






Petroleum – Year in Review

Energy Assessments Division

December 5, 2024



Housekeeping

- Meeting is being recorded. 
- Comments are welcome at the end of the presentation.
- Zoom:
 - Use the “raise hand” feature. 
- Zoom/phone participants, when called upon:
 - Your microphone will be opened.
 - Unmute your line. 
 - Spell your name and provide your affiliation for the record before beginning your comment.



Purpose of Today's Workshop

- Provide a review of petroleum trends in 2024, including production, inventory, and prices.
- Receive public input on transportation fuel prices.



Agenda

- **Petroleum: Year in Review**
 - Jeremy Smith, Energy Assessments Division
- **Public Comment**
- **Adjourn**

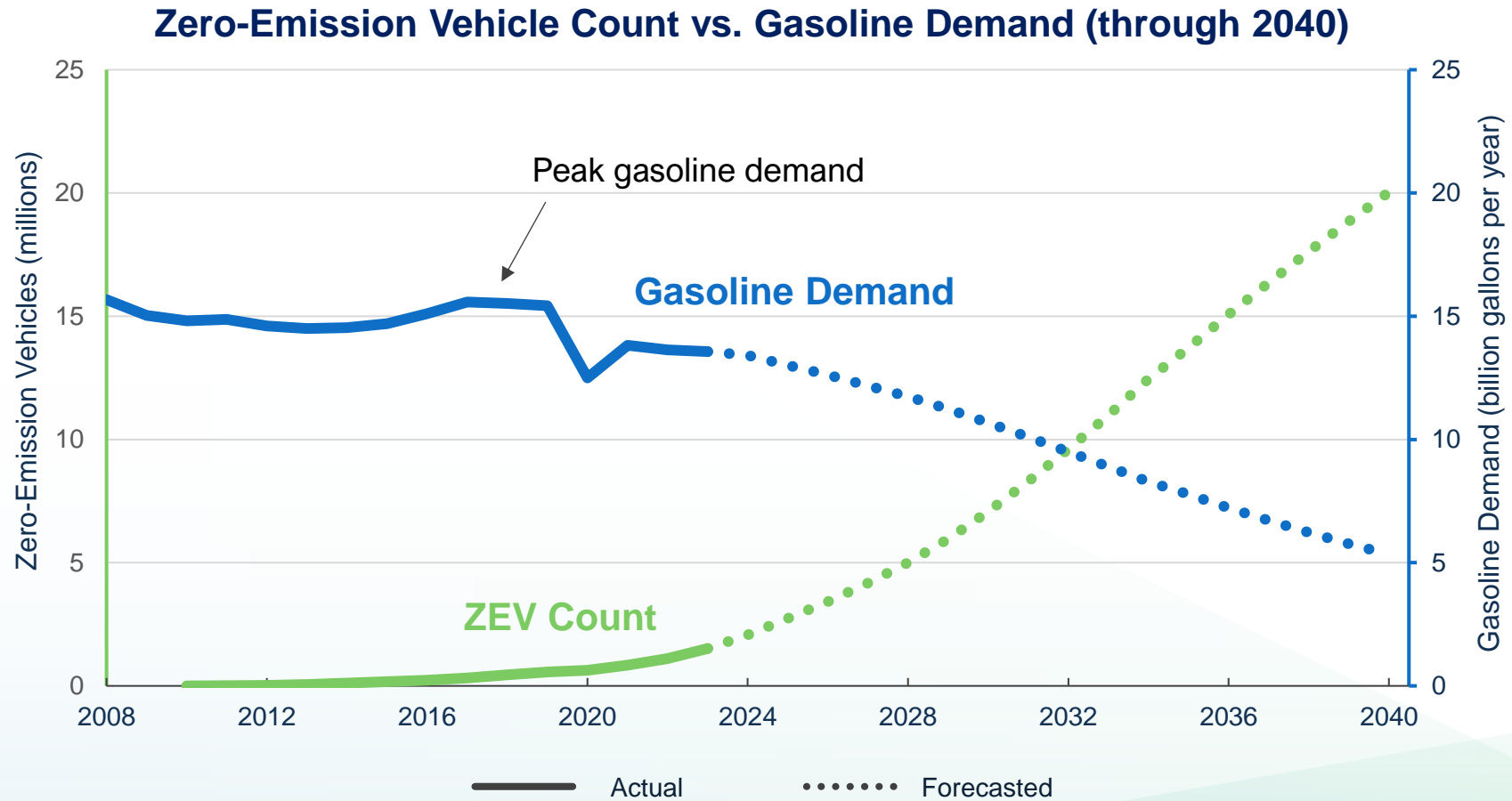


Petroleum: Year in Review





Towards a Zero-Emission Future



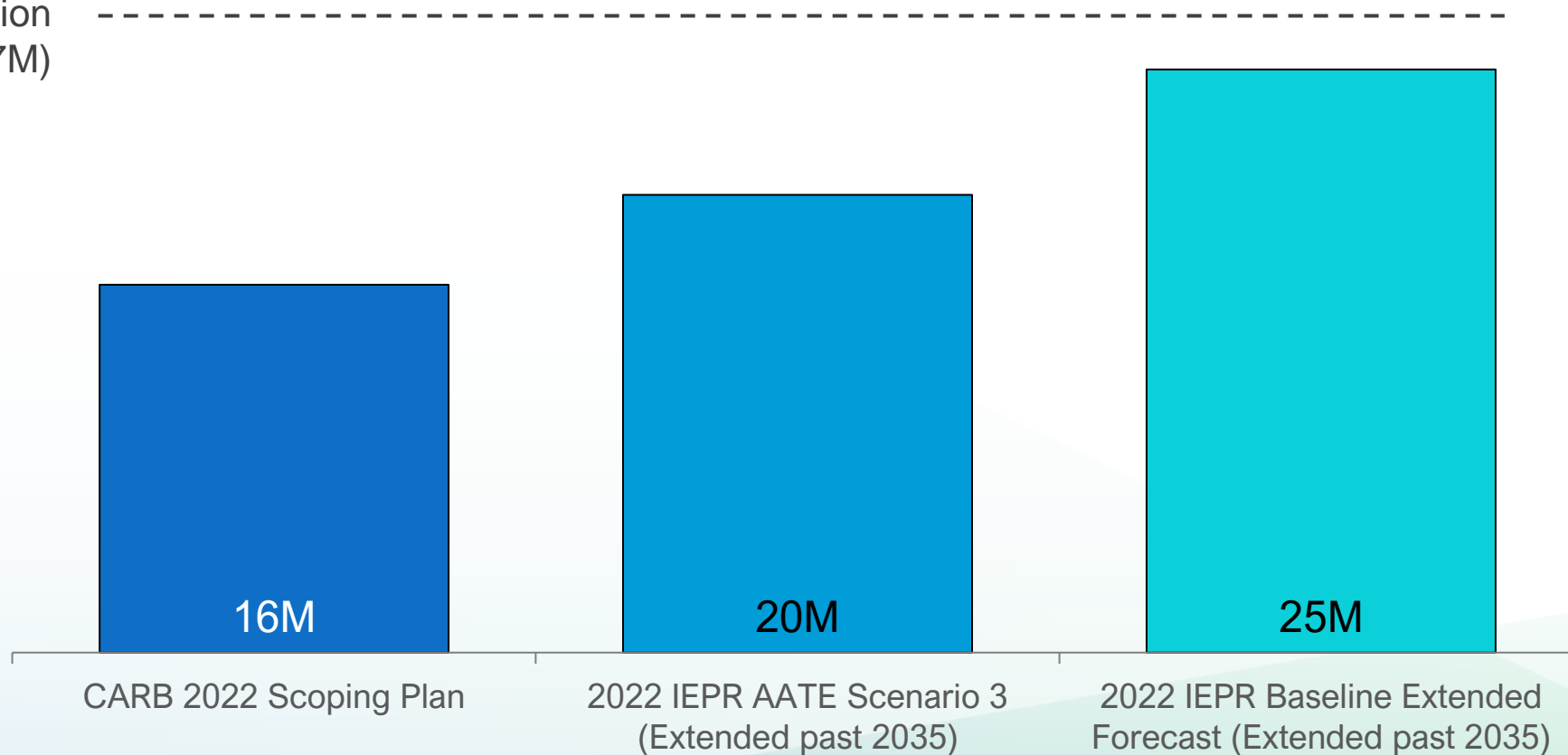
Sources: 2023 Integrated Energy Policy Report, DMV, Tax and Fee Administration



Fuel Needed for Decades

2035 Light-Duty Combustion Vehicles on the Road

2022 DMV
Population
(27M)





California's Fuel Flows

Supply

Crude oil (local)	373
Crude oil (imports)	1,074
CARB gasoline	796
Non-CARB gasoline	108
Gasoline (imports)	77

Demand

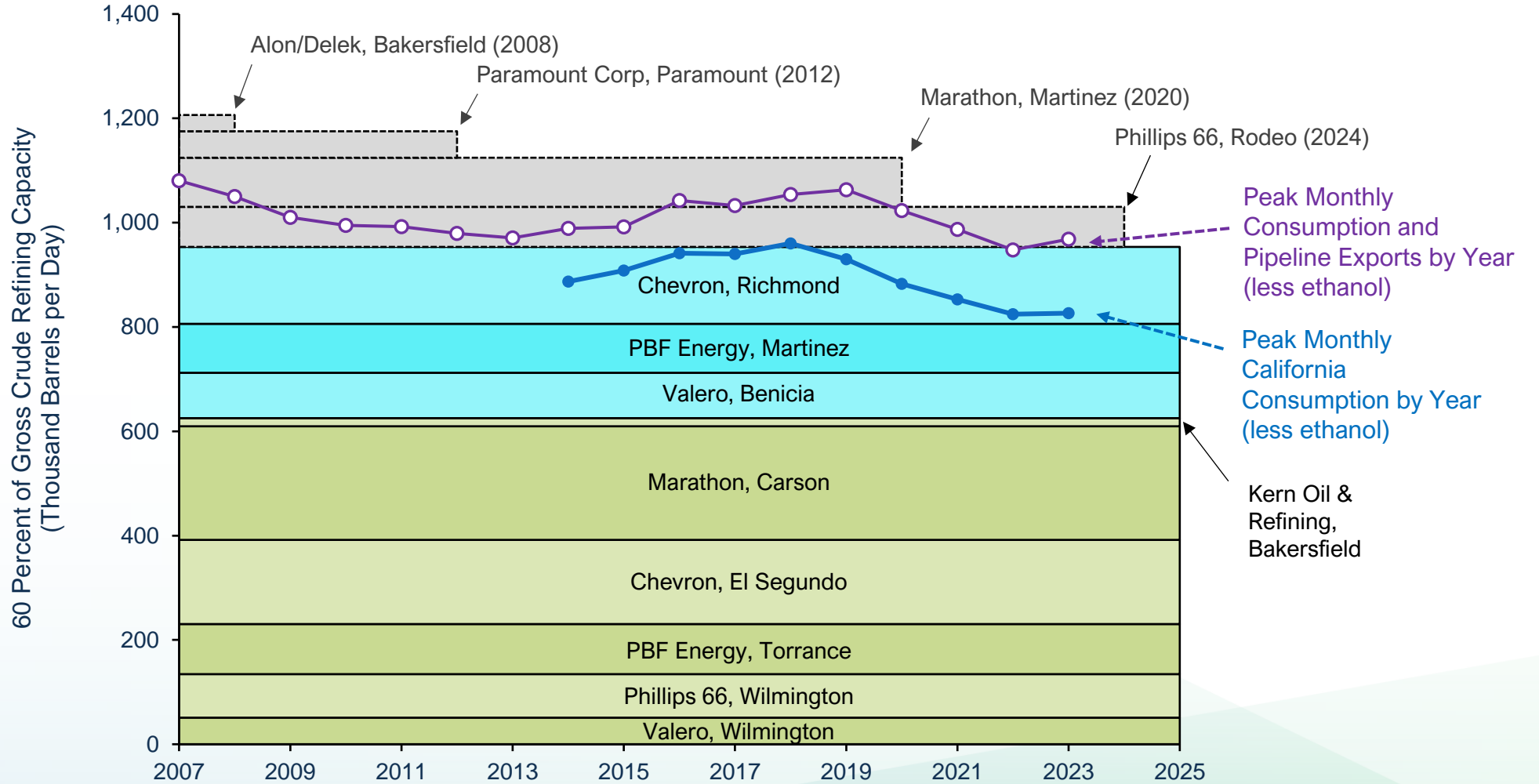
CARB gasoline	880
Nevada gasoline	61
Arizona gasoline	53
Gasoline (exports)	16



(Amounts shown in thousands of barrels per day)



Estimated Gasoline Refinery Capacity

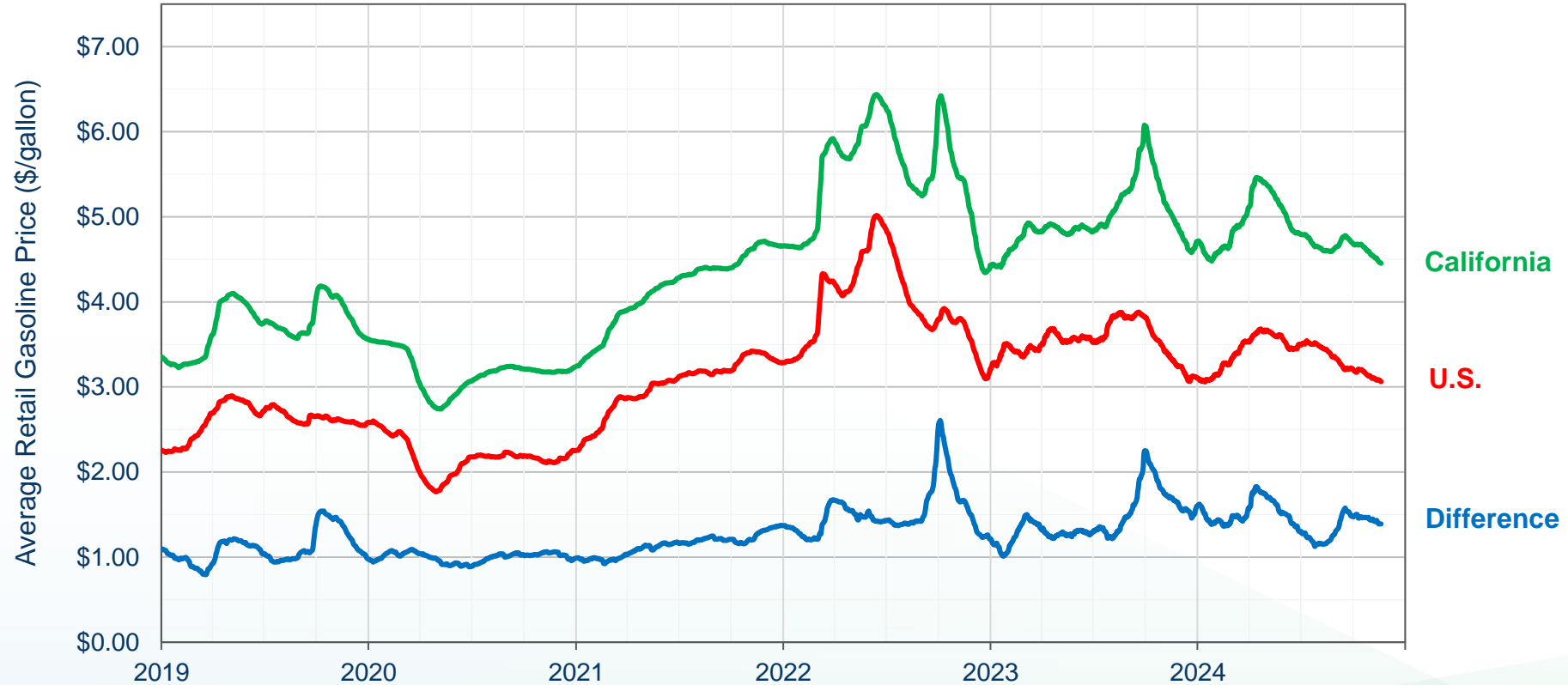


Source: CEC Staff, CDTFA



Gasoline Prices: CA vs. U.S. Average

California vs. U.S. Average Retail Gasoline Price (2019-Current)

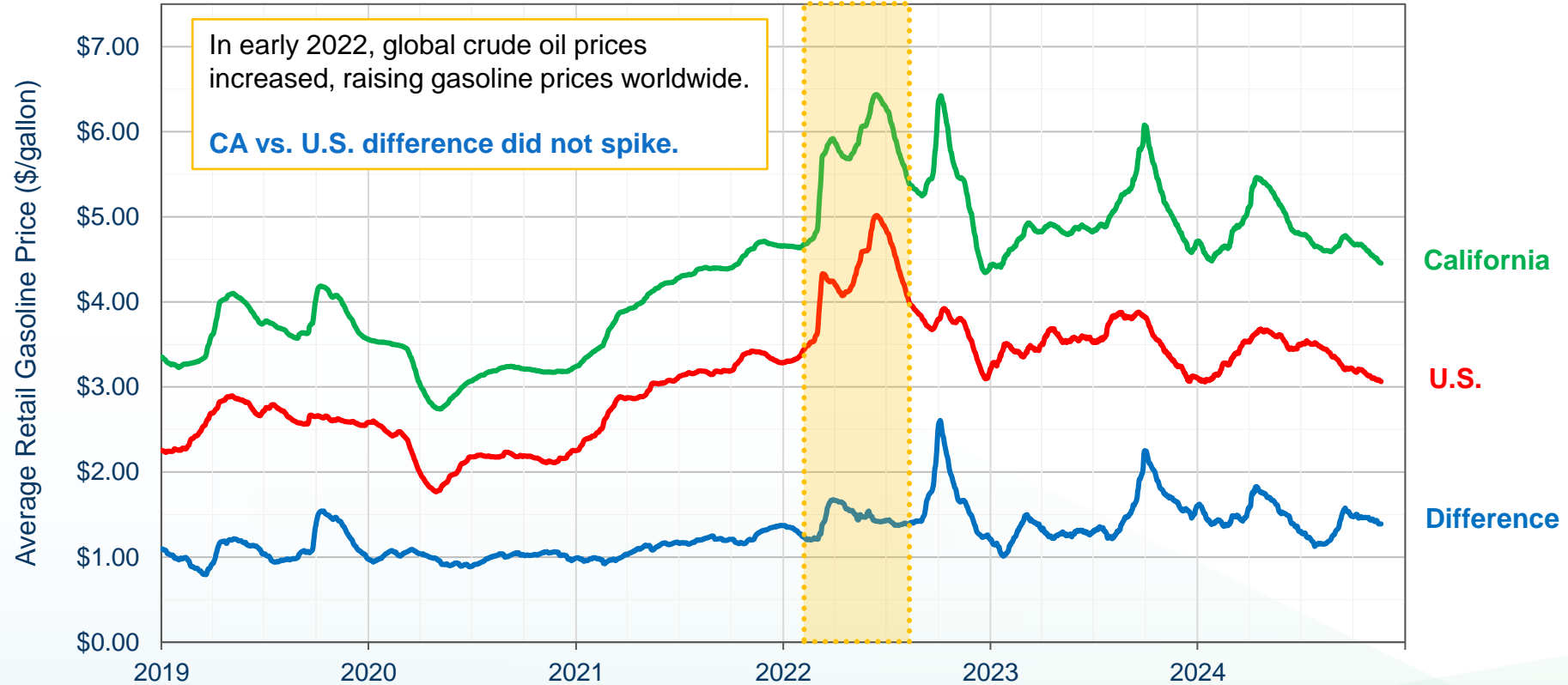


Source: CEC Analysis of OPIS data



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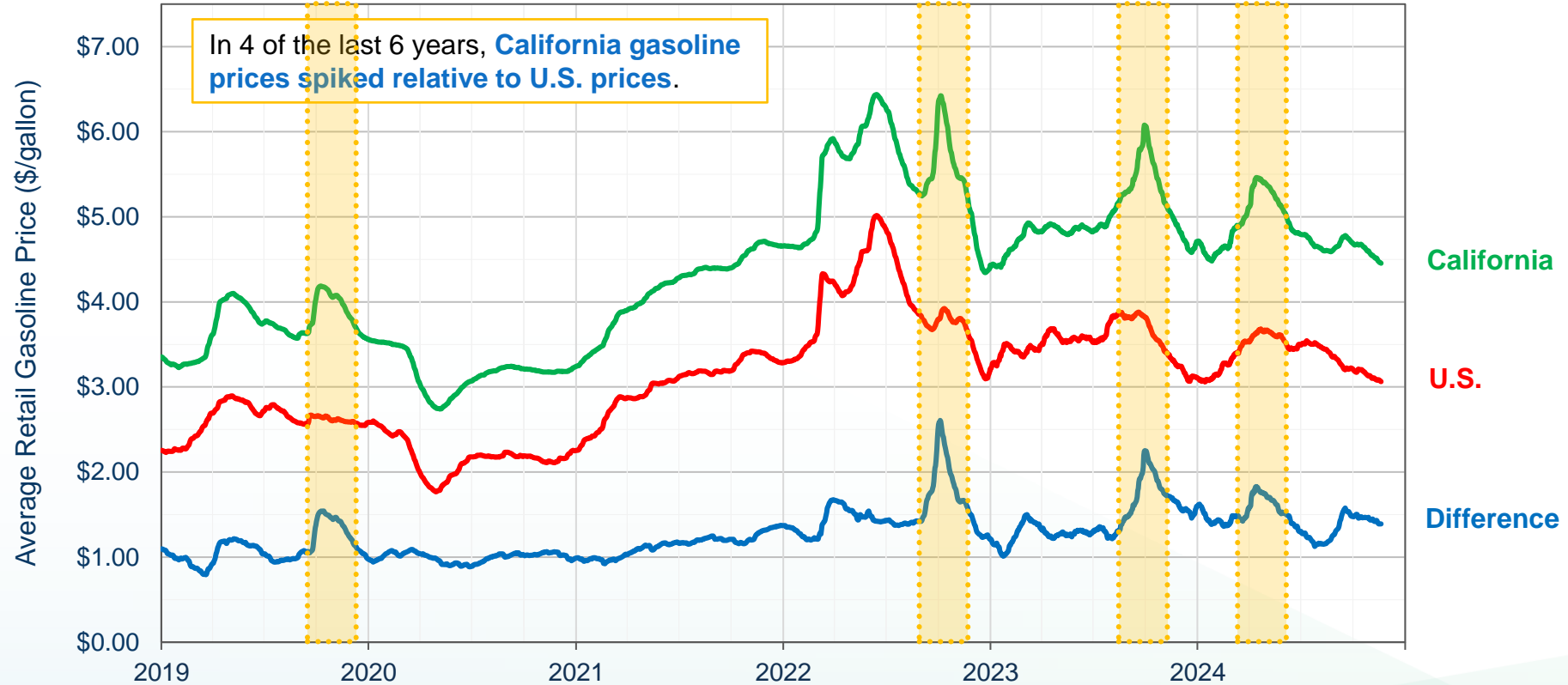


Source: CEC Analysis of OPIS data



Gasoline Prices: CA vs. U.S. Average

California vs. U.S. Average Retail Gasoline Price (2019-Current)



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SB X1-2 Implementation Activities



Data Collection &
Monitoring



Transportation Fuels
Assessment



Refinery
Maintenance
Monitoring



Transportation Fuels
Transition Plan
(w/ CARB)



California Gas Prices
Report
(w/ CDTFA)



Data Collection & Monitoring

Requirements

Collect new data from petroleum industry.

Analyze data to inform:

- Refiner max margin + penalty
- Market oversight
- Minimum inventory/resupply

Increase transparency through reporting.

Progress

Nine new data streams

- Spot market, marine imports, refinery maintenance, refiner margins, etc.

20,000+ data submissions processed and analyzed.

Refiner Margins (monthly) and **Gasoline Price Breakdown** (weekly) webpages



California-Specific Market Dynamics

SUPPLY



Gasoline
Inventories



Refinery
Production



Marine
Imports

DEMAND



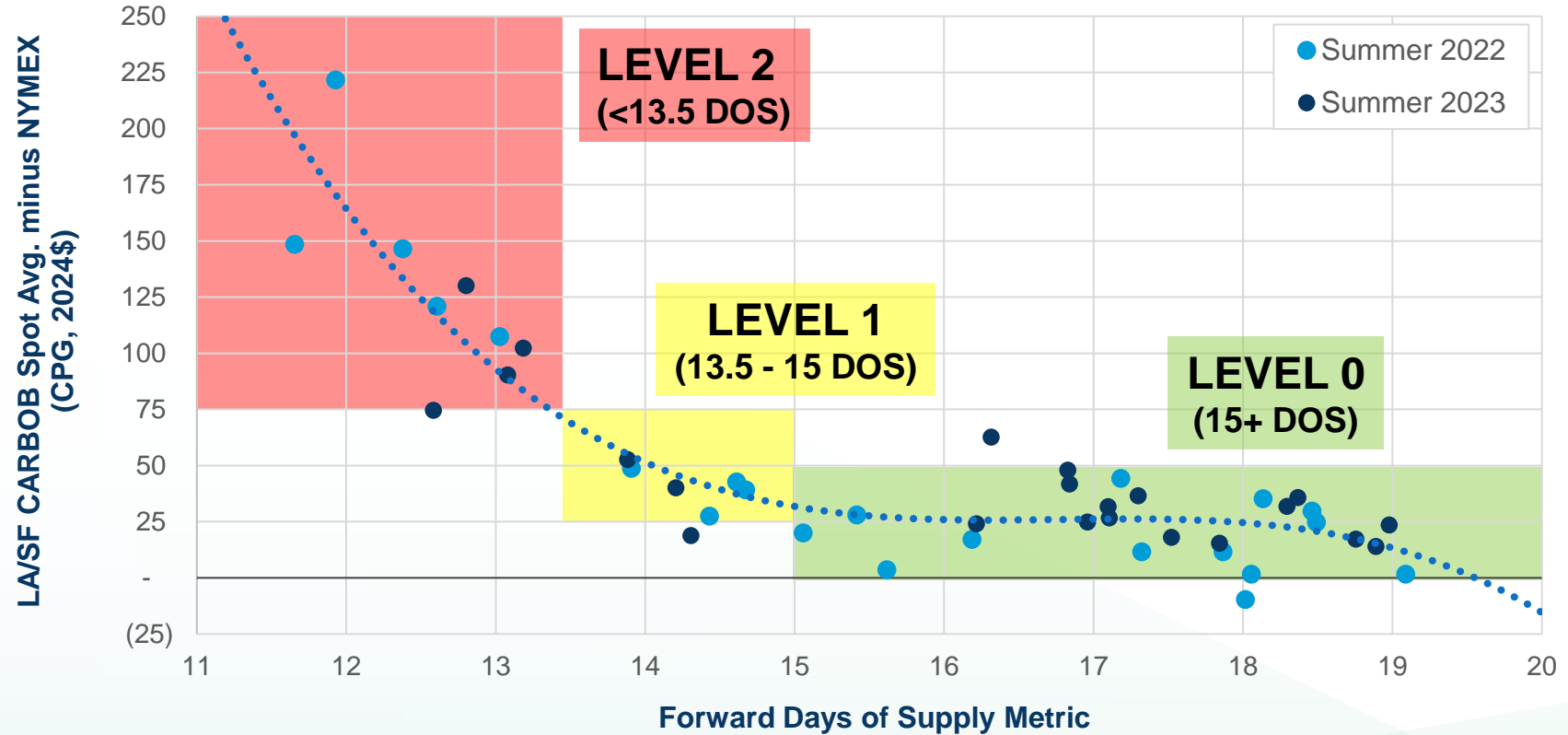
Gasoline
Demand



Establishing Price Risk Levels

Summer 2022 and 2023 Price Spread vs. Days of Supply (DOS)

↑
...Price spreads increase



← As Days of Supply fall...

Policy Options



Storage

- State-supported storage
- Storage requirements



Fuel Blends

- Fuel Blends: 15% Ethanol
- Regional Blends
- Non-CARBOB Blends



Highly Complex

- Gas Price Stabilization Fund
- Public utility model
- State ownership



Imports

- Resupply Compensation
- Railcar Replenishment
- State-managed imports



Demand Strategies

- Enhanced ZEV Access
- VMT Reduction Strategies
- Fuel Conservation

Progress

May 16, 2023

Workshop on fuel demand scenarios and assessment framework

August 17, 2023

Workshop to confirm demand scenarios, price spike policy and mitigation options

May 3, 2024

Workshop to present draft report

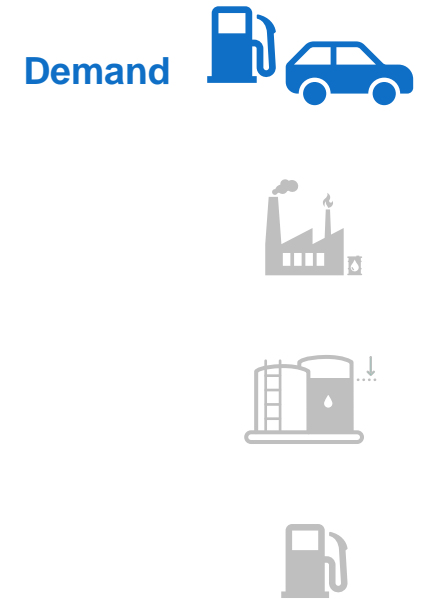
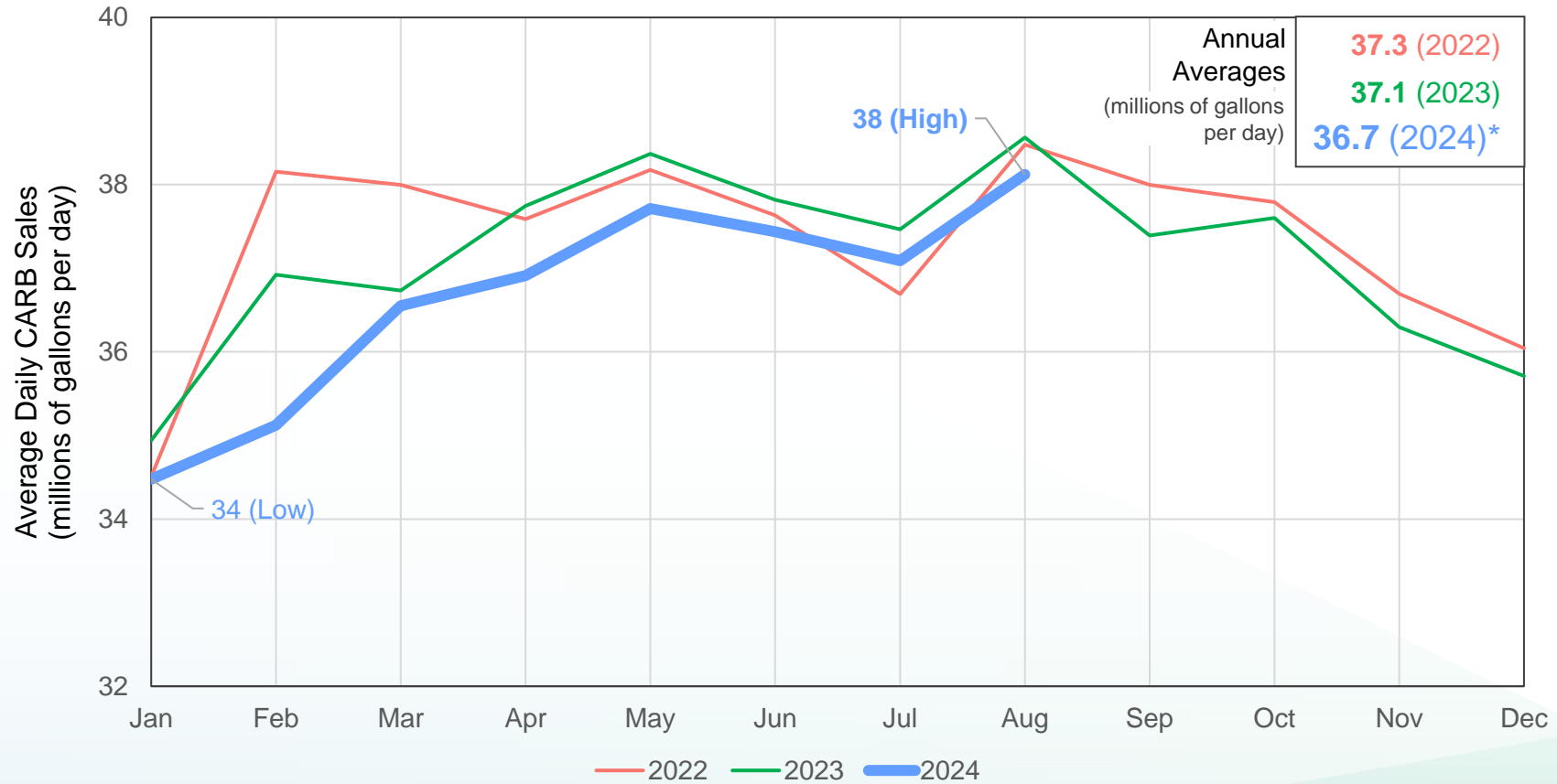
August 1, 2024

Final report published



California Gasoline Demand

Average Daily CARB Gasoline Sales (2022-2024)



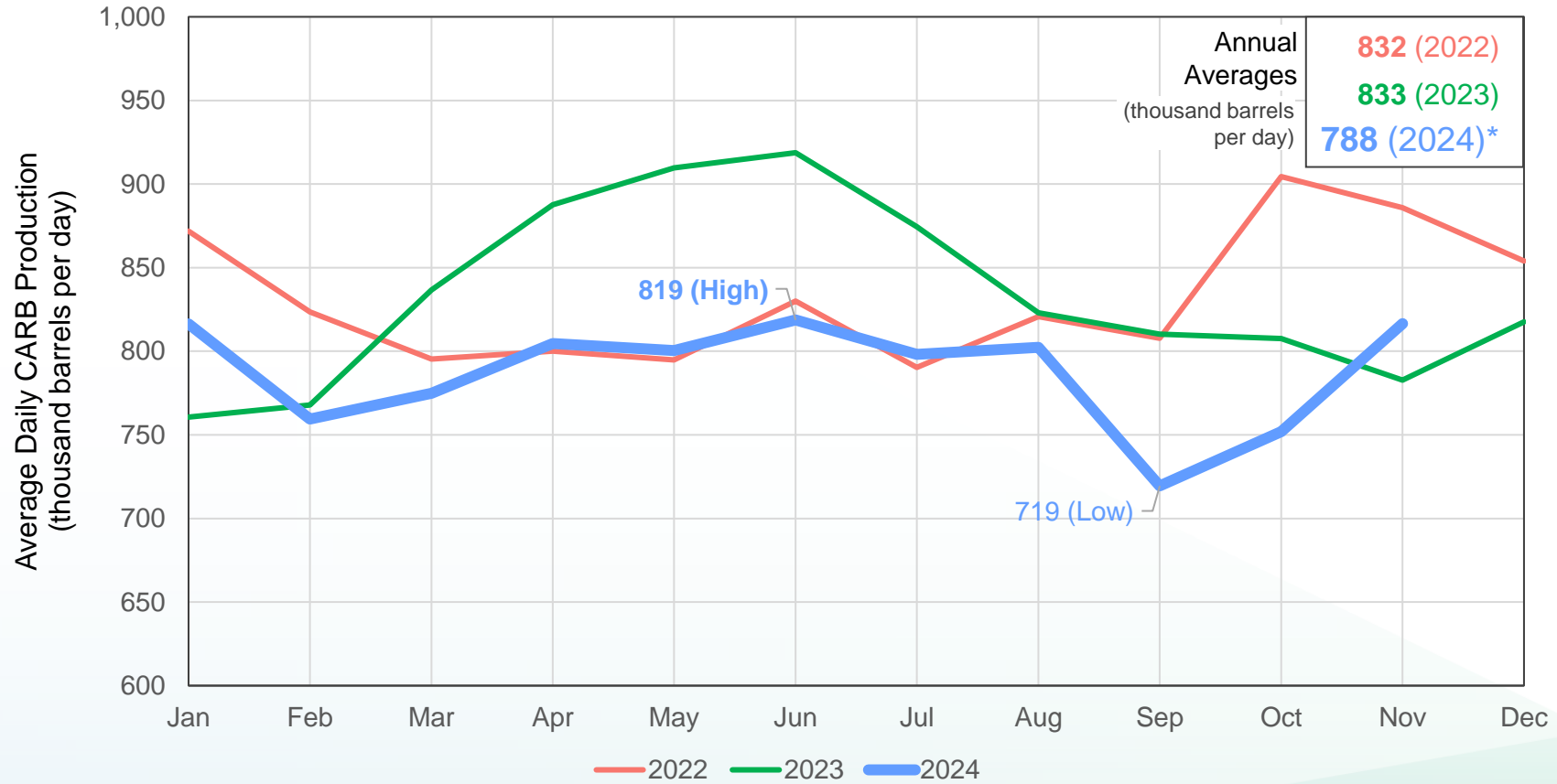
Source: California Department of Tax and Fee Administration (CDTFA)

*2024 average through August 2024.



CARB Gasoline Production

Average Daily In-State CARB Gasoline Production (2022-2024)

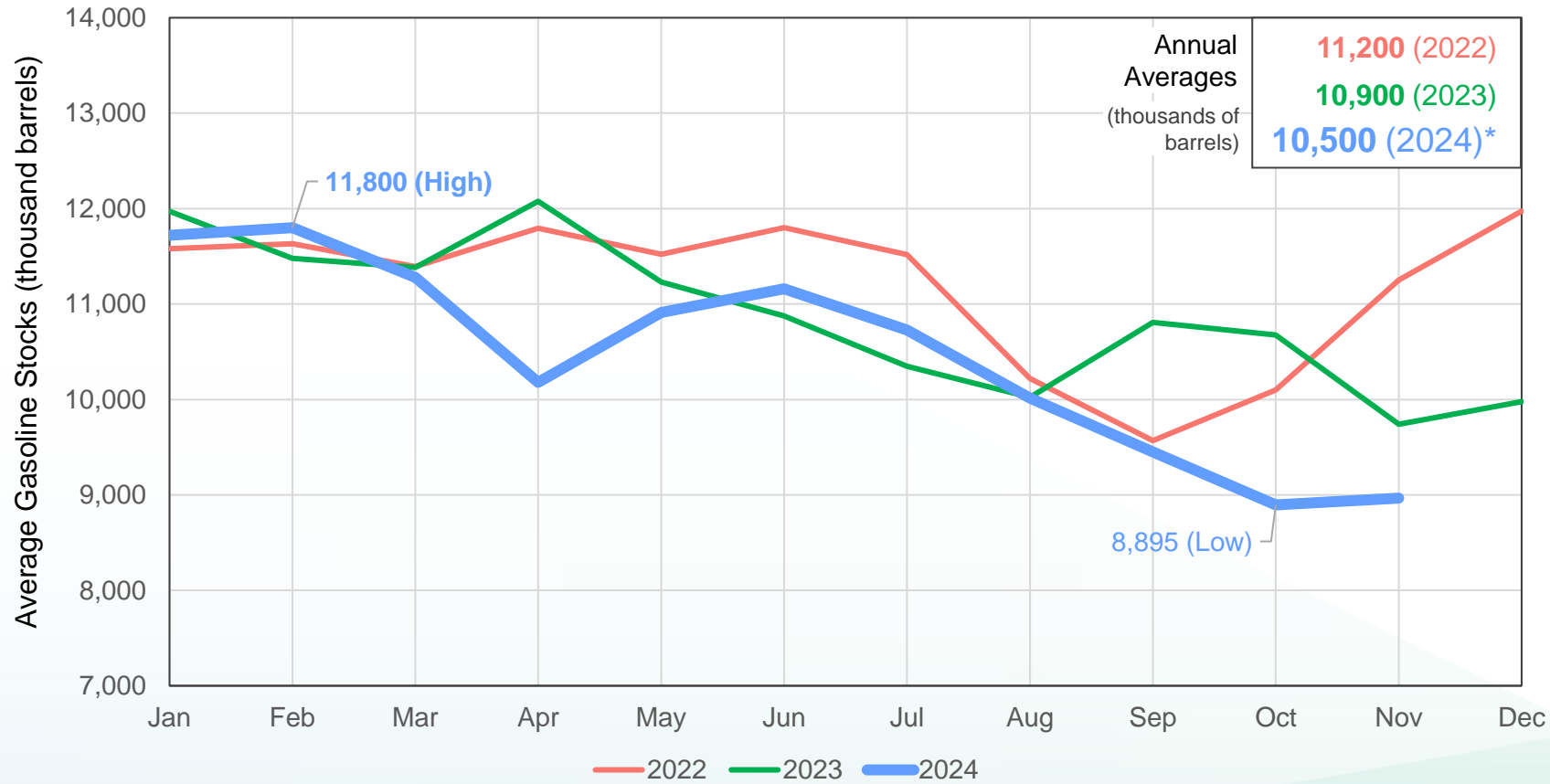


Source: CEC Weekly Fuels Watch
*2024 average through November 2024.

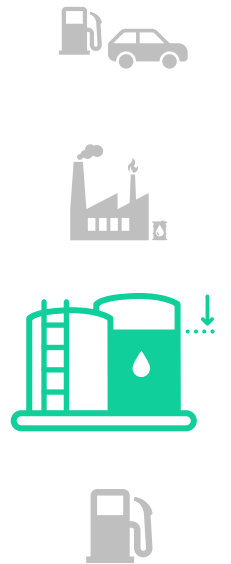


CARB Gasoline Stocks

California Gasoline Inventories by Month (2022-2024)



Stocks

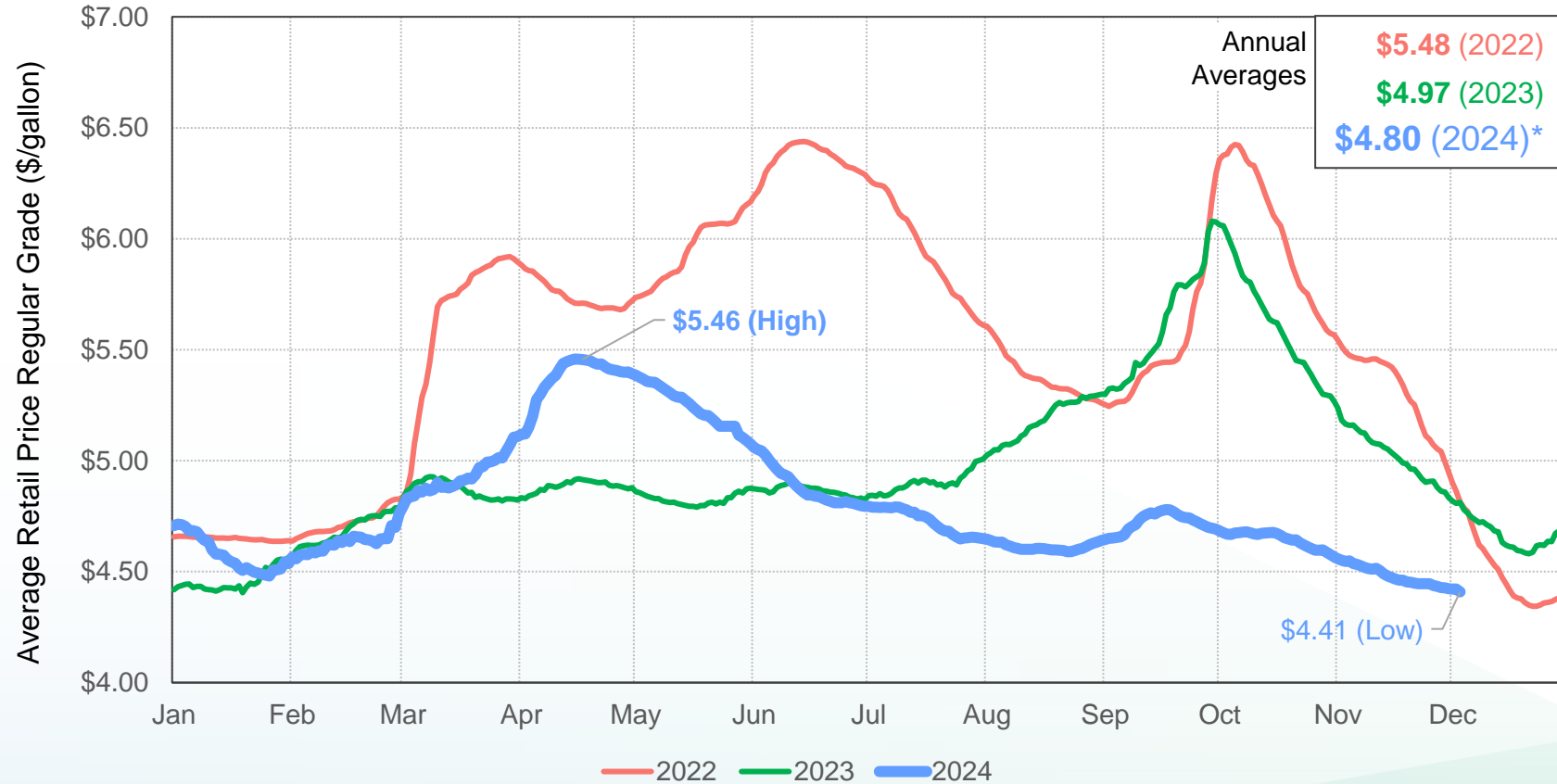


Source: CEC Weekly Fuels Watch
*2024 average through November 2024.



California Gasoline Retail Prices

California Retail Gasoline Prices (2022-Current)



Prices

Source: CEC analysis of OPIS data
*2024 average through December 2, 2024



Written Comments

Please submit written comments to:

- Docket No. 23-SB-02
- Due by 5:00 PM on December 20, 2024



Thank You!

Please reach out with questions.

Jeremy Smith

Deputy Director

Energy Assessments Division

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