

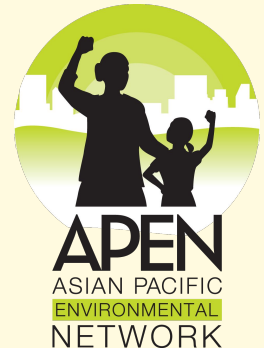
# Statewide Refinery Transitions: A Changing Landscape

*Refinery Community Briefing for Legislative Staff*

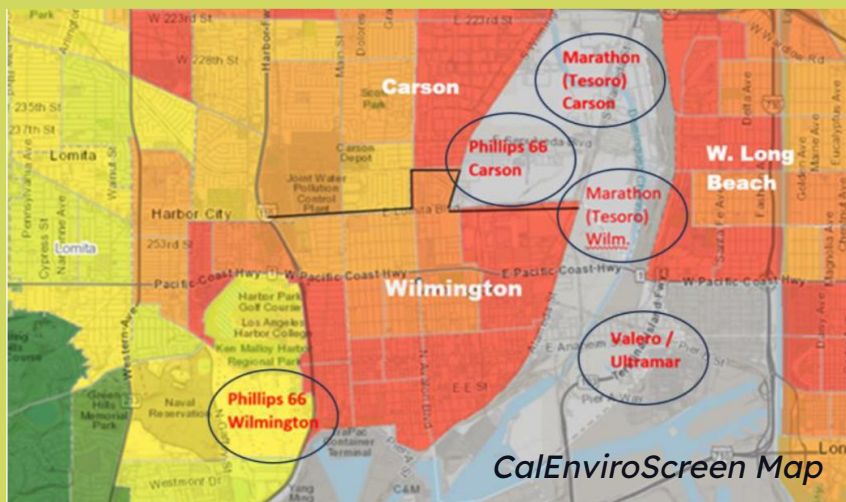
**May 28, 2025**

Faraz Rizvi, APEN Policy and Campaign Manager  
Connie Cho, APEN Senior Policy Advisor  
Julia May, CBE Senior Scientist

COMMUNITIES  
FOR A BETTER  
ENVIRONMENT  
established 1978



*Presented by the Asian Pacific Environmental Network and Communities for a Better Environment*



COMMUNITIES  
FOR A BETTER  
ENVIRONMENT  
established 1978





# AGENDA

1. What's Going On with California's Refineries?
2. Myth-Busting

**MYTH:** Refineries are closing due to CA health, safety and climate regulations.

**TRUTH:** Big Oil avoided basic maintenance investments for decades and wants taxpayers to foot the bill now, as national and global market dynamics are driving cuts to refinery production, consolidation, and closures.

**MYTH:** There is no supply issue whatsoever, we should ignore all of this news.

**TRUTH:** These notices of closure inaugurate the critical (and predictable) need for a targeted supply-side and comprehensive managed transition strategy.

3. Challenges and Opportunities of Refinery Closures
4. Initial State Policy Recommendations

# **What's Going on with California's Refineries?**

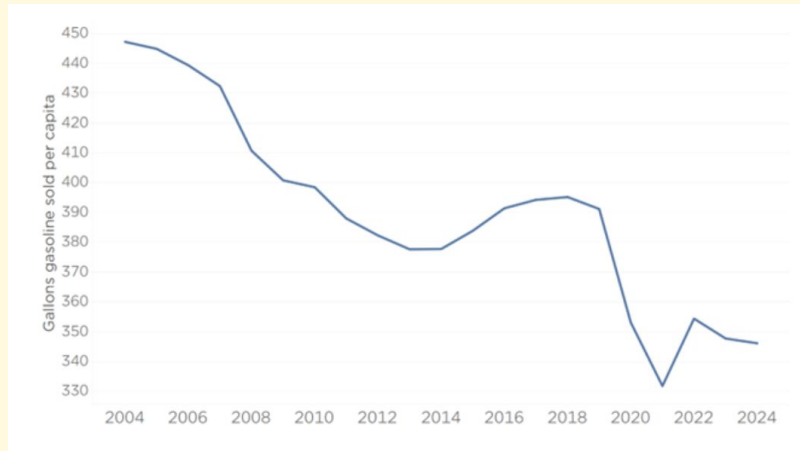
⚡ Last fall, Phillips 66 announced plans to shutter its Wilmington-Carson refinery by the end of 2025, but will still import in refined gasoline at the Port of LA.

This spring, Valero announced intent to close the Benicia Refinery by the end of 2026.

These unplanned closures have shocked many legislators and regulators – it's a clear indication **California needs a *managed transition* away from fossil fuels.**



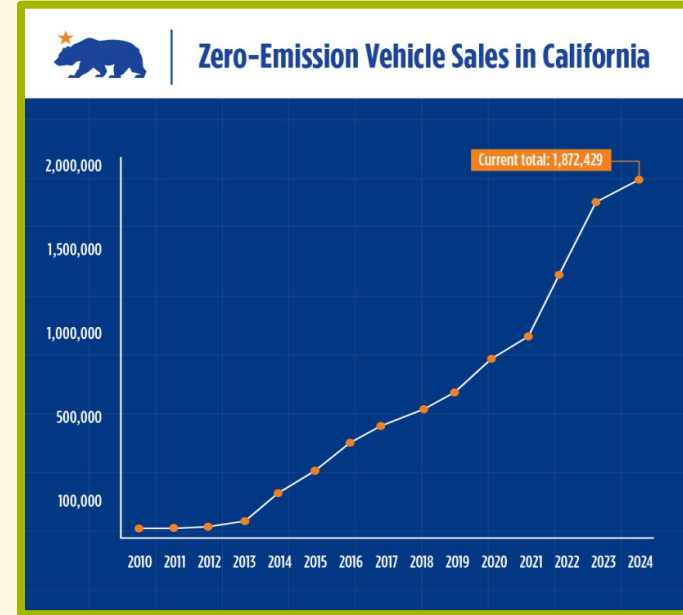
**In California—and the rest of the world—demand for refined oil products are falling...**



*Annual gasoline consumption per person*

**In California, the demand for fossil fuel products has been steadily dropping since 2005.**

UCS, 'Has Gasoline Use in California Peaked?' Sept. 11, 2024



**...as electrification policies are working! Cars have become more fuel efficient and Zero Emission Vehicles are more available.**



**Refinery closures and notices of closure are everywhere:** *from Pennsylvania to Texas to California.*

**Big Oil is trying to panic California's legislators into more giveaways for executives and shareholders without changing** the fact that they are consolidating and will close up shop everywhere, including California.

**So, we need targeted strategies to manage this transition:**

- Stabilize supply
- Minimize price shocks
- Plan for closure

NEWS > NATIONAL BUSINESS

## Houston's oldest refinery is shutting. It won't be the last

Feb. 17, 2025 | Updated Mon., Feb. 17, 2025 at 8:48 p.m.



Smoke rises from the LyondellBasell Houston refinery on June 14, 2024, in Houston, Texas. The city's oldest refinery is preparing to shut down, potentially putting hundreds of people out of work. (Brandon Bell/Getty Images North America/TNS)

X

Email

Reddit

By Barbara Powell and Nathan Risser  
Bloomberg News

# ⚡ US Gasoline Demand Peaked pre-pandemic, in 2018.

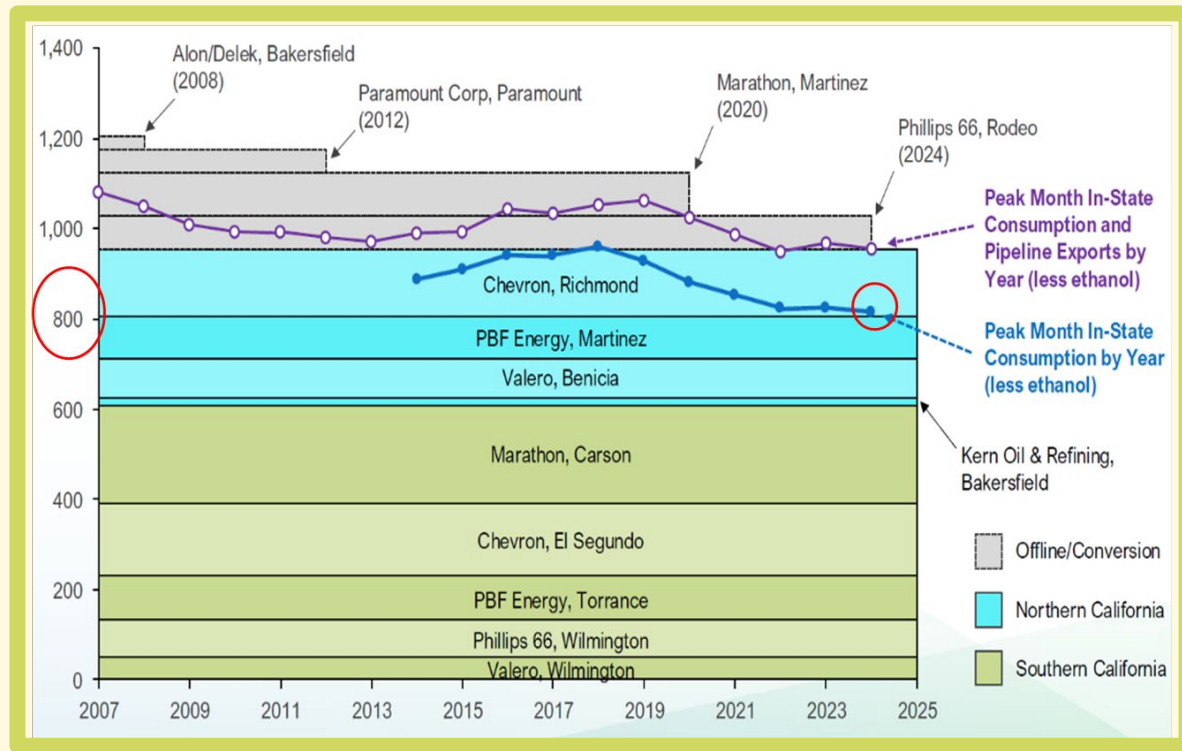


July 24 (Reuters) - While U.S. gasoline demand is unlikely to rescale the pre-pandemic peaks of 2018 as the energy transition accelerates, the pace of its decline is uncertain, illustrating the challenge for industry and the government in planning the shift to a low-carbon economy.

The complex interplay between the transition, policy, economic performance and consumer preferences have made it harder than ever to forecast gasoline demand.



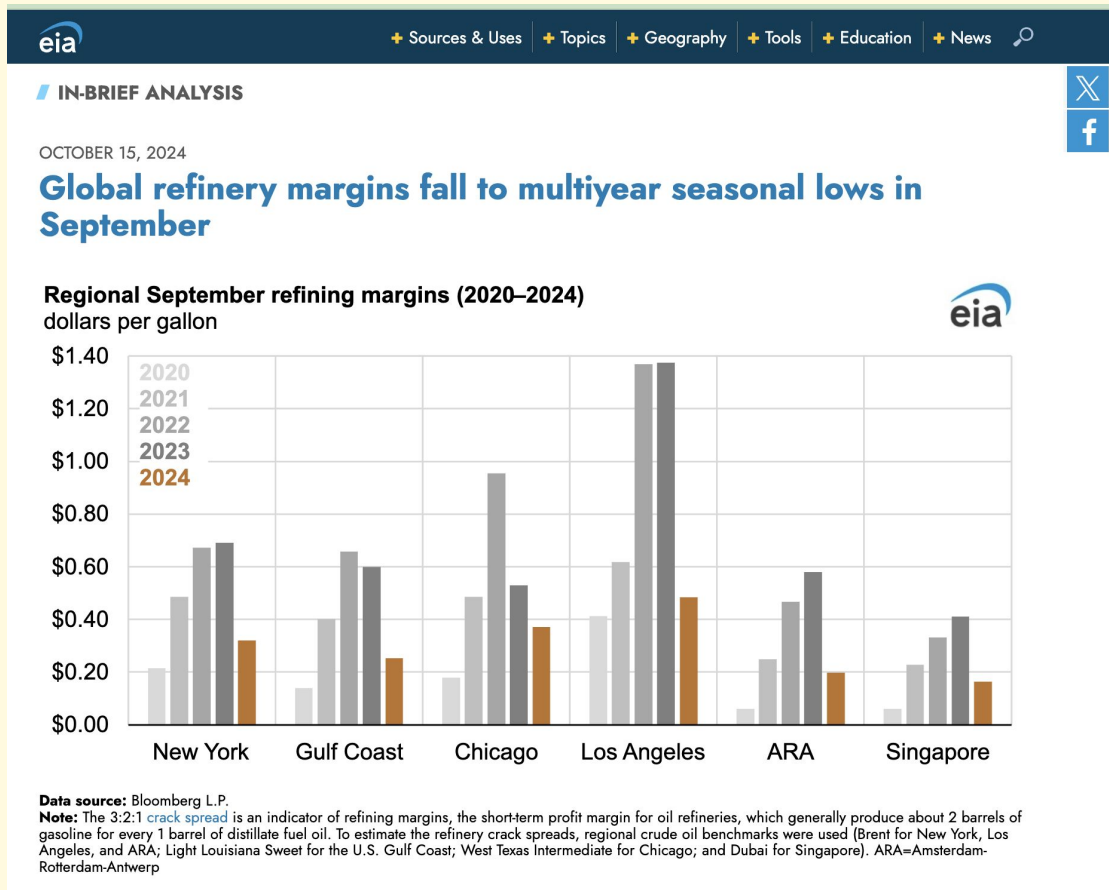
# ⚡ CA Refining Capacity and Demand



Annotated (red circles added) by CBE to [CEC Transportation Fuels Assessment](#)



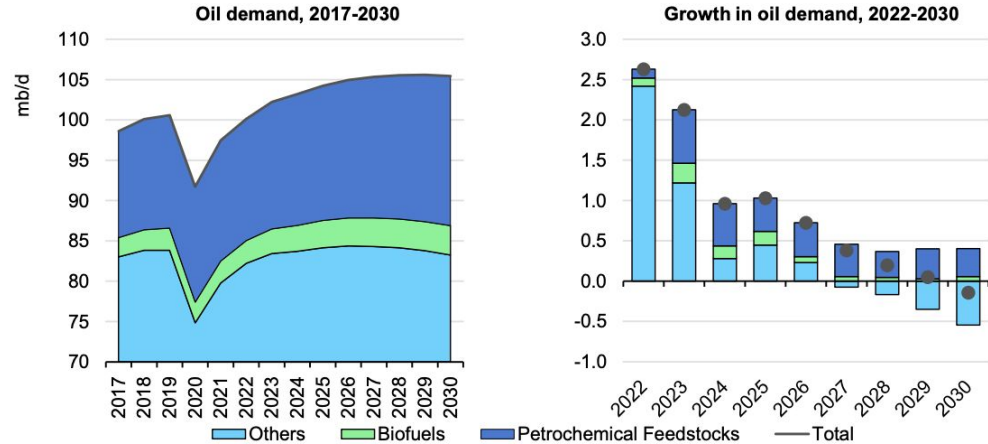
Globally,  
(gross)  
refinery  
margins are  
falling—but  
still higher  
in CA.



# ⚡ Global demand for gasoline is set to decline

**“Global refining capacity is forecast to rise by 3.3 mb/d from 2023 to 2030, well below historical trends. Even with the moderate expansion in capacity, the increase outpaces the call on refined products over the period.”**

World oil demand forecast to plateau this decade



IEA. CC BY 4.0.

*International Energy Agency 2024 Analysis and Forecast to 2030 Report*

Key Question:

***How can we smooth out  
the clean energy transition  
in motion at home and  
around the world?***

**MYTH:** Refineries  
are closing due to  
CA health and  
safety and climate  
regulations

**FACT:**

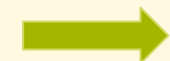
Big Oil avoided basic  
maintenance investments  
and cut corners on health  
and safety for years, while  
spending billions on stock  
buybacks.

Now, they want taxpayers  
and consumers to foot  
the bill.

# Special Session Refinery Bills

## Transparency & Accountability (SBX2-1 “Price Gouging”)

- Established Division of Petroleum Markets Oversight (DPMO) in the California Energy Commission (CEC)
- Empowered CEC to investigate how oil companies set fuel prices; **data on refinery supply and storage; high exports of refined fuels**
- *Authorized* CEC to fine refineries *if* (1) found excessively profiting from gas price spikes, and (2) it was the best policy to address the issues at hand.



“Price  
Gouging  
Penalty” led to  
Refinery  
Reserves Law

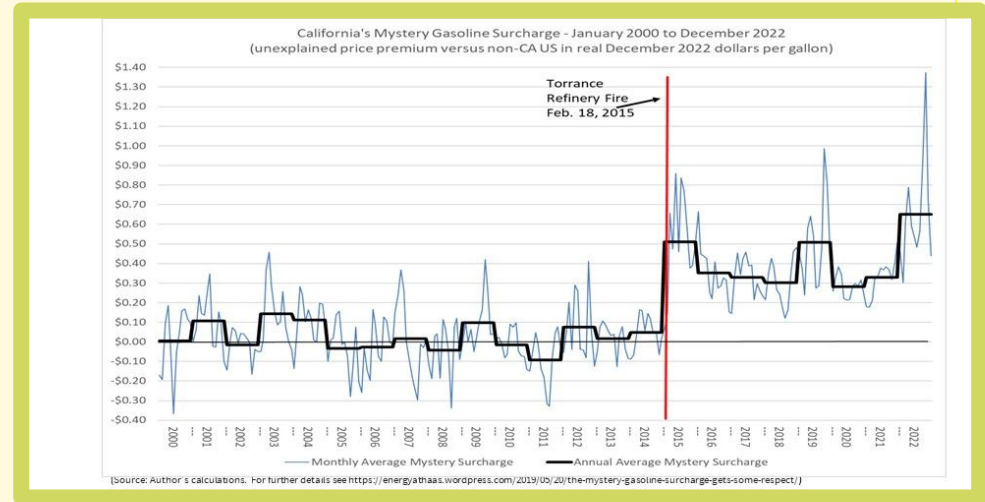
## Storage/Reserve Strategies: Re-Supply and Minimum Inventory During Shutdowns (ABX1-2)

- Gave CEC legal authority to require oil refineries **to plan to resupply and keep 15 days of reserves** during *planned* and *unplanned* shutdowns.
- Based on CEC SBX1-2 analysis that showed price spikes correlate to shutdowns that constrict supply. ***Reserves smooth out supply and prevent spikes.***
- “Unplanned shutdown” is often a euphemism for refinery disasters.

# Mystery Gasoline Surcharge

Independent and CEC analysis have also already debunked this myth.

- **2015 “Mystery Gasoline Surcharge”:** analysis by researcher Prof. Severin Borenstein demonstrates that CA’s comparatively higher gas prices have existed since 2015.
  - After accounting for regulatory pressures, the report identified a surcharge of at least 53 cents higher than the rest of the US.
- **On top of the 2015 surcharge, California Energy Commission (CEC) analysis** showed gas price spikes correlated to tighter supply, due to periodic refinery outages + spot market dynamics.



But that still leaves a difference of 53 cents per gallon that is not explained by higher taxes and fees. Some of that shows up in the spot price of gasoline — the price for large bulk transactions (at least 1 million gallons) among refiners and distributors. These prices can be very volatile, depending on the short-run local

***2015: the Torrance Refinery exploded, raining thousands of pounds of debris and pollutants onto local communities, going offline for a year and catalyzing the era of higher gas prices for the state. See next slide.***



## Deferred Maintenance is a Dangerous, Frequent Practice



### **Chevron Richmond Refinery: 2012 Fire**

“Had the crude unit been shut down when the leak was first noticed, the massive fire would not have occurred, the 19 workers would not have been in danger, and the community would’ve been protected.”

- US Chemical Safety Board



### **Torrance Refinery: 2015 Explosion**

The US Chemical Safety Board (CSB) found the explosion and catastrophic release of Hydrofluoric Acid (HF) was caused by deficient safety procedures, equipment use beyond safe life, and re-use of old variance procedures without full analysis.





**Refiners are  
knowingly  
cutting corners  
while spending  
billions on  
stock buybacks**



# Challenges and Opportunities: Communities Need *Planning* for Refinery Closures



# Valero Benicia Refinery Pollution

In 2024, Valero was fined for flagrantly, knowingly violating environmental health and safety laws for 16 years.

- Since at least 2003, Valero *knowingly* violated climate, health and safety laws, emitting 8,400 tons of cancerous chemicals and skipping routine safety checks.
- In 2019, regional Bay Area Air District expert refinery inspectors caught Valero.
- After a five year investigation, the Air District teamed up with CARB to fine Valero \$82 million dollars toward community pollution abatement efforts.

Now, Big Oil wants to undo these environmental health and safety regulations that held them accountable.

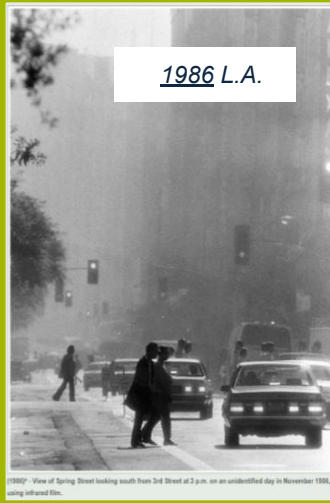
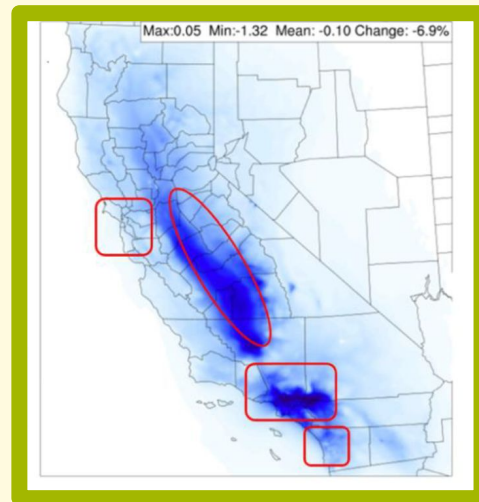


# Fossil transportation fuels made by oil refineries shatters health and safety, & still costs us dearly.

Electrifying transportation by 2035 would:

- Prevent **2,265 premature deaths/year**.
- **Save \$20 billion/year** in avoided hospitalizations, lost school days, and other impacts of chronic conditions.

*Quantifying Air Quality Impacts of Decarb. & Distrib. Energy in CA, E Three, pp. 6-7*



California only made progress due to its air pollution regulations, but pollution is still extreme.

Meeting Clean Air Act health standards has been demonstrated to be unsolvable without Zero Emission Transportation fuels. **We need a gradual phasedown.**

## Spills, fires, flaring (and more) impact neighbors regularly



**This is a common sight for frontline refinery neighbors.**

The South Coast District found it cannot meet Clean Air Act Health Standards without Zero Emission technologies across all stationary and mobile sources



---

***“The only way to achieve the required NOx reductions is through extensive use of zero emission technologies across all stationary and mobile sources.”*** Extreme non-attainment of health standards has plagued the region for decades. It found 17 million residents in Southern California have the worst air quality in the nation. 42% live in disadvantaged communities of color. 2022 S Coast AQMP Executive Summary.

# *Initial* State Policy Recommendations



## Now is the Time to Commit to the Transition...

- Rolling back health and safety regulations will not change this broader global dynamic that is informing refiners' investment strategies;
  - ◆ Nor will it bring gas prices down for consumers.
- During the 2022 Climate Change Scoping Plan development process, refinery communities were sounding the alarm about the need to engage in a ***managed transition*** that created a clear roadmap for the communities and workers most directly impacted.

**There are direct logistical methods to solve the supply problem, that will keep climate, environmental health and safety regulations intact.**





# SBX2-1: CEC Fuels Assessment Identified Options

1. Enhanced Zero-Emission Vehicle Access
2. Vehicle Miles Traveled Reduction Strategies
3. Fuel Conservation



## Demand Strategies

4. Storage Strategies
5. Production Enhancement Strategies
6. Alignment of Gasoline Specifications for Western States
7. Import Strategies



## Supply Strategies

8. Gas Price Stabilization Fund
9. Cost of Service Model
10. State-Owned Refineries
11. Retail Margin Management
12. Railcar Replenishment



## Highly Complex Implementation

## Other



# Targeted Supply-Side Strategies



- **Targeted Goals:** stabilize supply and soften price shock
- ***Initial Statewide Policy Recommendations***
  - ◆ **Establish a storage strategy:** finalize the **re-supply inventory rule** and begin the minimum inventory rule-making.
  - ◆ **Reject rollbacks to refinery process safety management (PSM) CalEPA/CalOSHA rules** to prevent sudden outages that trigger price shocks, and keep frontline workers and communities safe.
  - ◆ Further **explore options to address supply constraints from the CEC/DPMO** and reduce reliance on growing monopolies.
- ***Evaluate Site-Specific Strategies & Do Not Preempt Local Decision-Making***
  - ◆ **Valero Benicia Refinery:** pending assessment of infrastructure by CEC.
  - ◆ **Phillips 66 LA Refinery (Carson-Wilmington):** Support local communities and USW Local 675 workers to advocate for safe, transparent, and community voice in decommissioning, closure, cleanup, and redevelopment.

# Summary: EJ Strategies for a Just Refinery Transition

## Early Investments

- **Making polluters pay for one-time, short/medium-term investments** to support long-term, **climate resilient public infrastructure** and **economic diversification** to reduce dependence; **proactive savings** for tax base decline and replacement
- **Fund pilots, collaborative forums, and locally-rooted partnerships** between community, labor, and all levels of government
- **Prioritize *increased funding for equitable demand-side strategies***

## Regulatory Action Needed

- **Coordinated, whole-of-government approach** to empower communities+workers with **clear timelines, notice, resources** in the transition away from fossil fuels
- Immediately **enact policies to empower community voice in redevelopment** of their neighborhood, and **secure financial transition support** for workers;
- Strengthen regulations to **reassess site contamination** with enforceable, adequate **financial assurances** so refineries pay for land and groundwater **remediation**;
- Strengthen **health and safety protections** during refinery transition periods;
- **Reject polluting industries and/or remove subsidies** that would entrench disproportionately high cumulative pollution burdens.

# Models: Local and Regional Partnerships Planning for Transition

## Los Angeles Just Transition Strategy

*Developed by the LA County-City Just Transition Task Force,  
co-convened by Los Angeles County and the City of Los Angeles  
and facilitated by the Just Transition Fund*

In 2021, the **Los Angeles Just Transition Task Force** was established by the City and County of LA Chief Sustainability Offices to implement their 2019 fossil fuel free sustainability plans.



JUST  
TRANSITION  
FUND



## REPORT AND RECOMMENDATIONS OF THE CONTRA COSTA REFINERY TRANSITION PARTNERSHIP

AN INITIATIVE OF THE CALIFORNIA WORKFORCE DEVELOPMENT  
BOARD'S HIGH ROAD TRAINING PARTNERSHIP PROGRAM



FACILITATED BY THE  
BLUEGREEN ALLIANCE  
FOUNDATION  
JANUARY 2025

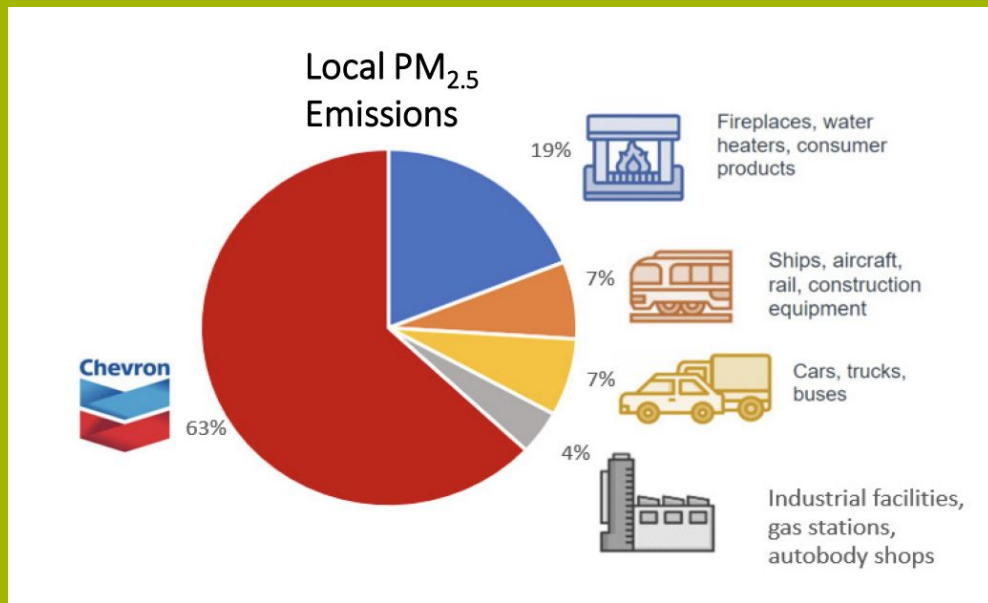
**Contra Costa  
County Refinery  
Transition  
Partnership:** 3+  
years to develop  
Worker and  
Community-  
Centered Regional  
Policy  
Recommendations

**Questions?**

# **APPENDIX**

# Refineries are Major Sources of Local Pollution

The **Chevron Richmond Refinery** is the **largest source of PM<sub>2.5</sub>** in the Richmond/San Pablo Area, emitting about  $\frac{2}{3}$  of the PM<sub>2.5</sub> in the area. The Air District's air monitoring van also detected **higher than typical** levels of certain **air toxics**, including **benzene**.



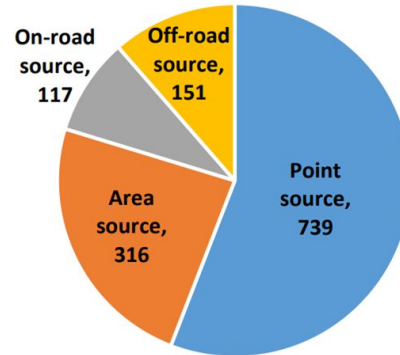
*Parents, teachers, and community members at the 2024 Flaring Town Hall at Peres Elementary next to the Chevron Refinery in Richmond, CA.*

# Refineries are Major Sources of Local Pollution

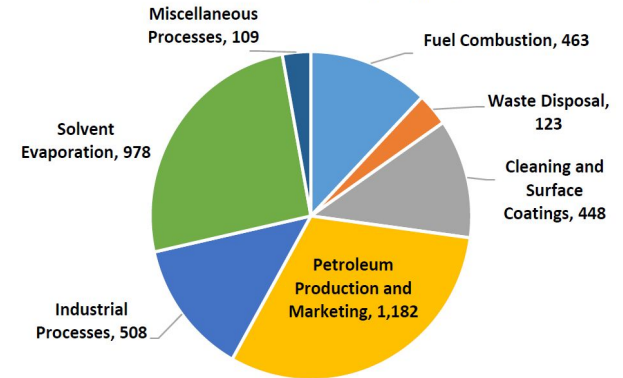
The **Wilmington-Carson-W. Long Beach** community has the **largest concentration of oil refineries** on the West Coast.

Refinery-related activity is also the **largest source of direct PM2.5 emissions** in this community.

Wilmington, Carson, West Long Beach  
PM2.5 in 2017 (tons/year)



Wilmington, Carson, West Long Beach stationary and area source  
VOC emissions in 2017 (tons/year)



“Typically, consumer products are the largest single source of VOC emissions in the South Coast Air Basin, **however, the petroleum refining industry is the largest VOC emitter in this community.** Approximately **32% of the total VOC** emissions in this community are attributed to processes related to petroleum refining. The second largest contributor to the community’s VOC emissions is consumer products. Off-road and on-road mobile sources account for marginal portions of the total VOC emissions.”

*Wilmington, Carson, W. Long Beach SCAQMD, AB 617 Community Emission Reduction Plan, 2019, p. 3b-3, image above right*





# Refinery Greenhouse Gas Emissions: No Progress



According to the state's 2022 OEHHA report, **under California state refinery policies** like Cap-and-Trade and the Low-Carbon Fuel Standard, **GHG emissions and PM2.5 pollution increased** in California's refinery communities **from 2012 to 2018**.

The Cap-and-Trade Reauthorization (AB 398) **preempted** any other refinery GHG regulations in 2017.

This finding is consistent with the trend that even as in-state demand declined, refineries **increased refining for export**; even as the number of refineries dropped, **capacity remained the same**.



**OEHHA**  
California Office of Environmental  
Health Hazard Assessment

*Table 2. Direction of Emission Changes at Facilities Near High-Scoring CES Communities Varies by Pollutant and Sector (2018 Compared to 2012 Emissions)*

Sector	Number of facilities in high-scoring CES communities (maximum)	GHG	PM2.5	Air Toxics
Hydrogen Plants	6	↑	↑	↓
Refinery	14	↑	↑	↓

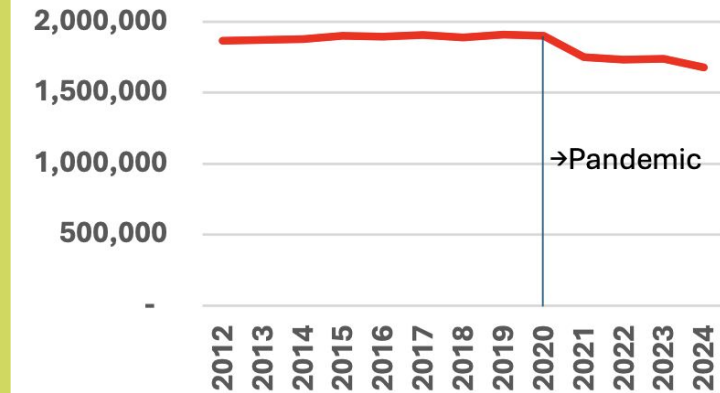


# Greater Monopolies: Fewer Refineries, but Same Capacity

**MYTH:** California had a golden age of refinery capacity decades ago, with 40 refineries, most of which closed due to extreme and unnecessary environmental regulation.

**FACTS:** Many **small refineries of the past** **could not compete:** simple, inefficient, straight-run distillation operations without the complexity to produce today's fuels.

- Many were very dangerous, poorly run, with the most extreme air pollution events, and **unable to operate without frequent costly breakdowns.**
- **Pre-Pandemic: refineries got bigger—consolidated and expanded** their footprint, meeting more than California demand as they increased exports of finished fuels as California demand started to drop.



**CA refining capacity** remained largely the same from 2012 to 2020. [USEIA data](#) show close to 2 million barrels/day crude oil refining capacity, until the pandemic crashed demand. CBE downloaded 091824

Analysis conducted by Julia May, Senior Scientist, Communities for a Better Environment (CBE) letter to Independent Consumer Fuels Advisory Committee, February 2025



# Fossil Fuel Playbook: Bankruptcy as Bailout?



“As a result, we believe that generally these assets have **no expected retirement dates** for purposes of estimating asset retirement obligations since the dates or ranges of dates upon which we would retire these assets cannot be reasonably estimated at this time.”

- **Phillips 66 to the State of New Jersey Pension Fund, 2023**



# Most Refinery Asset Retirement Obligations Not Yet Reported, or Secured



**Prior to 2025: Valero reported \$0 in AROs.**

**UPDATE as of April 2025: Valero reported “...expected asset retirement obligations of \$337 million as of March 31, 2025.”**



March 26, 2024

CERTIFIED MAIL 7019 2970 0001 2442 0235

Ms. Eileen White, Executive Officer  
San Francisco Bay Region  
California Regional Water Quality Control Board  
1515 Clay St., Suite 1400  
Oakland, California 94612

Attn: Fangli Yin, Water Resource Control Engineer, Groundwater Protection

Re: **Financial Assurance**  
**Valero Refining Company—California**  
**Benicia Refinery**  
**EPA I.D. No. CAD 063001770**

Financial assurance for the Waste Discharge Requirements Order No. R2-2013-0033 at the Valero Benicia refinery is demonstrated through a financial means test and a corporate guarantee provided by Valero Energy Corporation (VEC).

## Closure and Post-Closure Care

Facility	Closure Cost	Post-Closure Cost	Corrective Action
<u>Valero Refining Company-California</u>			
1) EPA I.D. No. CAD063001770 Valero Benicia Refinery 3400 East Second Street Benicia, CA 94510 WDR Order No. R2-2013-0033	\$ 1,617,939	\$ 4,453,482	

**~ 6 MILLION**

# Contra Costa County High Road Training Partnership (H RTP)

## REPORT AND RECOMMENDATIONS OF THE CONTRA COSTA REFINERY TRANSITION PARTNERSHIP

AN INITIATIVE OF THE CALIFORNIA WORKFORCE DEVELOPMENT  
BOARD'S HIGH ROAD TRAINING PARTNERSHIP PROGRAM



FACILITATED BY THE  
BLUEGREEN ALLIANCE  
FOUNDATION  
JANUARY 2025

### Labor and EJ in Contra Costa County

- Partnership formed in 2020.
- Building on decades of trust and collaboration on refinery safety and accountability advocacy.
- 3+ years to develop 31 Worker and Community-Centered Regional Policy Recommendations

#### CONTRA COSTA REFINERY TRANSITION PARTNERSHIP

##### CORE MEMBERS:



##### ADVISORY MEMBERS:



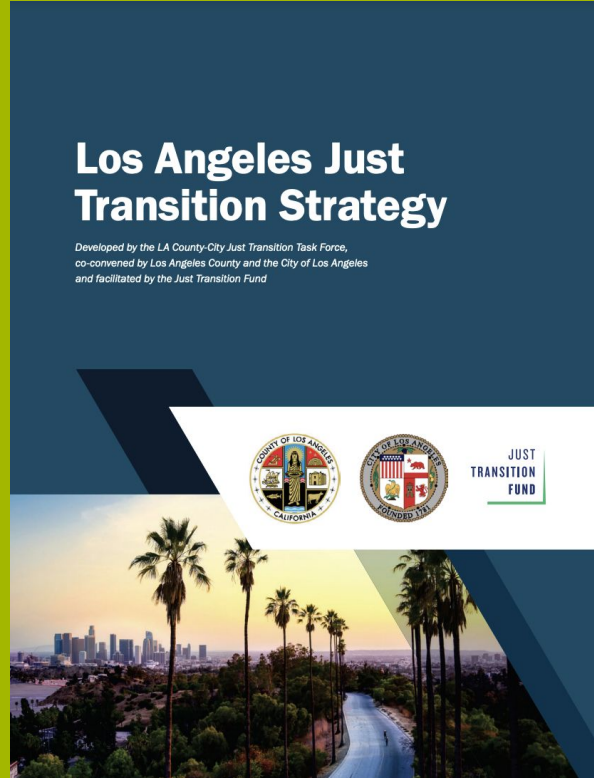
*Published in January 2025*

# Los Angeles Just Transition Task Force (Oil Extraction)

## City and County-Led Strategy

In 2021, the Just Transition Task Force was established by the City and County of LA Chief Sustainability Offices to implement their 2019 “fossil fuel free” sustainability plans.

The strategic planning effort was funded by the Just Transition Fund, from their experience supporting economic transition in coal-supported communities.



## LA County-City Just Transition Task Force TASK FORCE MEMBERS

<b>Dilay Akcora</b> <i>Student</i> University of Southern California	<b>Joël Barton</b> <i>Business Manager/Financial Secretary</i> IBEW 11	<b>Mijin Cha</b> <i>Assistant Professor, Urban and Environmental Policy</i> Occidental College
<b>Mary Collins</b> <i>Program Manager: Just Transition</i> Governor's Office of Planning and Research	<b>Ted Cordova</b> <i>Vice President</i> E&B Natural Resources	<b>Monica Embrey</b> <i>Senior Associate Director of National Energy Campaigns</i> Sierra Club
<b>Bahram Fazeli</b> <i>Director of Research and Policy</i> Communities for a Better Environment; Co-Chair, STAND LA	<b>Chris Hannan</b> <i>Executive Secretary</i> LA/OC Building & Construction Trades Council	<b>Lisa Hart</b> <i>Board Member</i> City of Los Angeles Neighborhood Council Sustainability Alliance
<b>Vince Holguin</b> <i>Councilman</i> Gabrielino-Tongva Indian Tribe	<b>Miguel Luna</b> <i>Environmental Project Director</i> Fernandeño Tataviam Band of Mission Indians	<b>Angela Mooney D'Arcy</b> <i>Executive Director</i> Sacred Places Institute for Indigenous Peoples
<b>Ryan Nordness</b> <i>Cultural Resource Analyst</i> Yuhaaviatam of San Manuel Nation	<b>Uduak-Joe Ntuk</b> <i>Oil and Gas Supervisor</i> CA Geologic Energy Management Division	<b>Marcela Oliva</b> <i>Professor</i> Los Angeles Trade Technical College
<b>Heather Pearce</b> <i>Director of Land Development</i> Sentinel Peak Resources	<b>Michele Prichard</b> <i>Senior Director of Strategic Initiatives</i> Liberty Hill Foundation	<b>Amisha Rai</b> <i>Managing Director</i> Advanced Energy Economy
<b>Norman Rogers</b> <i>2nd Vice President</i> USW Local 675	<b>Eric Romann</b> <i>STAND-LA Coalition Coordinator</i> Physicians for Social Responsibility Los Angeles	<b>Joe Shea</b> <i>Assistant Cabinet Deputy</i> Office of the Governor
<b>Patty Senecal</b> <i>Director, Southern California Region</i> Western States Petroleum Association	<b>Taylor Thomas</b> <i>Co-Director</i> East Yard Communities for Environmental Justice	<b>Melanie Traxler</b> <i>Contract Project Manager/Planner</i> Culver City; Principal at Planning PLUS/P+
<b>Veronica Wilson</b> <i>California Organizer</i> Labor Network for Sustainability	<b>Pete Wohlgezogen</b> <i>President</i> UA Local 250	<b>Carol Zabin</b> <i>Director, Green Economy Program</i> UC Berkeley Labor Center





## AB 617: Long-Awaited Refinery Rules Among Few Successes

**AB 617 required Air Districts to comply with the Clean Air Act by making a schedule to update long overdue Best Available Retrofit Control Technology (BARCT) standards.**

- EJ communities opposed the AB 398 Cap and Trade reauthorization, and this companion bill was intended to address concerns.
- While many communities have found AB 617 lacking, two Air Districts did finally adopt long-delayed updates to BARCT rules—at refineries.

### **AB 617 → Rule 6-5 “Cat Cracker Rule” or (Bay Area)**

- In 2021, BAAQMD adopted a rule to reduce PM2.5 pollution by having two Bay Area refineries (Chevron and PBF) install equipment that cuts pollution by 75% at the FCCU “cat crackers”, the largest source of PM2.5 at a refinery; the majority of U.S. refineries had them, incl. Valero Benicia.
- Chevron sued, delayed 3 years, settled install + pay fine into community fund and to settle 678 unrelated violations.

### **AB 617 → Rule 1109.1 “Boilers and Heaters Rule” (South Coast)**

- In 2021, the South Coast adopted a rule to cut ~9 tons of NOx a day, a meaningful reduction achieved by bringing old equipment up to standard, using controls that should have been adopted decades ago.
- From a community perspective, the South Coast went overboard extending compliance deadlines up to 2035 and even beyond.



# Contact



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