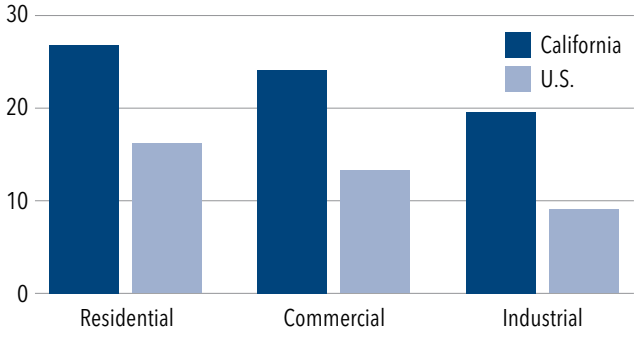
Energy Policy

Balanced, Cost-Effective, Flexible Approach Needed to Ensure Stable Supply Future

California energy policy is also California economic development policy and mobility policy, as well as poverty policy. Energy policy, and particularly the focus on addressing the causes and consequences of climate change, also is an organizing principle for much of state government's priority setting.

California residential consumers, businesses and drivers pay some of the highest energy rates in the nation — whether it's electricity for home consumption, natural gas for industrial or restaurant use, gasoline for workday commutes, or diesel for moving freight on roads or rail.

AVERAGE CALIFORNIA VS. U.S. ELECTRICITY COSTS
(cents per kilowatt hour)



Source: U.S. Energy Information Administration (September 2022).

TRANSPORTATION FUELS

California invented car culture. But while public policy is shifting toward discouraging vehicle use, most Californians still depend on their cars. About 31 million cars, small trucks and motorcycles are registered in the state, along with more than a million commercial trucks and trailers. Californians drove more than 340 billion miles in 2019, consuming more than 15.5 billion gallons of gasoline and 3 billion gallons of diesel fuel. Driving and fuel consumption flagged somewhat during the pandemic but have recovered more recently.

The price Californians pay for mobility is the very high price of transportation fuels, and in many cases a long commute to their jobs. Gasoline prices are notoriously the very highest in the nation — an average of 10% higher than any other state in the continental United States, and nearly 50% higher than the national average. The differences for diesel are somewhat smaller but directionally the same.

Reasons for the higher prices in California are well-known: the highest excise taxes on gasoline and diesel (about double the national average), regulatory levies directly applied to retail fuel prices (cap-and-trade taxes and low-carbon fuel standard fees), costlier gasoline formulations to mitigate criteria pollutants that are unique to California, and a limited — and diminishing — number of refineries capable and available to produce transportation fuels for the California market. The factors combine to limit production capacity, add costs, and reduce competitive choices.

California's political leadership has endorsed and is implementing ambitious policies to eliminate the sale of gasoline- and diesel-powered vehicles in the state, and eventually to discourage their use and presence. Notably, in 2022, the California Air Resources Board implemented Governor Gavin Newsom's proposal that by 2035 no new internal combustion vehicles be sold in the state. But in real time, this same political leadership has expressed shock and horror over the rapid rise of fuel prices in the fall of 2022 which, ironically, is probably the most reliable and stable method over time to motivate the average consumer to consider new technologies.

Governor Newsom called a special session of the Legislature

in late 2022 to enact a "financial penalty," or what he had earlier termed a "windfall profits" tax, on companies engaged in the extraction, production and refining of oil. The Legislature postponed any action under the special session until 2023, but initial polling on the subject has shown deep concern by California voters that higher taxes on energy producers would merely add to the price of gasoline. Even though the Governor has termed this charge a "penalty," to avoid triggering the constitutional two-thirds vote requirement, the effect of the new levy would be the same: discouraging investment in liquid fuels infrastructure and availability in the state, and raising their prices.

ELECTRICITY AND NATURAL GAS

California's greatest, or at least its most mentioned, aspiration of the 21st century is our leadership on climate change. For nearly two decades, governors and the Legislature have set ambitious goals, followed by tough regulations. These aggressive goals often are set far into the future, providing time for innovation and hard work to hit the target.

But sometimes aspirations run ahead of progress, and this is the case for the state's electrical grid. Much of California's new electricity generation is in the form of clean renewable power, which is better for the climate, but can be unreliable or insufficient during the hottest days of summer, or when clouds cover the sky or the wind calms. The long-term solution of massive battery storage has not yet arrived, and the persistent Western drought has diminished summertime hydroelectric resources.

The state administration and Legislature have established a goal of 100% clean electric retail sales by 2045, which involves ramping up new solar, wind (including offshore wind) and geothermal resources — along with battery storage — to serve the state's growing electricity load. At the same time, utility planners expect the retirement of more than 6,000 megawatts of natural gas-fueled electricity generation to come offline in 2024 and 2025.

California has among the highest retail prices for electricity in the nation, with the third-highest residential rates, according to the U.S. Energy Information Administration. Leaving aside Hawaii, California has the highest business electricity rates in the country, averaging 83% higher than the national average in the commercial sector, with industrial rates more than double the national average.

Natural gas is not only the most widely used home space- and water-heating fuel; it is vital for many commercial and industrial processes, including cooking, food processing, gasoline production and other major manufacturing. For 2021, California had the third highest residential price for natural gas in the continental United States, the sixth highest commercial rate, and the fourth highest industrial rate for natural gas.

As policy makers continue their pursuit of "decarbonization" of the California economy, their goal is for electricity to become the dominant fuel for what are currently enormous energy sectors: replacing gasoline and diesel in vehicle transportation and natural gas for home heating, cooking and many industrial processes. These plans would play out over a couple of decades, but the groundwork for this profound transition is being laid today.

Although this trajectory is the current preferred course by many elected leaders and regulators, it is but one path to meeting climate goals. For example, extensive and cost-effective deployment of hydrogen technologies and carbon capture and storage can transform the emissions and mitigation profile of natural gas and petroleum, respectively.

2022 LEGISLATION

California businesses that depend on reliable or affordable electricity must consider the condition and outlook of the electrical grid when planning location and expansion decisions. In this context, the Legislature and Governor acted on the following major legislation affecting state energy policy, including a "climate package" introduced by Governor Newsom, in the waning days of the 2022 session with far-reaching laws and policies cementing California's continuing leadership on this issue.

- **SB 846 (Dodd; D-Napa)**, sponsored by the Governor and supported by the California Chamber of Commerce, creates a limited-term extension of the operation of the Diablo Canyon Nuclear Power Plant. Diablo Canyon was scheduled to shut down its electricity generation operations beginning in 2024, but the bill extends its operation through 2030, with an option to continue to 2035.
- **AB 2133 (Quirk; D-Hayward)**, part of the "climate package," would have accelerated the state's already-aggressive greenhouse gas (GHG) reduction target. The current requirement to reduce GHG emissions by 40% below 1990 levels by the end of 2030 would have been ramped up to a 55% reduction in the same time frame. CalChamber opposed. Defeated.
- **SB 260 (Wiener; D-San Francisco)** would have required the California Air Resources Board (CARB) to adopt regulations requiring the reporting of GHG emission data throughout the entire supply chain to include activities such as business travel, employee commutes, procurement, waste, and water usage, regardless of location. These "Scope 3" emissions