DOCKETED	
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Project Title:	Independent Consumer Fuels Advisory Committee
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Document Title:	Third Meeting of the Independent Consumer Fuels Advisory Committee
Description:	Presentations
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Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	12/9/2025 4:09:36 PM
Docketed Date:	12/9/2025

Third Meeting of the Independent Consumer Fuels Advisory Committee

December 9, 2025

Housekeeping

- Meeting is being recorded. 

- Attendees may participate today by making comments during public comment period.

Purpose of Today's Meeting

- Discuss the petroleum supply stabilization and other petroleum-focused efforts.
- Solicit initial thoughts on the implementation of SB X1-2 and AB X2-1.

Agenda

Opening Comments

Introduction of New ICFAC Member, Timothy Jefferies

1. Overview of Legislative Developments and Transportation Fuels Analytical Work
2. Updates on Petroleum Supply Stabilization Strategies
3. Economics Perspective: Industry Trends and Resupply Requirements
4. Update on Senate Bill 237 (Stats. 2025, ch. 118) Assessment and Transportation Fuels Transition Plan

Committee Discussion

Open Forum

Public Comments

Closing Remarks

Opening Comments

Introduction of New ICFAC Member

Timothy Jefferies
Speaker of the Assembly Appointee

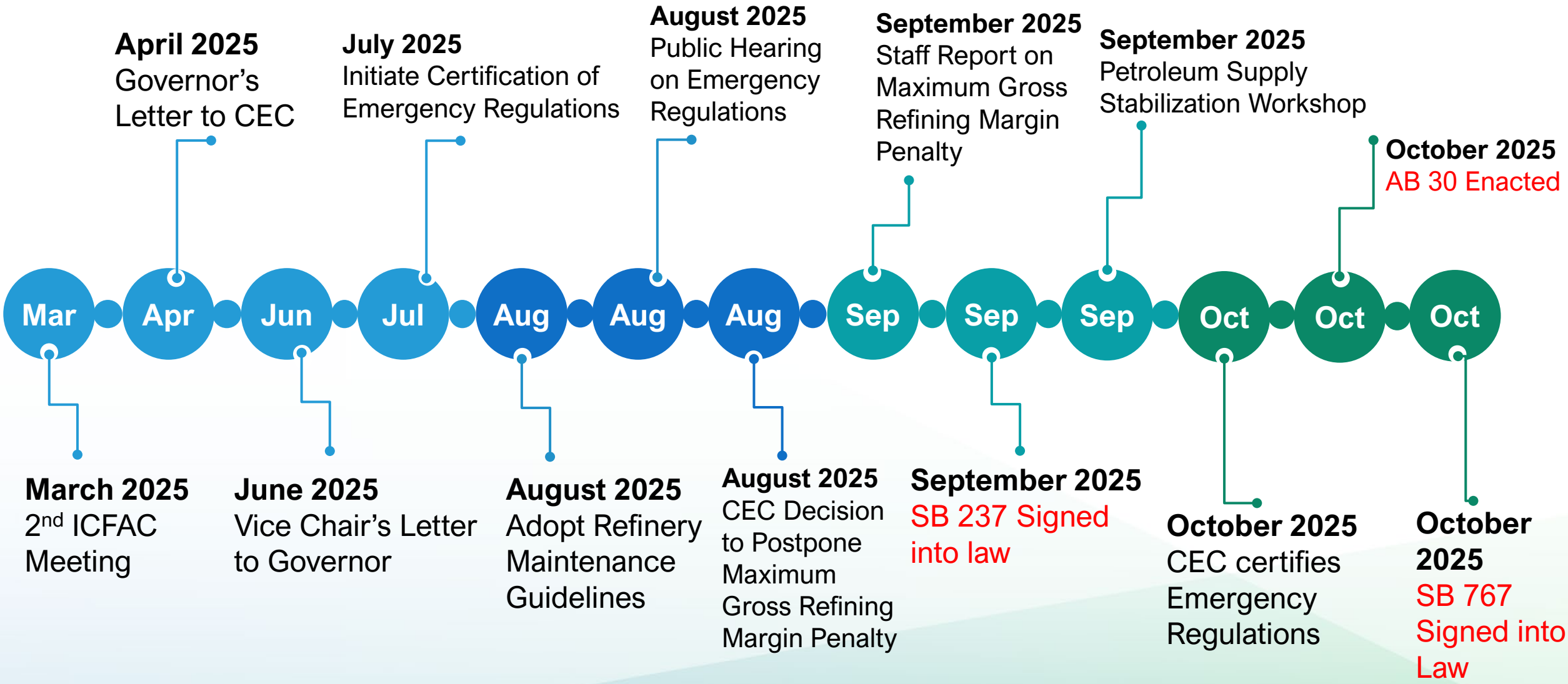
Overview of Legislative Developments and Transportation Fuels Analytical Work

Max Solanki, Manager, Fuels Analysis Branch

Purpose & Agenda

- What's changed since the second ICFAC Meeting
- Building Petroleum Team with Integrated Capabilities
- Arc of petroleum requirements
- Vice Chair's letter to Governor
- Maximum Gross Gasoline Refining Margin
- Resupply Plans & Minimum Inventory

What's Changed Since Second ICFAC



Building Petroleum Team with Integrated Capabilities

- Petroleum Systems & Market Expertise
- Advanced Analytics & Modeling
- Infrastructure & Investment Assessment
- Economics, Engineering, Operations & R&D
- Regulatory & Policy Planning
- Leadership, Strategy & Execution

Arc of Petroleum Requirements

PIIRA, 1980

Petroleum industry data collection and reporting.

- Monthly refiners and marketers on output, stocks, supply & distribution
- Product receipts and sources
- Annual Data on capacities of transportation system
- Basic planned maintenance information

SB 1322 & SB X1-2, 2023

Expanded data collection and regulatory analysis.

PIIRA 1980 +

- Refinery Costs Disclosure
- Gross Gasoline Refining Margin (GGRM)
- Planned maintenance details and turnaround
- Improved temporal data on imports & exports
- Sales, Projections & Terminal Inventories
- Analysis supporting inventory & GGRM policy
- Price Triggers and Alerts Playbook

AB X2-1, 2025

Deeper economic and technical analyses underpin statewide infrastructure and fuels planning.

SB X1-2 +

- Days of Supply Model
- Enhanced Refinery Maintenance and Resupply Plan Analysis
- Expanded Spot Market, Inventory and Marine Imports Analysis
- Near-term Price Forecast
- Price Spike Analysis
- Max Margin and Resupply Plan Framework
- Petroleum Infrastructure Tracker

Arc of Petroleum Requirements

SB 237, 2025

Market Stabilization /CEQA / Transition Analysis

ABX 2-1+

- Expand TFA
- Evaluate alternative gasoline specifications
- Evaluate “westwide” gasoline specifications
- Evaluate future petroleum import needs
- Review regulations affecting supply
- March 31, 2026 Assessment
- Consult on Governor suspending RVP requirements
- Role in Analyzing Kern County Production

SB 767, 2025

Data, Transparency, Market Monitoring, Refinery Oversight

ABX 2-1+

- Identify reportable pipelines
- Collect monthly pipeline data from pipeline operators

Letter to Governor: Strategies and Recommendations

1 Stabilize Fuel Supply

- **Ensure** reliable imports
- **Explore** retaining existing refineries

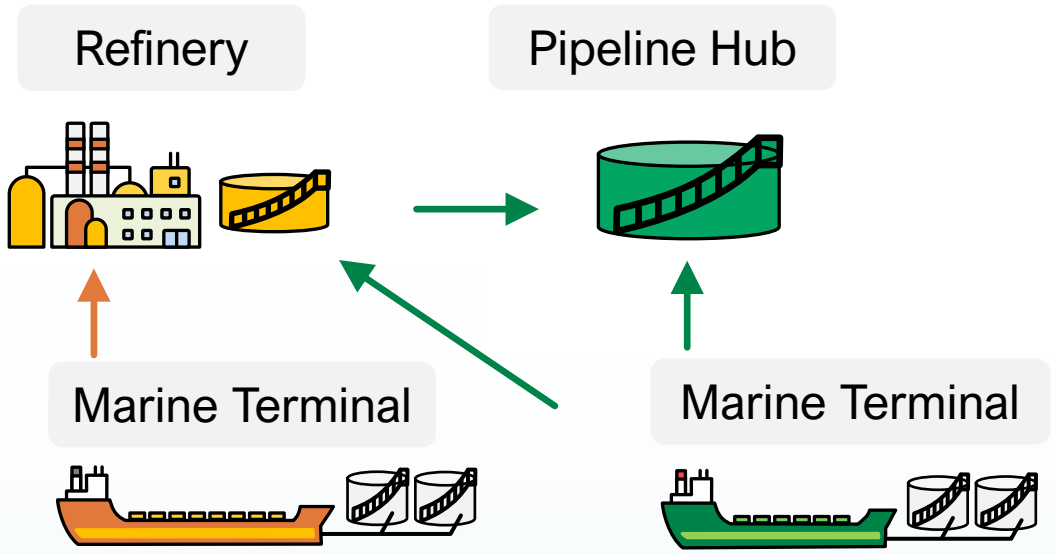
2 Build Investment Confidence

- **Stabilize** in-state crude oil production
- **Support** statutory & regulatory efforts
- **Strengthen** regional coordination

3 Holistic Transition Strategy

- **Interagency & Community** coordination
- **Support** transition funding
- **Protect** environment
- **Protect** health and safety

1 Stabilize Fuel Supply Through Imports & Maintain In-State Refining Capacity



Key Work Products

- Petroleum infrastructure task force
- Refineries + Terminals + Pipelines vulnerability report with prioritized mitigations
- Infrastructure & Market Engagement Tracker

2 Build Investment Confidence for Safe and Reliable Operations

Key Work Products

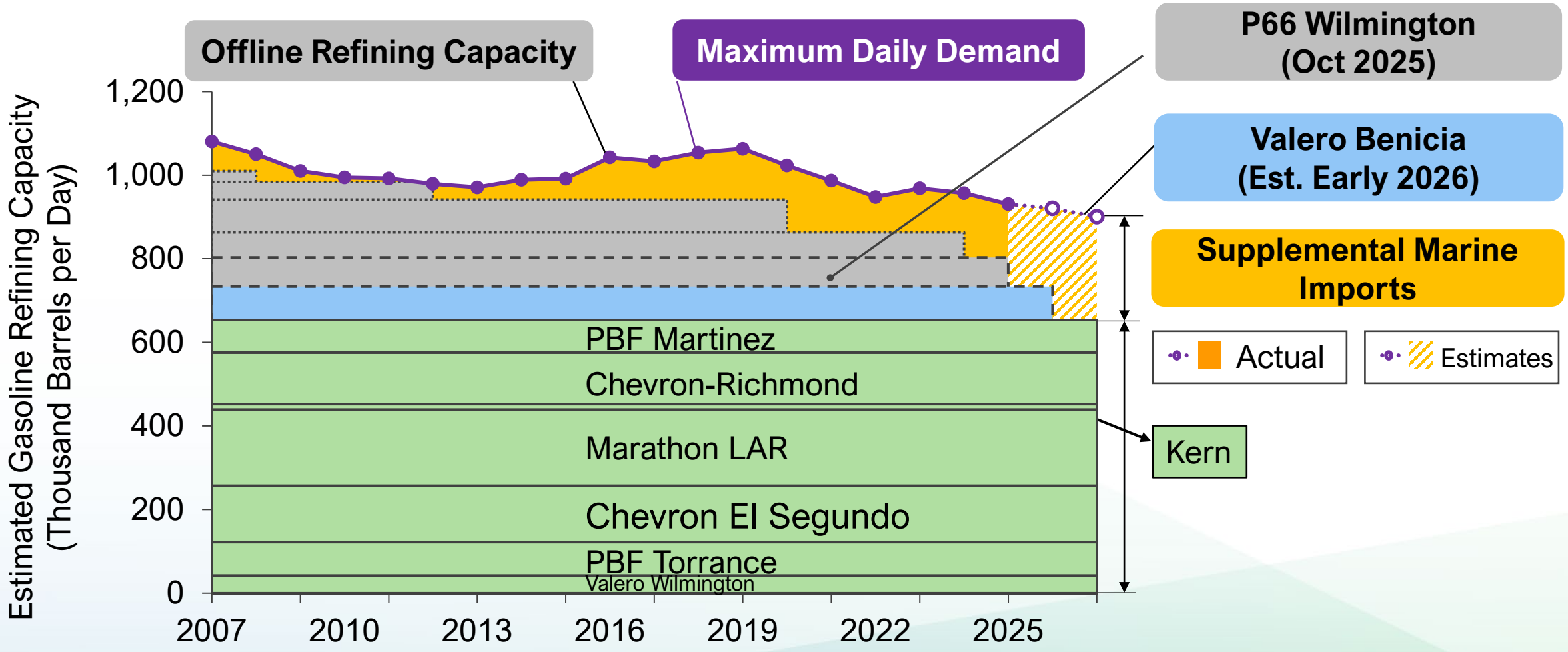
- Transportation Fuels Assessment 2 (2026)
- Minimum Inventory & Resupply Report & Rulemaking
- GGRM Analytical Basis Report

3 Support a Holistic Transition Strategy

Key Work Products

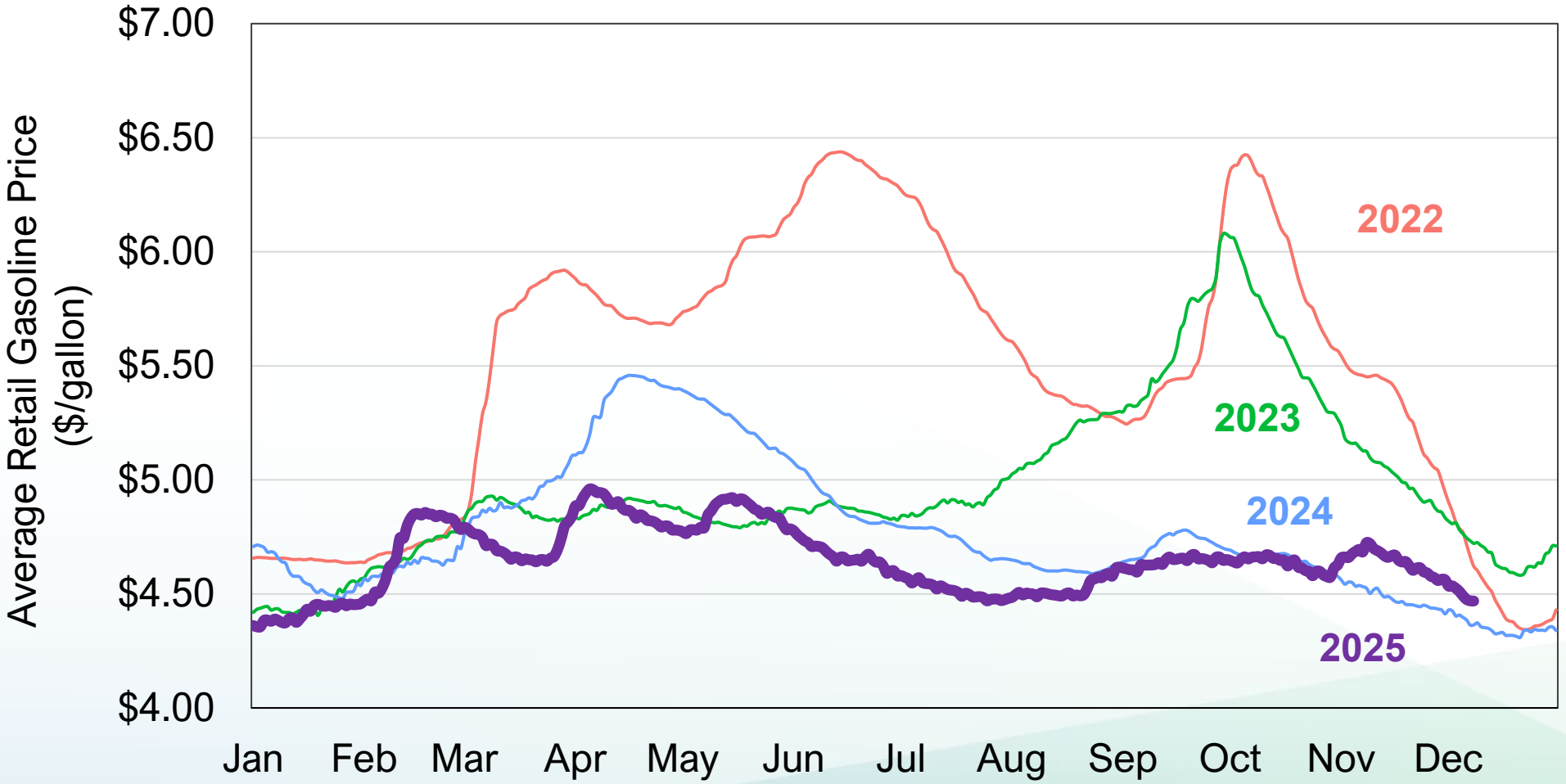
- Transportation Fuels Transition Plan (with CARB)
- SB 237 March Assessment

Estimated Gasoline Refinery Capacity



Source: CEC Staff, CDTFA

Gasoline Price History



MGGRM & Penalty – Strategic Deprioritization

- Pivoted in 2025
- MGGRM Deprioritize
- Prioritize stabilization measures
- Continue Analysis
- Workshop forthcoming

MGGRM & Penalty –Deprioritization Drivers

- Refinery exits
- Maintenance protection
- Outage risk
- Import reliance
- Mid-transition sensitivity

Resupply Plans & Minimum Inventory

- Build “Resupply Framework” + playbook
- Establish “Minimum Inventory” thresholds
- Run scenario modeling + simulations
- Engage industry on logistics planning
- Present findings at workshop next year

Closing Message

- Collaboration ensures thoughtful, early action
- Transition challenges require collective expertise
- Focus: stability, investment, equitable transition

Updates on Petroleum Supply Stabilization Strategies

Max Solanki, Manager, Fuels Analysis Branch

Purpose of OIIP

Establish a robust public record prior to regulatory actions

Facilitate early and transparent stakeholder engagement

Evaluate both benefits & consequences of strategies

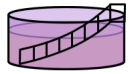
Develop data-driven strategies to stabilize fuel supply and reduce gasoline price volatility

2022 - 2025 Evolution

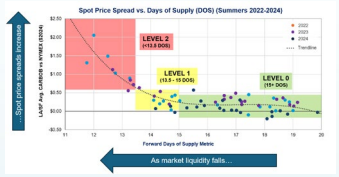
2022 – No Transparency

Senate Bill X1-2 Implementation

The California Gas Price Gouging and Transparer
enhances the state's ability to understand and re
to gasoline price spikes.



2023 – New Tools

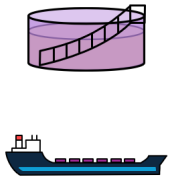


2024-2025 – Deeper Insights

Assessment & Insights

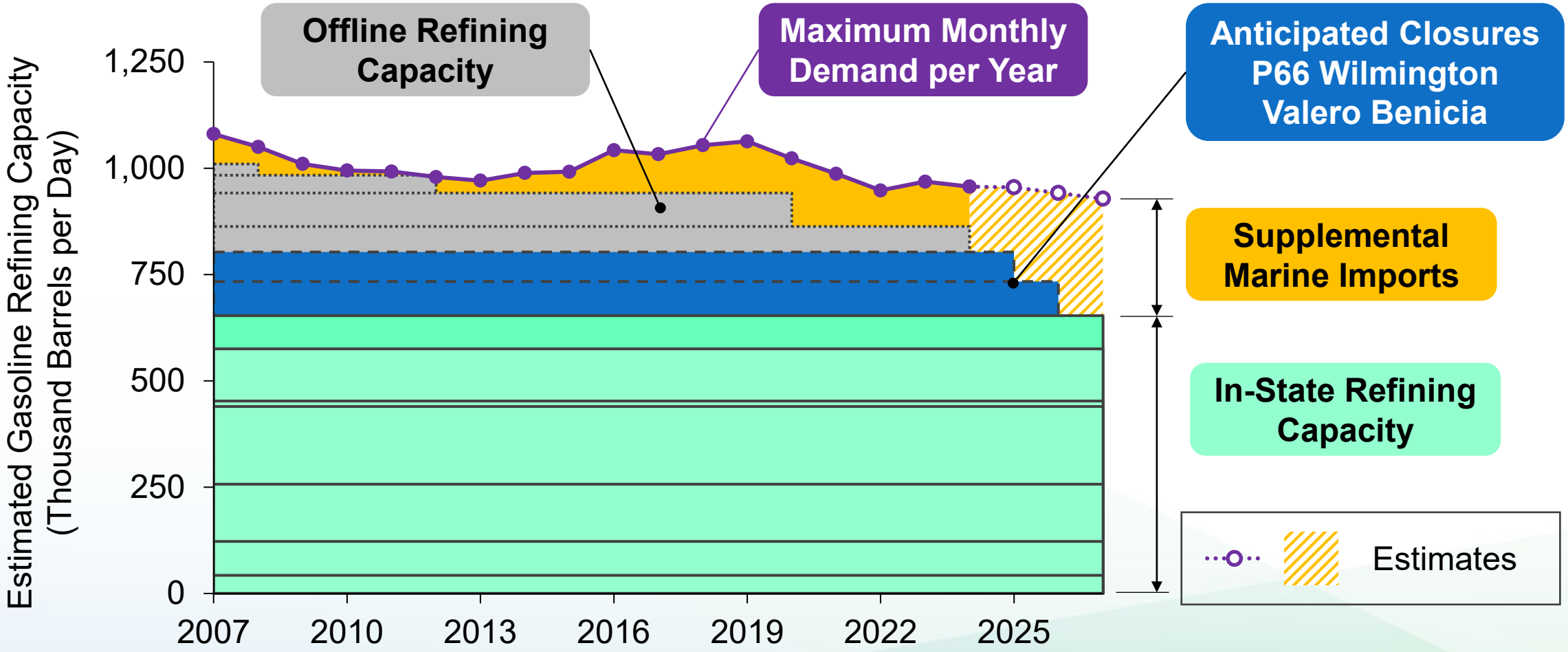
Transparency allowed us to observe and explain

Core Findings – Supply tightness primary driver of price spikes



ABX 2-1 Tools – Resupply Planning & Minimum Inventory

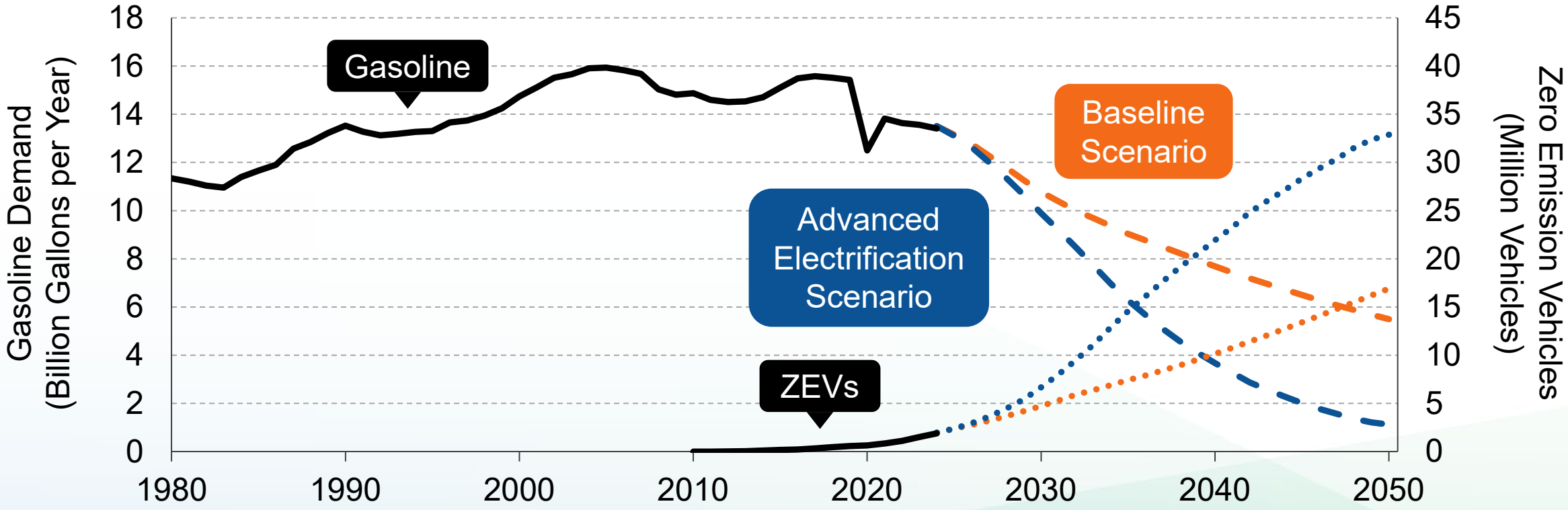
Global & State Trends Shaping California



Source: CEC Staff, CDTFA

Mid-Transition Context

Pre-Transition (Fossil Growth) | **Early-Transition** (Fossil Adequacy) | **Mid-Transition** (Building/Retiring) | **Late-Transition** (New Dominant System)



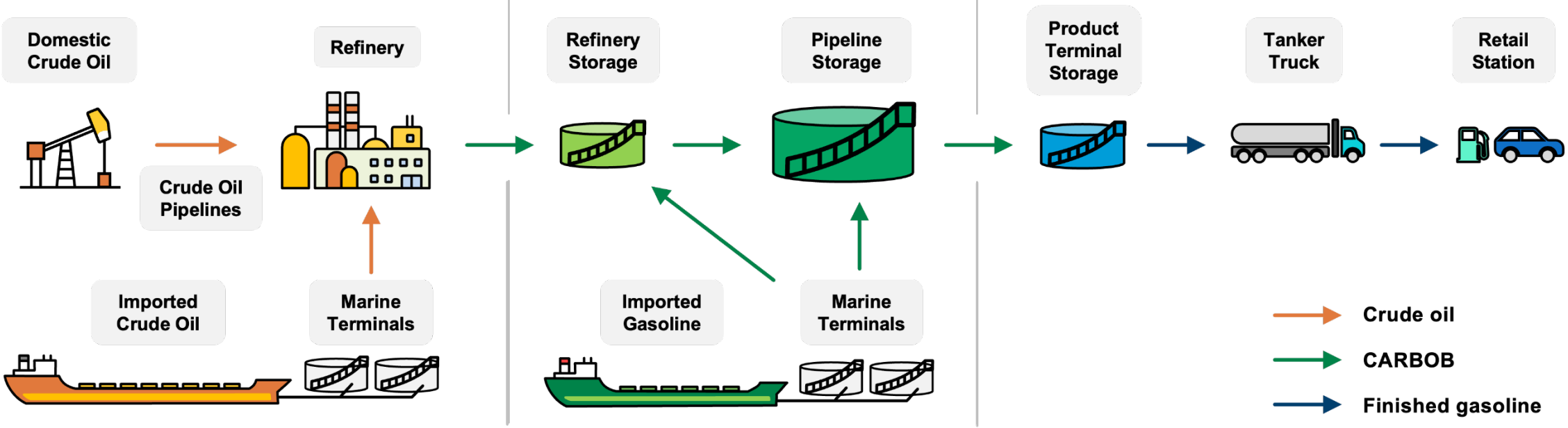
Source: CEC Staff

Consider Value Chain As A Whole

Crude oil is extracted from fields or delivered via marine vessel to refineries, which produce gasoline and other petroleum products.

Gasoline from refineries and additional imports are delivered to pipeline hubs.

Gasoline is blended with ethanol and loaded onto trucks at racks to be delivered to retail stations.



Landscape: Demand Supply Equilibrium

SUPPLY

Gasoline Inventories

Refinery Production

Marine Imports

DEMAND

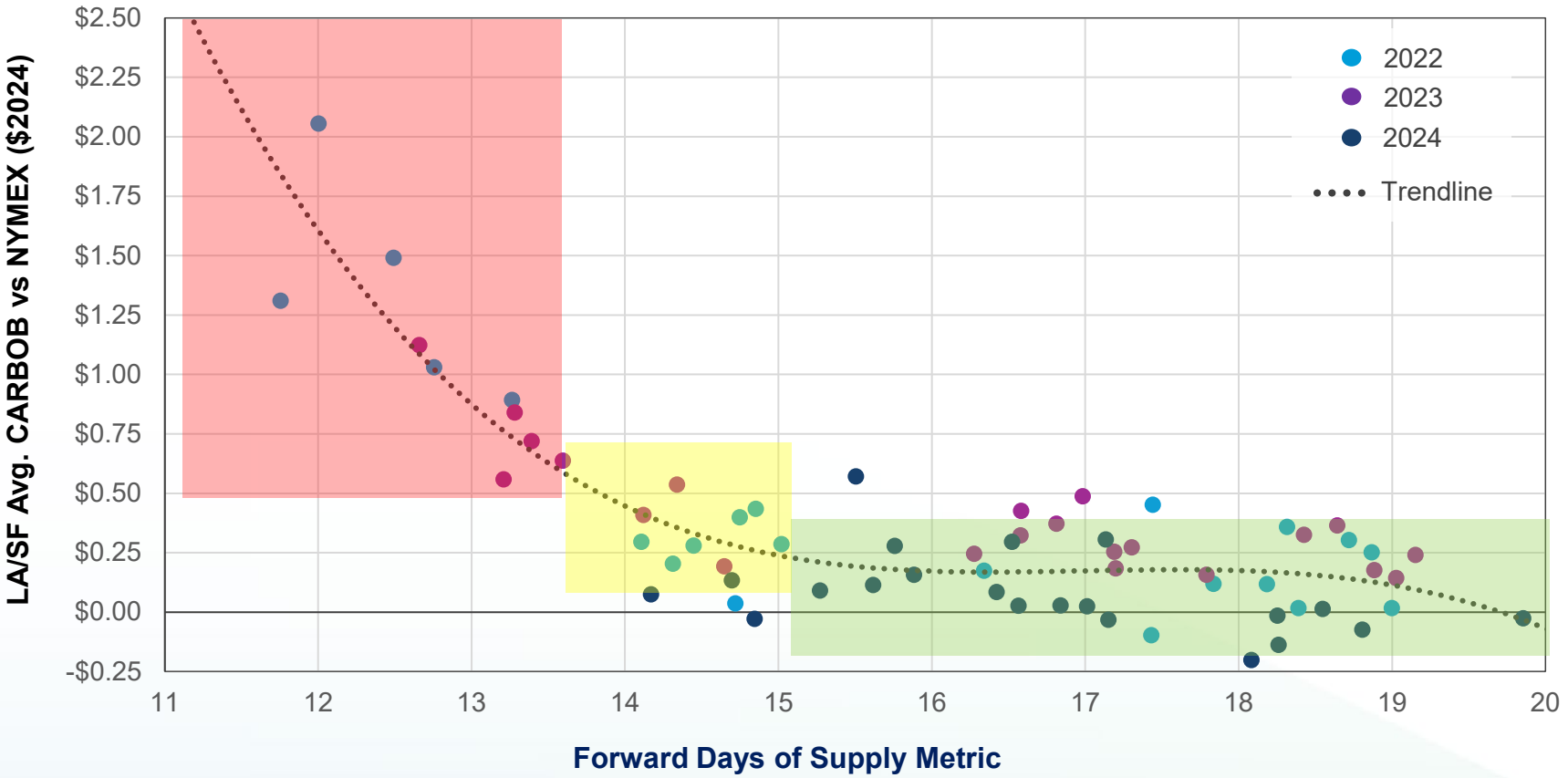
Gasoline Demand

Balancing Demand and Supply

California Gasoline Days of Supply

Spot Price Spread vs. Days of Supply (DOS) (Summers 2022-2024)

…Price spreads increase



LEVEL 0
(15+ DOS)

LEVEL 1
(13.5 - 15 DOS)

LEVEL 2
(<13.5 DOS)

Note: Days of Supply is an estimate using production and inventory metrics for week ending 9/12/2025 and projected marine imports and refinery production based on currently available refinery maintenance information.

As Days of Supply fall…

Panel Discussions

- Tom O’Connor, ICF International
- Julia May, Communities for Better Environment
- Jodie Muller, Western States Petroleum Association
- Ryan Cummings, Standford Institute for Economic Policy Research
- Norman Rogers, United Steelworkers Local 675

Takeaways

- Rising reliance on fuel imports
- Ports critical for supply stability
- Storage and import upgrades needed
- Refinery pollution harms communities
- Call for equitable refinery transition
- Closures impact workers and prices
- Refining history shows safety risks
- Strategies should balance reliability, safety, environment

Thank you

Max Solanki, Program Manager
Fuels Analysis Branch

DIVISION OF PETROLEUM MARKET OVERSIGHT

Economics Perspective: Industry Trends and Resupply Requirements

Gigi Moreno, Chief Economist, DPMO

December 9, 2025

DPMO's 2024 Annual Report

1. **Introduction & Year in Review**
2. **2024 Gasoline Market Conditions**
3. **Demystifying California Gasoline Prices**
    a) DPMO confirms the "mystery gasoline surcharge"
    b) Higher gross gasoline industry margins make up the largest share of the surcharge
    c) Market power (horizontal and vertical) is a growing concern in California's gasoline market
    d) Californians face price spikes and increasing branded gasoline markups
    e) California's refining sector has split into "haves and have nots"

DPMO 2024 Annual Report QR Code

DIVISION OF PETROLEUM MARKET OVERSIGHT

Outline

1. **Economics for Resupply and Minimum Inventories**
   - Gasoline Refining Industry Structure
   - Market Concentration and Misaligned Incentives
2. **AB X2-1 Policy Tools**
   - Refinery Storage Utilization Trends
   - Principles for Implementation

DIVISION OF PETROLEUM MARKET OVERSIGHT

CA's Refining Sector: Key Characteristics

Concentration: A few large firms dominate the market

Price Setting: Firms are not "price takers" and have influence over price

Barriers to Entry: High fixed costs limit new entrants

Shrinking Demand: Gasoline and fossil diesel demand is declining

Interdependence: Firms buy and sell from one another

Concentration in CA's Refining Sector

Crude Refining Capacity Among California Refiners with Gasoline Production (January 2025)

Crude Refining Capacity Among California Refiners with Gasoline Production

Rank	Refiner with Gasoline Production Capacity	Total CA Crude Refining Capacity (BPD)	Share of Total CA Crude Refining Capacity	Cum. Share of CA Crude Refining Capacity
1	Chevron Corp	530,271	36%	36%
2	Marathon Petroleum Corp	365,000	25%	61%
3	PBF Energy Co LLC	316,400	22%	83%
4	Valero Energy Corp	230,000	16%	98%
5	Kern Oil & Refining Co	26,000	2%	100%
Four-Firm Concentration Ratio in Rest of U.S.				48%

Notes and Sources: Based on DPMO analysis of data from U.S. Energy Information Administration. Table includes refineries with gasoline capacity, excludes refineries that do not produce gasoline and the Phillips 66 Rodeo facility, which converted to renewable fuel in March 2024. Rank is based on total crude refining capacity, which includes a company's refining capacity across refineries and products. Shares are rounded.

Price Spikes as Market Failure

Firms as Profit-Maximizing Actors

- All firms are profit-maximizers
- Public companies obligated first to investors
- Price and supply reliability are secondary

Price Spikes as Market Failure (Cont'd)

Firms as Profit-Maximizing Actors

- All firms are profit-maximizers
- Public companies obligated first to investors
- Price and supply reliability are secondary

Market Power & Misaligned Incentives

- Market power creates incentives to decrease supplies
- Decreasing supplies increases prices and profits
- Creates disincentive to buffer the market from supply disruptions

Price Spikes as Market Failure (Cont'd 2)

Firms as Profit-Maximizing Actors

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Market Power & Misaligned Incentives

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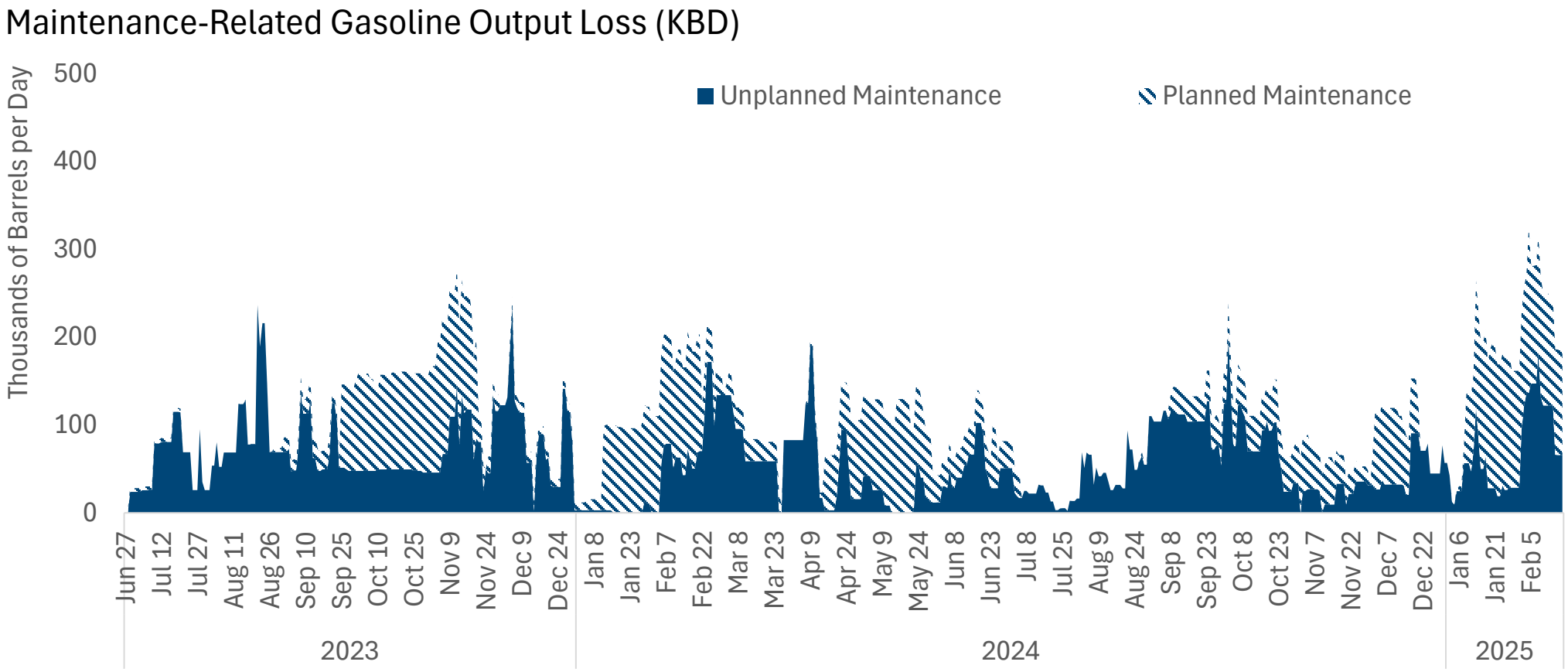
Result: Supply Volatility & Price Spikes

- Price volatility becomes market feature
- Market has disincentive to buffer supply disruptions
- State intervention (including AB X2-1 tools) realigns incentives

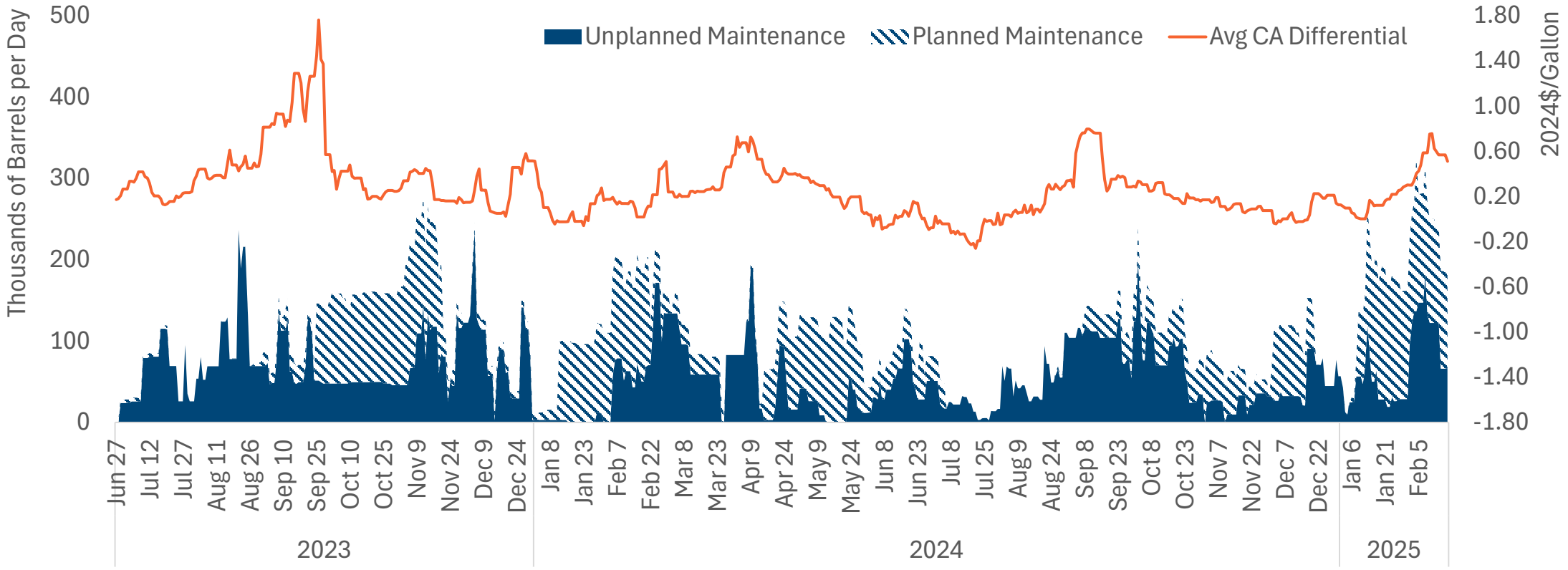
Gasoline Output Loss and Prices



Based on DPMO analysis. Maintenance data from CEC, spot price data from OPIS. Discount factor based on CPI less Energy (U.S. Bureau of Labor Statistics).

Gasoline Output Loss and Prices (Cont'd)

Maintenance-Related Gasoline Output Loss (KBD) and Average California Spot Price Differential (2024$/gal)



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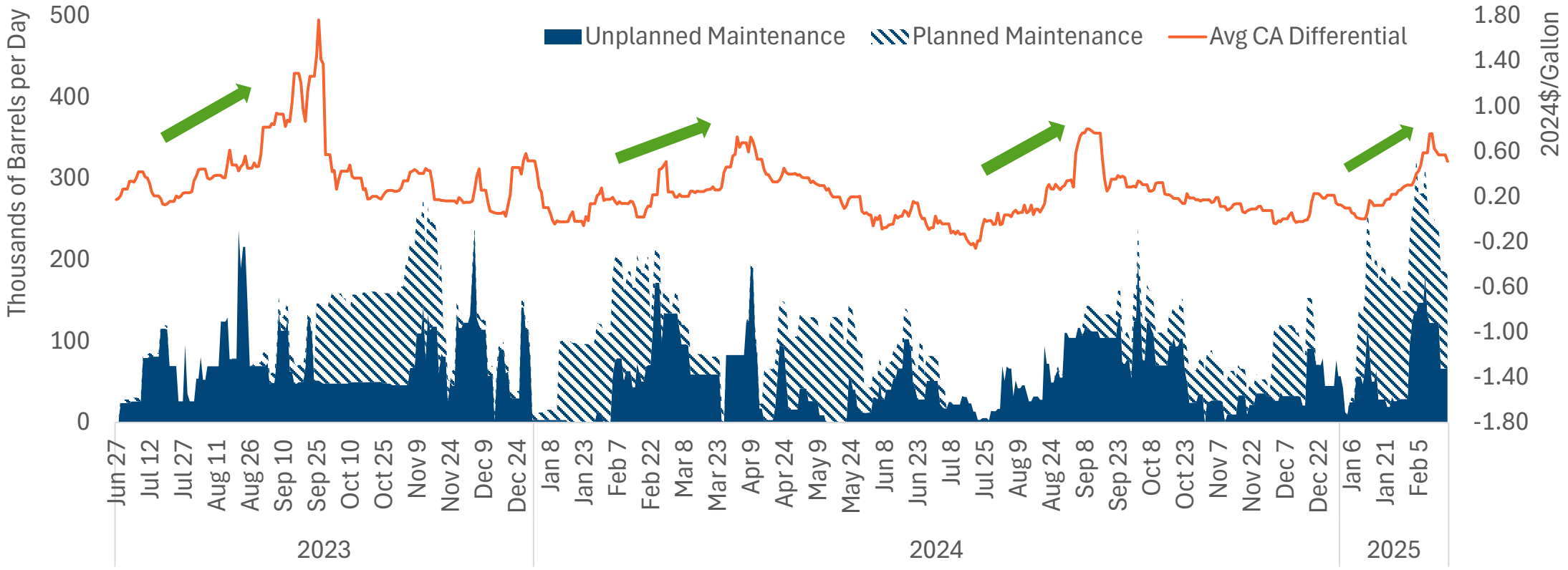
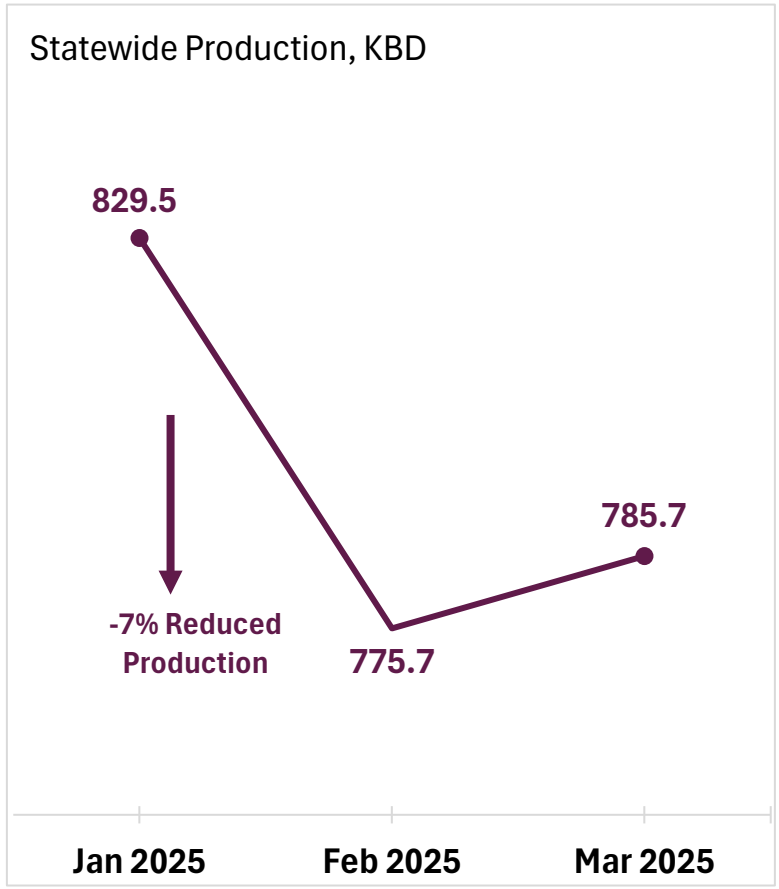


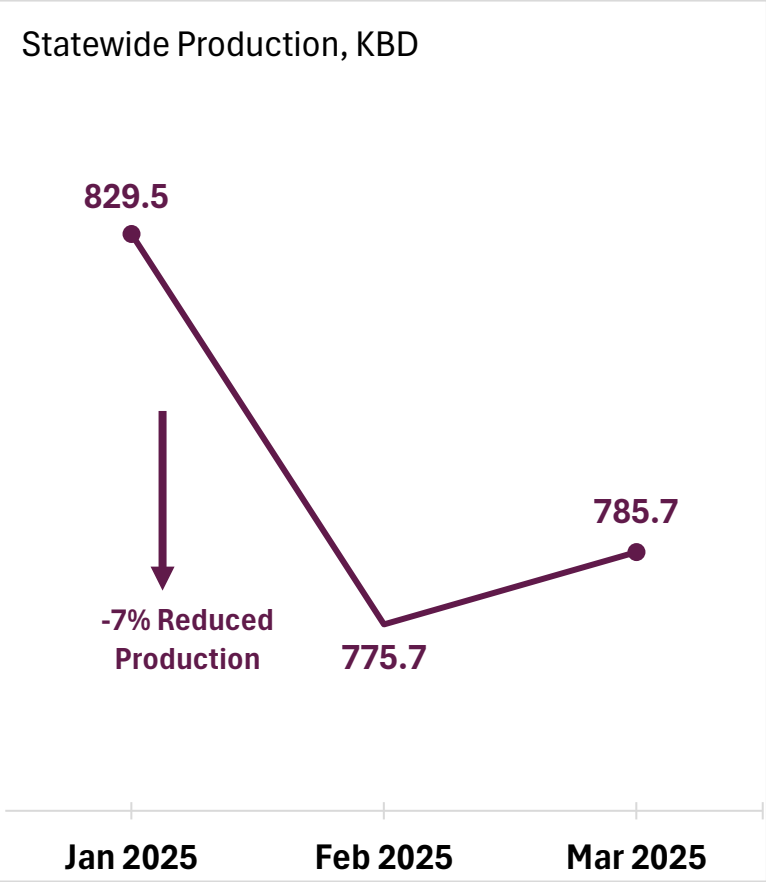
Based on DPMO analysis. Maintenance data from CEC, spot price data from OPIS. Discount factor based on CPI less Energy (U.S. Bureau of Labor Statistics).

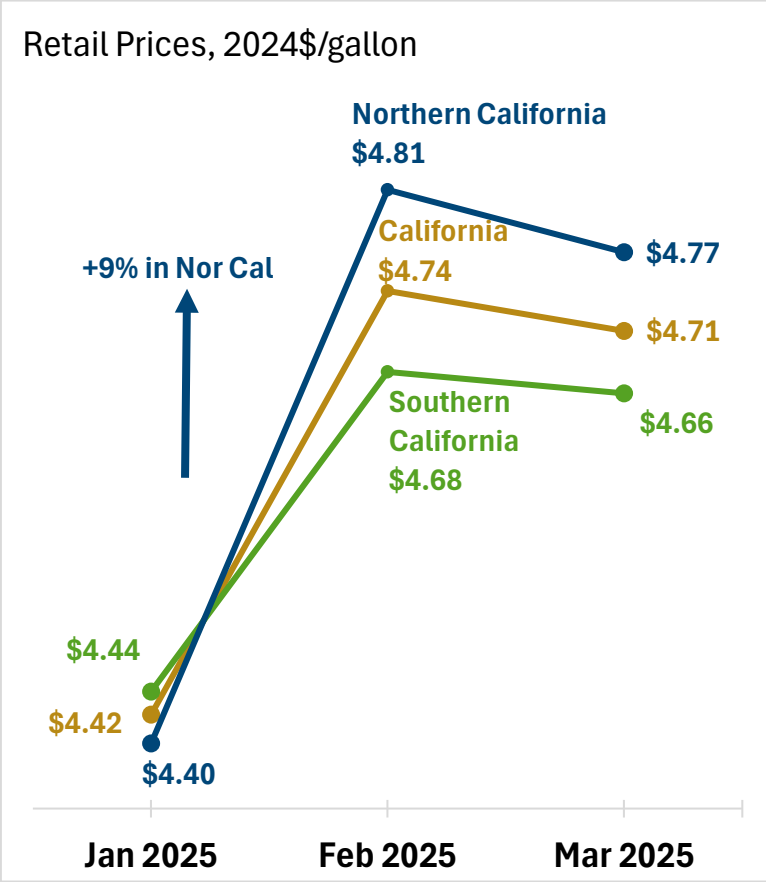
2025 Winter Supply Disruption



Based on DPMO analysis of EIA refinery production data.

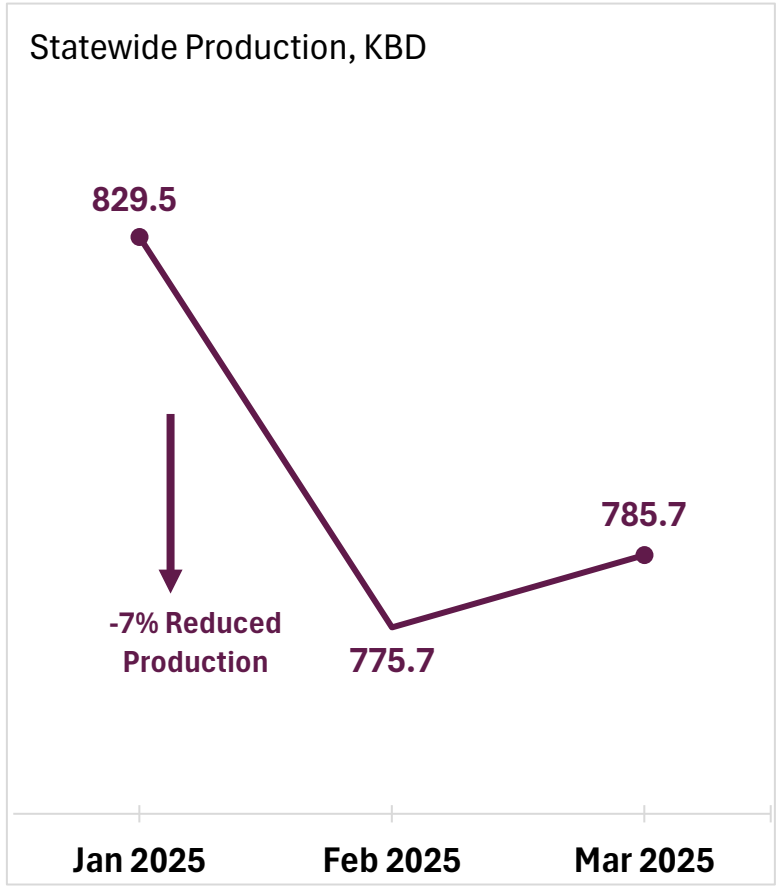
2025 Winter Supply Disruption (Cont'd)

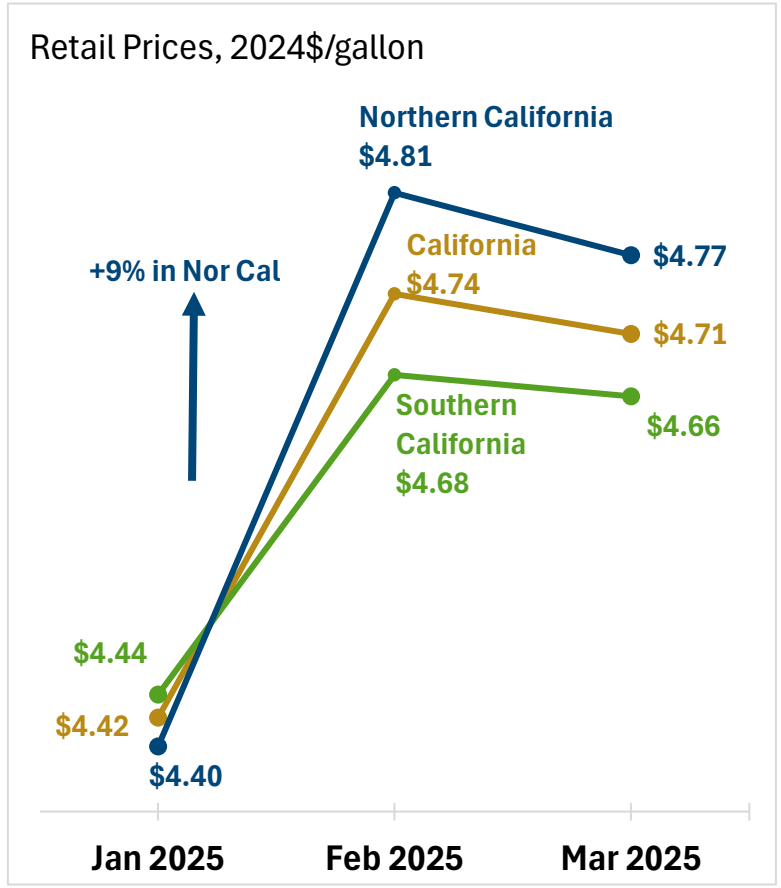


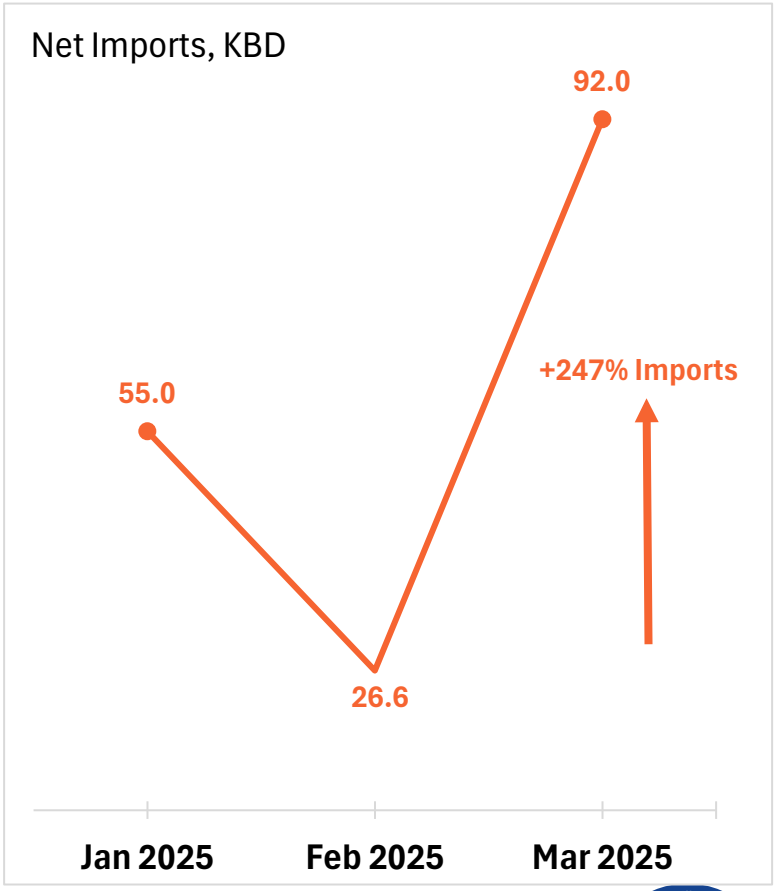


Based on DPMO analysis of EIA refinery production data. Retail prices computed from OPIS data and discounting using CPI less Energy from the U.S. Bureau of Labor Statistics.

2025 Winter Supply Disruption (Cont'd 2)





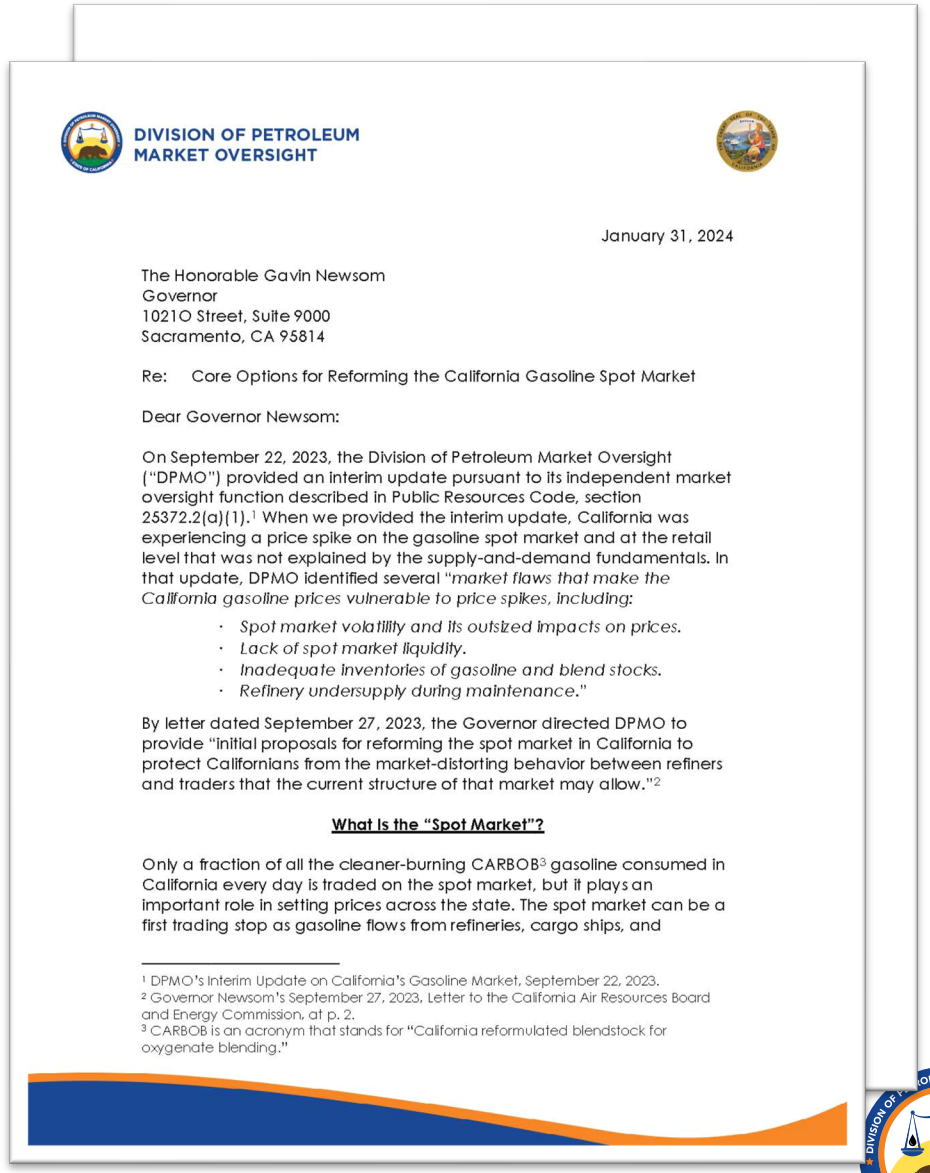


Based on DPMO analysis of EIA refinery production data. Retail prices computed from OPIS data and discounting using CPI less Energy from the U.S. Bureau of Labor Statistics.

AB X2-1 Tools

Under AB X2-1 (Hart, Aguiar-Curry), the CEC may consider:

- Refinery planning to resupply the market during planned maintenance events
- Maintain minimum inventories to buffer against unplanned maintenance or other disruptions



DIVISION OF PETROLEUM MARKET OVERSIGHT

January 31, 2024

The Honorable Gavin Newsom
Governor
1021O Street, Suite 9000
Sacramento, CA 95814

Re: Core Options for Reforming the California Gasoline Spot Market

Dear Governor Newsom:

On September 22, 2023, the Division of Petroleum Market Oversight ("DPMO") provided an interim update pursuant to its independent market oversight function described in Public Resources Code, section 25372.2(a)(1).[1] When we provided the interim update, California was experiencing a price spike on the gasoline spot market and at the retail level that was not explained by the supply-and-demand fundamentals. In that update, DPMO identified several "*market flaws that make the California gasoline prices vulnerable to price spikes, including:*

- *Spot market volatility and its outsized impacts on prices.*
- *Lack of spot market liquidity.*
- *Inadequate inventories of gasoline and blend stocks.*
- *Refinery undersupply during maintenance.*"

By letter dated September 27, 2023, the Governor directed DPMO to provide "initial proposals for reforming the spot market in California to protect Californians from the market-distorting behavior between refiners and traders that the current structure of that market may allow."[2]

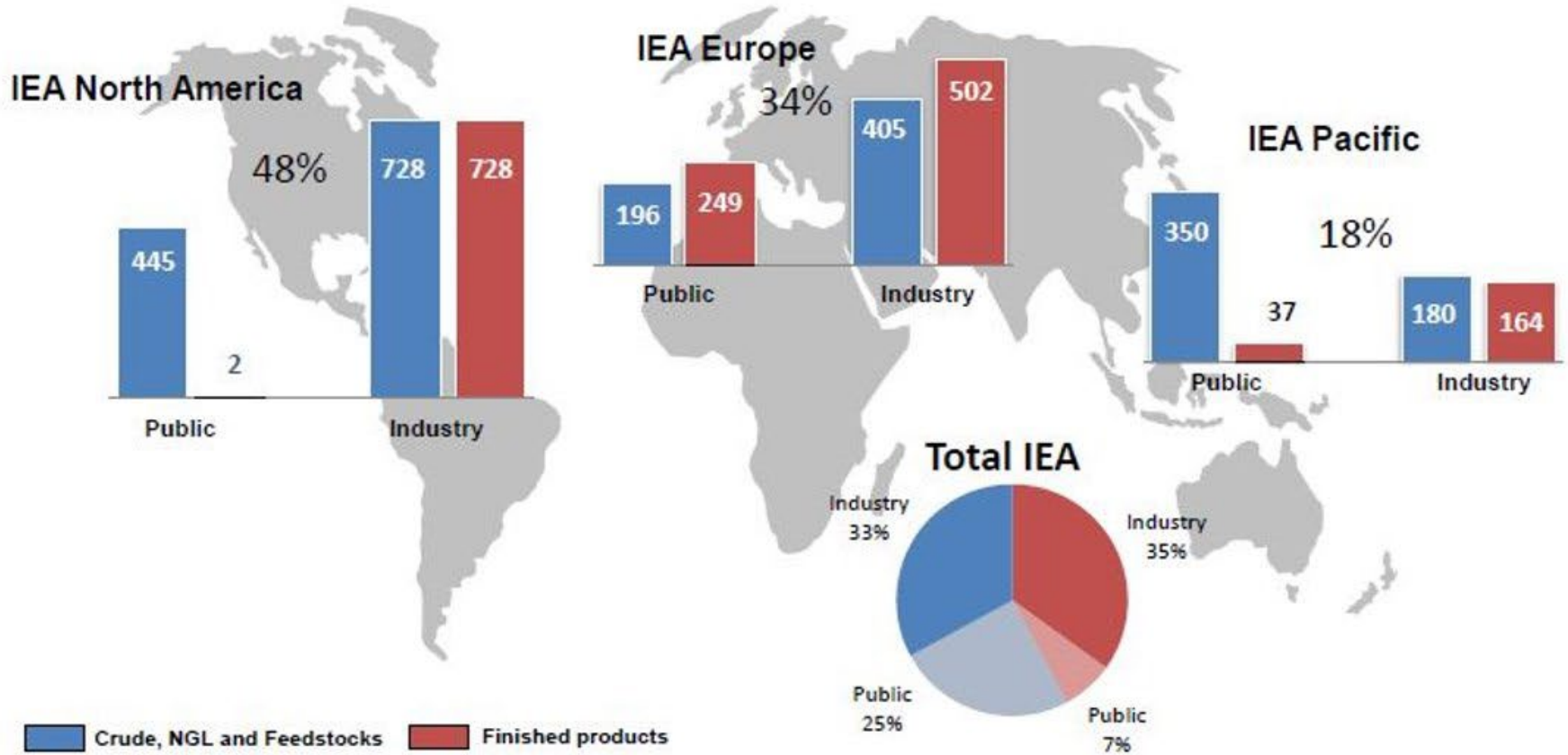
What Is the "Spot Market"?

Only a fraction of all the cleaner-burning CARBOB[3] gasoline consumed in California every day is traded on the spot market, but it plays an important role in setting prices across the state. The spot market can be a first trading stop as gasoline flows from refineries, cargo ships, and

[1] DPMO's Interim Update on California's Gasoline Market, September 22, 2023.
[2] Governor Newsom's September 27, 2023, Letter to the California Air Resources Board and Energy Commission, at p. 2.
[3] CARBOB is an acronym that stands for "California reformulated blendstock for oxygenate blending."

Stocks levels by type in the IEA

Oil stocks of IEA member countries by region in million barrels, end-August 2022



4 billion barrels of oil stocks in IEA countries, including 1.3 billion barrels of public stocks

Examples of Inventory Requirements

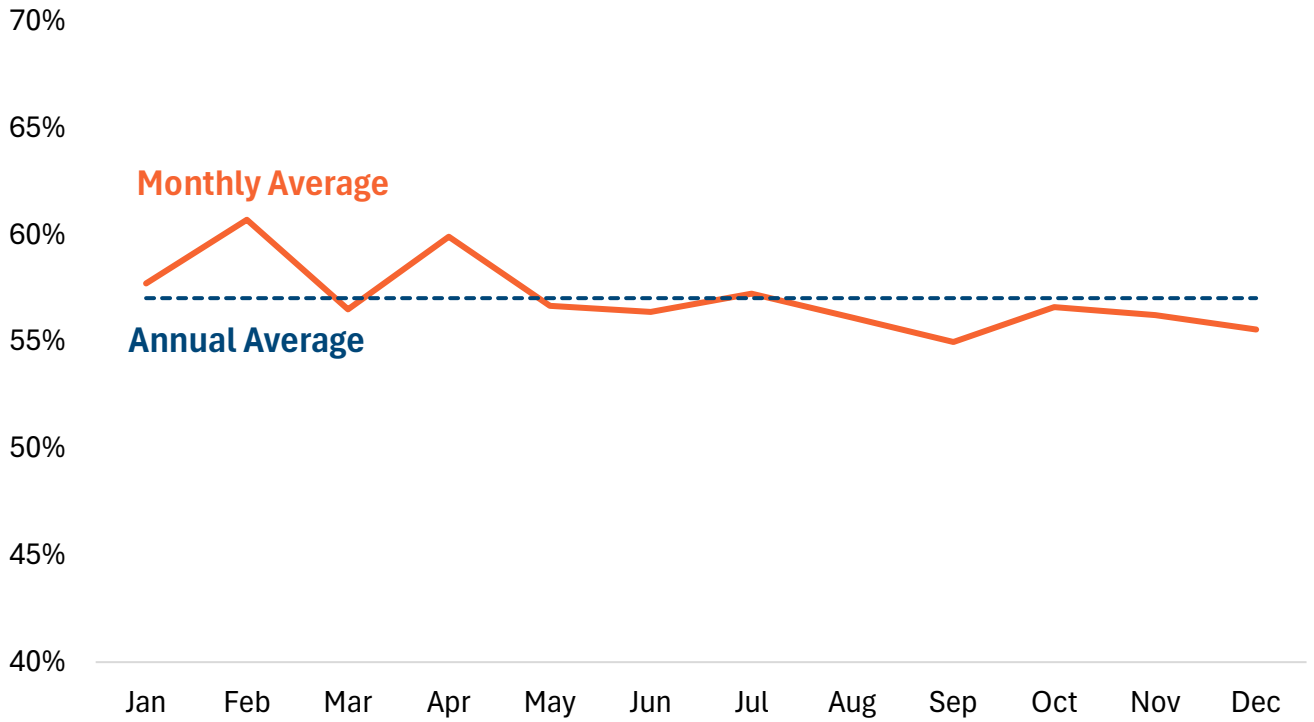
- Minimum inventory requirements are not novel
- Important for import-dependent regions, not exclusive to them
- Diverse requirements across regions
- Common goal to stabilize transportation fuels markets

Country	Products Covered	Minimum Stock and/or Inventory Obligation	Motor Gas Consumption from Imports in 2023 (%)
Australia	**Gasoline**, diesel, kerosene (jet)	**Gasoline 24-27 days**; diesel 20-32 days; kerosene 24-27 days	59.3%
Denmark	**Finished petroleum products**	**73.2 days** of consumption	26.8%
Mexico	**Gasoline**, automotive diesel, jet fuel	Gasoline & diesel: **15 days** of demand; Jet fuel: 1.5 days	65.5%
New Zealand	**Gasoline**, diesel, jet	**Gasoline: 28 days**; Jet: 24 days; Diesel: 21 days (from Jan 2025 regime)	89.2%
Norway	**Finished petroleum** products	**20 days** of domestic sales	94.5%
Spain	Crude oil and **finished petroleum products**	**92 days** of sales or consumption	13.7%

Sources: UN Data Motor Gasoline 2023 (https://data.un.org/Data.aspx?d=EDATA&f=cmID%3AMO), Official Gazette Mexico https://www.dof.gob.mx/nota_detalle.php?codigo=5507473&fecha=12/12/2017#gsc.tab=0, DCCEEW Australia https://www.dcceew.gov.au/energy/security/australias-fuel-security/minimum-stockholding-obligation, IEA Policy Summaries (https://www.iea.org).

Available Gasoline Storage Capacity

Volume-Weighted Average California Refinery On-Site Storage Utilization, 2019-2024



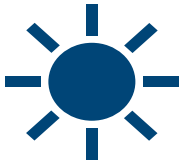
Notes: DPMO calculations based on EIA 810 data for gasoline and gasoline blending components.

- Seasonal variation in refinery on-site storage utilization suggests additional storage available during summer months
- Additional merchant terminal storage or other storage assets may be used more efficiently

AB X2-1 Implementation Principles

Worker and community safety is paramount

Accountability through reporting, oversight, and deterrence



Transparency through robust reporting requirements

Flexibility for firms to reach key resupply or inventory criteria

Simplicity and predictability, and iterate to improve


DIVISION OF PETROLEUM MARKET OVERSIGHT
STATE OF CALIFORNIA

Update on Senate Bill 237 (Stats. 2025, ch. 118) Assessment and Transportation Fuels Transition Plan

Quentin Gee, Manager, Advanced Electrification Analysis Branch

Previous and Ongoing Work

- Four workgroup meetings and one planned
- Three in-person community meetings
- Collaboration across CEC, CARB, DPMO, and other agencies/organizations
- Contracted refinery supply modeling analysis
- TFTP drafting, currently under review by CARB and CEC leadership
- Public Workshop planned for Q1 2026

Work Group Topics

- Options to Mitigate Price Spikes
- Supply and Demand Planning
- Equity and Workforce Development
- Community Impacts
- [After Draft Posting] Discussion on Draft

Major Comments from Community Meetings

- Equity
- Public Health and Safety Priorities
- Labor
- Economic Impacts/Community Tax Base

TFTP Next Steps

Q4 2025

- Final CARB/CEC Review of Draft

Q1 2026

- Public Workshop and Final Workgroup Meeting
- Post Draft TFTP for 30-45 day public comment period

Late Q1 – Early Q2 2026

- Review public comments and incorporate into final TFTP
- Post Final TFTP

Upcoming Petroleum Reports

Transportation Fuels Transition Plan

- Workgroups and Community meetings
- Detailed discussion on labor, communities, long-term demand scenarios and dynamics
- Strategies focused on mid- to long-term holistic transition and supply concepts

Early 2026

SB 237 March 2026 Assessment

- Evaluate strategies in the 2025 Vice Chair's letter to the Governor
  1. Capacity for stable supply
  2. Investment confidence in necessary infrastructure
  3. Holistic transition strategy
- Working group authorities or structures, permitting changes and reform

March 2026

2027 Transportation Fuels Assessment

- Public process
- Broad market assessment
- Evaluation of import and export logistics
- Evaluation of alternative fuel specifications

January 2027

Thank You!

Quentin Gee, Ph.D
Advanced Electrification Analysis Manager
Energy Assessments Division
quentin.gee@energy.ca.gov

Committee Discussion

Open Forum

Public Comments

Zoom:

- Use the “raise hand” feature.

Telephone:

- Dial *9 to raise your hand.
- Dial *6 to mute/unmute your phone line. You may also use the mute feature on your phone.

Zoom/phone participants, when called upon:

- Your microphone will be opened.
- Unmute your line.
- State and spell your name for the record, and then begin speaking.

Limited to one representative per organization.

Three-Minute Timer

Written Comments

Please submit written comments to:

- Docket No. 23-ICFAC-01
- Due by 5:00 PM on January 6, 2026

Closing Remarks