Chalam Tubati

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DATA-DRIVEN FACT SHEET

The Real Financial Burden of California's Cap-and-Trade

Oil & Gas Industry Margins, Market Power Findings, and Regulatory Enforcement Delays

1. CALIFORNIA GASOLINE REFINING MARGINS

According to monthly data collected by the California Energy Commission (CEC) under SB 1322, state refining margins are structurally elevated. The Division of Petroleum Market Oversight (DPMO) authoritative historical gross series tracks a major post-2015 structural shift:

YEAR / CONTEXT	GROSS MARGIN
2013 (Cap-and-trade begins)	**$0.42** / gal
2015 (Torrance refinery outage gap)	**$0.71** / gal
2016 (Post-outage adjustment)	**$0.45** / gal
2019 (Pre-pandemic benchmark norm)	**$0.50** / gal
2022 (Record profits & price spike)	**~$1.00** / gal
2023 (Highest annual average on record)	**$1.01** / gal
2024 (Post-boom downward normalization)	**$0.70** / gal

> *Key Insight: Even the post-boom decline to $0.70 per gallon in 2024 remains more than double the long-term historical baseline average of $0.32 per gallon.*

2. MARKET POWER & MANIPULATION

The DPMO's formal evaluations indicate that anti-competitive behavior and extreme industry alignment—rather than climate compliance costs—dictate the severe pricing dynamics observed across the state:

- **The Branded Disparity:** Branded gas networks extracted a massive **$0.72/gallon premium** over unbranded retail operations since 2015, driven by integrated refiner market control.
- **Refinery Consolidation:** Four major firms control 90% of current in-state refining capacity. Following the planned exits of Phillips 66 (Los Angeles) and Valero (Benicia), these 4 survivors will lock down **98% of total capacity**.
- **The SB X1-2 Delay:** In August 2025, the CEC delayed enforcing the refinery profit margin cap for 5 years out of concern over sudden plant closures. No gouging penalties have been levied.

BY THE NUMBERS

MARKET STRUCTURAL GAUGES

$59B — **Mystery Surcharge:** Cumulative overcharges extracted from state consumers between 2015 and 2024.

+$0.35 — **U.S. Margin Gap:** Amount California gross margins averaged above the rest of the nation since 2015.

98% — **Capacity Lock:** Near-total control by just four refining conglomerates post-2026 closures.

CONSUMER PUMP IMPACT

$0.25 — **Cap-and-Trade:** Added directly to pump prices by the program per Legislative Analyst's Office (LAO) data.

$0.17 — **LCFS Costs:** Per-gallon addition dictated by Low Carbon Fuel Standard mandates.

$0.612 — **State Excise Tax:** High fixed rate effective via CDTFA Notice L-978.

DATA-DRIVEN FACT SHEET

The Real Financial Burden of California's Cap-and-Trade

Consumer Pass-Through Mechanics, Public Resource Allocations, and Corporate Cross-Subsidies

3. COST PASS-THROUGH MECHANICS

Empirical data indicates that environmental compliance fees are completely externalized by fossil fuel operators. The **$0.25/gallon** cap-and-trade compliance cost is added entirely to retail prices at the pump, rather than being deducted from corporate refining margins.

Gasoline allowance sales flow into the state's Greenhouse Gas Reduction Fund (GGRF). This structure places an asymmetrical fiscal burden on low-income, rural, and car-dependent communities that have minimal access to public transportation alternatives.

4. COUNTERVAILING STATE ASSISTANCE

While the energy industry publicizes regulatory policies as restrictive operational stressors, state transactional ledgers reveal immense offsetting public resource flows and corporate shields:

- **Free Allocation Share:** CARB provides substantial free allowances to block "emissions leakage." The petroleum sector claims **61% to 72% of all industrial free allowances**—surpassing every other state industry sector.
- **The 2024 Handout:** In 2024 alone, the industry received 25,284,110 free allowances, handing them a public gift value of roughly **$890 million** based on market settlement prices.
- **The LCFS Circularity:** Over $22 billion in LCFS credits have been issued since 2013, with 80% ($17.7B) flowing to combustion-based biofuel producers. Major integrated oil entities leverage this as an internal subsidy channel by operating as both credit generators and primary purchasers.

BY THE NUMBERS (CONT.)

STATE SUPPORT CHANNELS

$7-9B — **Free Allowances:** Cumulative asset value handed to the oil and gas sector from 2013 to 2024.

$17.7B — **Biofuel Credits:** Share of LCFS market capital directed heavily toward combustion biofuel systems.

FOREGONE PUBLIC REVENUE

$1.5B+ — **Severance Tax Gap:** Annual loss; CA is the only top oil state charging no extraction severance fees.

$4.1B — **Water's-Edge:** Comprehensive 2024-25 corporate state tax shield benefiting multinationals.

SYNTHESIS

Regulatory data fundamentally dismantles the argument that climate caps form an unmanageable drag. High pricing power allows easy cost exportation to fuel items, while billions in public allowance handouts and circular biofuel subsidies insulate integrated corporate bottom lines.

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The Real Financial Burden of California's Cap-and-Trade on the Oil & Gas Industry and Consumers

A Data-Driven Report – Based on Primary Regulatory Sources

SECTION 1. CALIFORNIA GASOLINE REFINING MARGINS: THE BASELINE

Data Source

The California Energy Commission (CEC), under SB 1322, collects monthly gross and net gasoline refining margins for all California refiners. This data is specific to California gasoline and is the authoritative series for direct year-to-year comparisons. The DPMO publishes annual gross margins from this dataset in Exhibit 8 of its annual report, going back to 2013.

Gross Margins Since 2013

Year	Gross Margin (per gallon)	Context
2013	$0.42	Cap-and-trade begins
2014	$0.44	
2015	$0.71	Torrance refinery outage; persistent structural gap appears
2016	$0.45	
2017	$0.52	
2018	$0.49	
2019	$0.50	Pre-pandemic norm
2020	$0.42	Brief demand crash
2021	$0.67	Recovery begins
2022	~$1.00	Record profits; fall price spike pushes margins to historic highs
2023	$1.01	Highest annual average on record
2024	$0.70	Post-boom decline, still well above pre-2015 levels

Year	Gross Margin (per gallon)	Context
2025 (partial)	Elevated	Continued volatility; recent closures push margins higher

Source: DPMO 2024 Annual Report, Exhibit 8; CEC SB 1322 monthly data.

The Post-2015 Structural Shift

Since the 2015 Torrance refinery outage, California gross gasoline margins have averaged **$0.35 per gallon more** than the rest of the U.S. (DPMO 2024 Annual Report). This margin gap persists after accounting for taxes, environmental program costs, and normal supply-demand factors, and it is the primary driver behind the DPMO's "mystery surcharge"—the $0.41 per gallon average retail price premium discussed in Section 3. The pre-2013 baseline is not directly comparable from the same data series, but available regional SEC data (West Coast, all products) suggests pre-2015 margins were considerably lower.

> ***Key Takeaway:*** *Even the 2024 decline to $0.70 per gallon is well above pre-2015 norms. The 2022–2023 profit surge was unprecedented. The state's own data shows structurally elevated gross margins not explained by regulatory costs.*

SECTION 2. COSTS PASSED ON TO CONSUMERS

The CEC publishes a detailed breakdown of the retail gasoline price. As of January 2026, the estimated components are:

Component	Cost per Gallon	Source
Cap-and-Trade	~$0.25	CEC, May 2026; LAO, Feb. 2025
Low Carbon Fuel Standard (LCFS)	~$0.17	CEC, May 2026
State Excise Tax	$0.612	CDTFA Special Notice L-978 (effective July 1, 2025 – June 30, 2026)
State & Local Sales Tax	~$0.13	CDTFA; CEC dashboard (based on ~$5.26/gal average)
Total State-Imposed Costs	**>$1.00**	

These costs are passed through to consumers, not absorbed by the industry. The Legislative Analyst's Office states that "the cap-and-trade program currently adds about 25 cents to each gallon of retail gasoline sold in

California." The revenue from gasoline-related allowances goes to the Greenhouse Gas Reduction Fund (GGRF) for state climate programs.

Additionally, LCFS credits largely flow to biofuel producers, some of which are oil companies or their subsidiaries. The oil industry also benefits as the primary purchaser of these credits, using them to comply with the LCFS mandate. This arrangement creates a circular subsidy that obscures the full consumer cost (Stanford Law School, Mar. 2026).

SECTION 3. MARKET MANIPULATION FINDINGS (SB X1-2 / DPMO)

The DPMO's 2024 Annual Report (October 2025) provides the definitive state findings on California's gasoline market.

The $59 Billion Mystery Surcharge

Between 2015 and 2024, California consumers paid an estimated **$59 billion in overcharges** – a "mystery surcharge" averaging **$0.41 per gallon**. This surcharge is distinct from taxes, fees, and environmental program costs.

California Margins vs. the Rest of the U.S.

Since 2015, California gross gasoline industry margins have increased by **$0.35 per gallon** relative to the rest of the United States. The DPMO states: "One possible reason is market power."

Branded vs. Unbranded Disparity

Retail gasoline sold at major brand stations carries the highest surcharge, at **$0.72 per gallon** since 2015. Brand-focused refiners' gross margins averaged **$1.02 per gallon** between February 2015 and July 2025, compared to **$0.73 per gallon** for unbranded-focused refiners. This gap is attributed to the market power of integrated refiners that control their own retail networks.

Market Concentration and Vertical Integration

Approximately **90 percent** of in-state refining capacity is controlled by four companies. After the planned closures of the Phillips 66 Los Angeles refinery and the Valero Benicia refinery, four firms will control **98 percent** of the state's refining capacity. Furthermore, about **50 percent** of refiner sales are through vertically integrated sales channels. The DPMO notes that "outside of price spikes, large integrated refiners benefit from marketing/ retail networks, while smaller non-integrated refiners are marginal."

Price Spikes Are Profit Spikes

The DPMO uses this exact language. During the fall 2022 price spike, California retail gasoline prices rose by **$1.21 per gallon** while prices in the rest of the U.S. fell and crude oil costs decreased by **$0.39 per gallon**.

Policy Response

In August 2025, the CEC formally delayed implementation of the profit cap authorized under SB X1-2 for five years, citing concerns that immediate enforcement could trigger additional refinery closures. No penalties have been levied for price gouging under the law.

Sources: DPMO 2024 Annual Report; Consumer Watchdog, May 29, 2025; Politico Pro, Aug. 29, 2025.

SECTION 4. STATE ASSISTANCE AND SUBSIDIES TO THE INDUSTRY

Beyond cap-and-trade compliance, the oil and gas sector receives substantial public financial support through direct allocations, credit trading programs, and tax exemptions.

Free Cap-and-Trade Allowances

To mitigate "emissions leakage," CARB allocates free allowances to industrial emitters, including oil refineries and crude oil extraction facilities. The oil and gas industry receives approximately **61–72 percent** of all industrial free allowances, more than any other industrial sector. (CARB annual allocation summaries)

Using CARB's own published vintage-year allocation summaries and quarterly auction settlement prices, the cumulative value of free allowances allocated to the oil and gas sector from 2013 through 2024 can be estimated at approximately **$7–$9 billion**. This estimate is derived by multiplying the number of free allowances allocated to petroleum refining, hydrogen production, and crude oil and natural gas extraction in each vintage year by that year's average auction settlement price, relying solely on publicly available CARB data.

In 2024 alone, the oil and gas industry received **25,284,110 free allowances**, valued at approximately **$890 million** based on the average 2024 auction settlement price of $35.23. (CARB Vintage 2024 Allocation Summary; Capitol Weekly, May 2025)

Low Carbon Fuel Standard Credits

The LCFS is a separate credit trading program that requires transportation fuel suppliers to offset the carbon intensity of their products. Since the program's inception in 2013, it has issued more than **$22 billion in credits** for low-carbon fuels. About **80 percent** of these credits – worth more than **$17.7 billion** in 2023 dollars – have gone to combustion-based biofuel producers, while the remainder has supported electric vehicle charging, hydrogen, and other alternatives. (Kleinman Center for Energy Policy, "The LCFS in California," 2024)

The oil industry participates in this market both as a credit generator, through biofuel subsidiaries and refinery-adjacent operations, and as the primary credit purchaser to meet its compliance obligations. The cost of these credits is ultimately borne by fuel consumers through higher pump prices. (Stanford Law School, Mar. 2026)

Tax Breaks and Exemptions

- **No Oil Severance Tax:** California is the only major oil-producing state without a tax on oil and gas extraction. According to the Legislative Analyst's Office, a 10 percent severance tax would likely generate between **$1.5 billion** and **$2.5 billion** annually. This represents foregone revenue that could otherwise offset the costs of climate programs or consumer rebates. (LAO, Initiative Analysis, 2011)
- **Water's-Edge Election:** A multi-billion-dollar corporate tax break (the largest in California, costing the state an estimated **$4.1 billion** in 2024–25 across all industries) from which oil and gas companies benefit. The specific industry share is not publicly isolated. (AB 1790, 2026)
- **Other Tax Provisions:** A set of smaller tax breaks, including deductions for intangible drilling costs, percentage depletion, and enhanced oil recovery costs, was partially eliminated by SB 167 in 2024. The combined savings from these eliminations were projected at **$22 million** in 2024 and approximately **$17 million annually** thereafter. (SB 167, 2024)

Context

The free allowances and LCFS credits represent substantial value flowing to and through the oil and gas sector. When tax breaks are included, the net flow of public resources strongly favors the industry. This pattern of public support complicates the argument that cap-and-trade represents an unsustainable financial burden.

Sources: CARB Vintage 2024 Allocation Summary; Capitol Weekly, May 14, 2025; Kleinman Center for Energy Policy, "The LCFS in California," 2024; Stanford Law School, Mar. 23, 2026; LAO, Initiative Analysis (2011); AB 1790 (2026) legislative analysis; SB 167 (2024) legislative analysis.

SECTION 5. SYNTHESIS: THE REAL BURDEN OF REGULATION

The industry's claim that cap-and-trade is an existential "stressor" does not hold against the regulatory data:

- **Profits Are Historically High:** Even the 2024 margin of $0.70 per gallon is well above pre-2015 norms. The 2022–2023 period set profit records. (DPMO Exhibit 8)
- **Costs Are Passed Through:** The $0.25 per gallon cap-and-trade cost is added to pump prices, not paid from industry margins. (CEC; LAO)
- **Subsidies Cushion the Burden:** Billions of dollars in free allowances and LCFS credits flow to and through the sector, as documented by CARB allocation data and the Kleinman Center.
- **Market Power, Not Regulation, Drives Consumer Prices:** The DPMO's **$0.35 per gallon structural margin premium**, branded/unbranded gap, and **$59 billion cumulative consumer overcharge** (calculated from the $0.41 per gallon average mystery surcharge) all point to anti-competitive behavior as the primary driver of high California gasoline prices. (DPMO 2024 Report)

A Necessary Nuance: Integrated majors (Chevron, Marathon) have thrived, while some independent refiners have closed. Phillips 66 announced closure of its Los Angeles refinery in 2024; Valero booked a $1.1 billion

impairment on its Benicia facility and plans to exit by April 2026. These closures reduce competition and can drive margins even higher for survivors.

Bottom line: For the dominant players, cap-and-trade is a manageable cost in a market where they hold significant pricing power – and that cost is substantially cushioned by state support.

Sources (Primary Regulatory or Official)

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California Energy Commission, "Estimated Gasoline Price Breakdown and Margins," accessed May 2026

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Yahoo Finance / Rigzone, "Valero Mulls Shutdown of California Refinery, Books $1.1B Impairment," April 21, 2025

AB 1790 (2026) legislative analysis – Water's-Edge Election

SB 167 (2024) legislative analysis – Phase-out of certain oil and gas tax provisions