unexplained difference. However, it appears that much of the unexplained difference occurs at the distribution and/or retail level, not at the refining level.
- Key Questions:
  - What portion of the price difference is the Legislature most concerned about? State taxes and environmental programs are the result of intentional policy decisions meant to support transportation and environmental goals. Any changes to these policies would likely come with significant trade-offs that the Legislature would need to consider.
  - What factors might contribute to unexplained price difference?
    Possible explanations for the difference could include market power at the distribution and/or retail level, insufficient gasoline station competition, and/or consumer preferences that differ from the rest of the country. What do we know about the degree to which each of these factors—or some other factor—is driving this unexplained price difference?



### **Excessive Profits Going to Businesses**

One issue that the administration and other stakeholder have raised is "excessive" profits going to gasoline suppliers, perhaps at the expense of higher prices and costs for consumers. Ultimately, the level of profits considered excessive is a judgment call. However, if the Legislature determines that such a threshold exists, a resulting policy goal might be to redirect some of the excessive profits from businesses to consumers. Below, we identify some of the general policy tools that have been proposed to address excessive profits.

- Windfall Profit Taxes. Under this approach, a portion of the excessive profits that exceed a certain threshold would be collected by the government through a tax, and the revenue can be redistributed back to households to help offset their costs. This approach does not directly limit the price a supplier can charge.
- Price Caps. A price cap directly limits the price that a supplier can charge. This approach is generally not aimed at collecting revenue and redistributing the revenue to consumers.
- Key Questions:
  - What level of profits are considered excessive?
  - How can excess profits be differentiated from cyclical fluctuations in profits?
  - What is driving large profits—market power, supply limitations, or something else?
  - What policy approach most directly addresses the issue of excessive profits—a windfall profit tax, a cap on prices, and/or some other approach?
  - How does each potential policy approach ultimately affect the supply of gasoline in California and/or the retail gasoline price paid by consumers?

