

# REPORT AND RECOMMENDATIONS OF THE CONTRA COSTA REFINERY TRANSITION PARTNERSHIP

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



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# CONTRA COSTA REFINERY TRANSITION PARTNERSHIP

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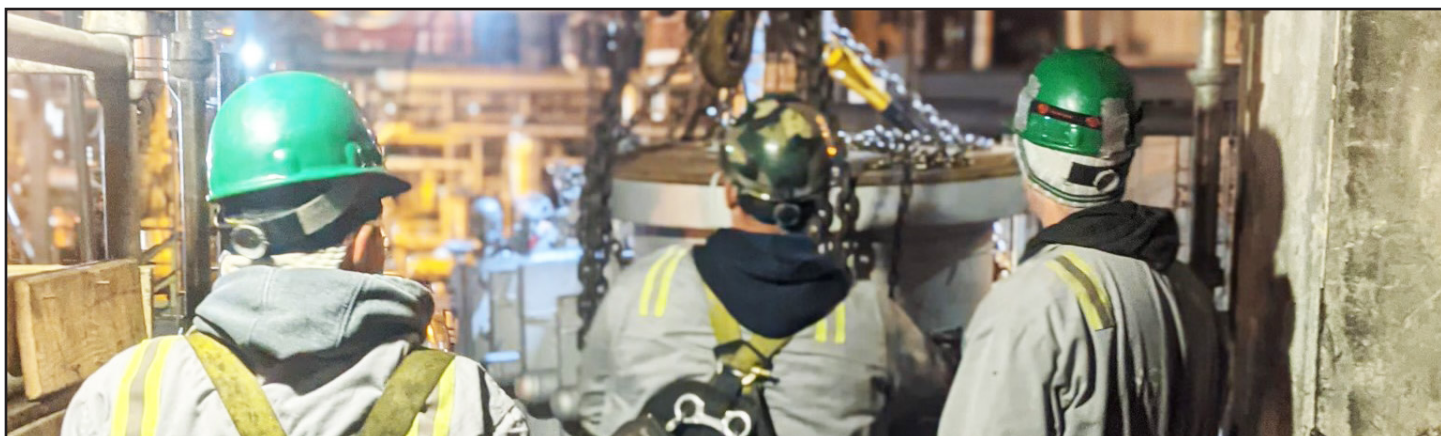
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## EXECUTIVE SUMMARY

In 2020, the Marathon Martinez oil refinery in Contra Costa County, California announced that it would indefinitely idle, laying off over 700 workers including 350 members of the United Steelworkers Local 5. This refinery closure acted as a wake-up call for Contra Costa County, the oil refining hub of Northern California. The closure prompted local labor and environmental justice organizations, who have a long history of collaborating to advance refinery safety, to come together to form the Contra Costa Refinery Transition Partnership (CCRTP), a labor and environmental justice partnership facilitated by the BlueGreen Alliance Foundation, with funding from the California Workforce Development Board's High Road Training Partnership program.

Over a three-year period, the CCRTP carried out detailed research to understand the pace, scale, impacts, and opportunities of refinery transition; led a robust community and worker engagement process to gather critical feedback from impacted stakeholders across Contra Costa County's refinery corridor; and developed a comprehensive set of policy recommendations for prioritizing the needs of refinery workers and affected communities in the energy transition.

## KEY TAKEAWAYS:

- **California's response to the climate crisis, as well as corresponding market changes will lead to refinery closures, conversions, and land re-use. In the face of this transition, Contra Costa County and the Bay Area must start preparations now.** As California takes necessary action to respond to the climate crisis and meet the goals of the Paris Climate Agreement to keep global warming under 1.5 degrees Celsius, the state is decarbonizing the economy and phasing out the use of fossil fuels in transportation. This phase-out will result in a significant reduction of demand ("demand destruction") for the primary products produced by the San Francisco Bay Area's refineries. Of the Bay Area's current five refineries, the CCRTP's *San Francisco Bay Area Refinery Transition Analysis* anticipates that a 65% to 92% reduction in production capacity is likely by 2045. By that time, the region may have one large or two small oil refineries to serve the remaining market, or no oil refineries at all, depending on the pace of transition and the degree to which refineries pivot to exports in response to declining regional consumption. It is imperative to begin planning to minimize impacts to workers and communities from this transition.

- Refinery workers are exposed to significant harm from refinery closures due to the lack of an established worker safety net and the scarcity of quality comparable jobs elsewhere in the local economy.** There are 3,000 direct and 15,000 indirect jobs in Contra Costa that are linked to the refinery industry. Many of these jobs—particularly in refinery operator, construction trades, and maintenance occupations—are well-paid, union jobs with good benefits. CCRTP commissioned a study on the impacts on the Marathon Martinez refinery workers following their layoff (*Fossil Fuel Layoff: The economic and employment effects of a refinery closure on workers in the Bay Area*) demonstrated that workers and their families are significantly harmed by facility closure and that current safety net programs provide neither sufficient financial assistance nor effective assistance for transitioning to comparable new jobs. Former Marathon workers experienced an average unemployment rate of 26% one year following layoff, and a reduction in wages of 24% for those securing new employment, in addition to significant financial and mental health strain. Additionally, UC Berkeley Labor Center’s Refinery Worker Job Match Analysis (included as an Appendix to their *Refining Transition: A Just Transition Economic Development Framework for Contra Costa County* report) documents that the regional economy currently generates only a very limited number of jobs that match refinery workers’ skills and also provide similar pay, benefits and working conditions. This limits the ability of refinery workers to find comparable employment, underscoring the need for significant focused economic development and job quality improvement efforts.
- The dependence of Contra Costa County on taxes generated by the oil refining industry means that the county will need to find new sources of revenue as the energy transition unfolds.** In 2022, Contra Costa County government, local cities, and Special Districts received an estimated \$136 million in direct taxes from the refining industry and \$836 million in indirect tax revenue. Indirect inputs for Contra Costa’s refinery industry include activities like construction maintenance, truck transportation, machinery repair and maintenance, and building services, among others. This amounted to a total of 5% (direct) and 31% (indirect) of the County’s locally generated tax revenue that year (or 1%, and 5%, respectively, of Contra Costa County’s total revenue from all sources). Additionally, these taxes amounted to 3.5% (direct) and 22% (indirect) of Special District annual revenue. Special Districts’ revenue supports critical services such as fire protection, water, sewage, and transportation, as well as quality public-sector jobs. The county must prepare now to avoid a significant decline in local revenue when facilities close or convert to new uses, including carrying out further detailed tax analysis and developing a proactive tax revenue strategy. Contra Costa will also need to prioritize economic development investment and seek state and federal support.
- Economic development is an essential element of a just transition strategy for Contra Costa. A just transition economic development framework is necessary to meet displaced worker needs and avoid perpetuating pollution burden and inequality.** CCRTP’s commissioned report from UC Berkeley Labor Center, *Refining Transition: A Just Transition Economic Development Framework*, identifies that Contra Costa is facing two core challenges: (1) A highly unequal economy, with low-income communities burdened by pollution and lack of access to quality jobs, and (2) refinery transition that will result in significant job losses and risk to essential tax revenues in Contra Costa. To address both challenges, Contra Costa County and local cities must pursue an approach to economic development that focuses on the three interrelated core priorities: quality jobs, healthy communities, and economic resilience. A just transition in Contra Costa requires a commitment to the quality of

economic growth as much as the quantity, and an understanding that environmental and economic justice are not oppositional forces to growth, but instead are necessary, complementary strategies for achieving a just, new regional economy.

- **Refinery closures bring significant health improvement to local communities. However, there is a risk of ongoing pollution and harm when proactive clean-up policies are absent.** Refineries are among the top sources of pollution in California and have impacted local communities for decades—disproportionately harming the working class, people of color, and immigrants who experience elevated rates of pulmonary and cardiovascular diseases and cancers. The U.S. Environmental Protection Agency (EPA) estimates that refinery pollution in Contra Costa has a local economic impact between \$290 million and \$560 million a year from health costs, as well as loss of school and workdays. For many community members, refinery closures offer a long-awaited hope of relief. However, closures also bring the ongoing health risks associated with thousands of acres of highly polluted lands and waters and a regulatory structure that has often failed to hold polluters accountable for full-clean up. Preparing for future closures, conversions, and re-use requires planning ahead to set decommissioning and clean-up standards, as well as holding refinery owners responsible for clean-up and remediation costs.
- **Local government must be proactive to re-envision land use after a refinery closure or conversion announcement, closely engaging impacted workers and communities in the process.** Contra Costa’s refineries occupy thousands of acres of waterfront land that offers significant redevelopment potential, depending on the level of clean-up that is possible and is actually completed. Following a facility announcement of closure or conversion, local governments must act proactively to re-envision land use—including closely engaging impacted communities and

workers—to advance and implement a shared vision for redevelopment that advances community needs.

## PREPARING FOR REFINERY TRANSITION: POLICY RECOMMENDATIONS

The CC RTP developed and the partners unanimously approved a set of 31 comprehensive policy recommendations for how local, state, and federal government can prepare for refinery transition and advance a just transition in Contra Costa County. These recommendations fall into five categories:

- 1. Refinery Transition Planning & Oversight**—Creating oversight for the refinery transition process to ensure worker and community voices and needs are centered
- 2. Worker Safety Net & Transition**—Building a meaningful safety net and transition support for refinery workers who experience layoff
- 3. Land Use, Decommissioning, & Clean-Up**—Ensuring communities aren’t left with the cost of cleaning up highly contaminated lands and waters, and that sufficient remediation occurs so that lands can be repurposed for new development and community needs
- 4. Refinery Community Support & Transition**—Supporting frontline communities in recovering from disproportionate health impacts and loss of tax revenue, including ensuring that they have a voice in future economic development
- 5. Just Transition Economic Development**—Ensuring Contra Costa takes swift action, with state and federal support, to promote a diversified high-road economy that can replace the economic benefits of the refining industry and that prioritizes quality jobs, healthy communities, and economic resilience

The next page briefly summarizes all 31 policy recommendations. We then introduce the Partnership, its membership and process, an overview of our detailed research, and finally, our detailed policy recommendations and conclusion.

# CONTRA COSTA REFINERY TRANSITION PARTNERSHIP

## RECOMMENDATION SUMMARY

### *Refinery Transition Planning & Oversight*

1. Require Two Year Notification of a Refinery Closure/Idling/Downsizing & Require Quarterly Maintenance Planning with Impacted Labor Representatives
2. Require Employers to Develop Workforce Transition Plans with Impacted Labor Unions Due Six Months Prior to Closure
3. Establish a Contra Costa Refinery Transition Oversight Commission

### *Refinery Worker Safety Net & Transition*

4. Establish Financial Support for Worker Transition—State & Federal
5. Establish Third Party-Certification for Refinery Workers
6. Require Verification of Employment from Employers
7. Explore Policy Mechanisms for Refinery Industry to Fund Worker & Community Safety Net
8. Establish & Fund Transition Navigator/Peer-to-Peer Case Management Programs for Impacted Oil Refinery Workers
9. Create a Bridge to Retirement Program for Impacted Refinery Workers
10. Complete a Contra Costa Supply Chain Analysis
11. Establish Statewide Severance Standards & Employee Protections
12. Establish Incentives for Employers to Hire Impacted Refinery Workers
13. Create an Outreach Program for Employers to Hire Impacted Oil Refinery Workers
14. Complete a Statewide Study Assessing Long-Term Health Impacts of Refinery Workers

### *Land Use, Decommissioning & Clean-Up*

15. Initiate Land-Use Visioning Process Upon Notification of a Refinery Closure/Idling/Downsizing/Conversion
16. Establish Refinery Decommissioning/Clean-Up Standards
17. Require Site-Specific Plans to Meet Refinery Decommissioning & Remediation Standards
18. Secure Enforceable Financial Assurances for Environmental Remediation
19. Require Labor Standards for Refinery Decommissioning & Clean-Up
20. Promote Maximum Environmental Restoration of Refinery Lands Upon Closure
21. Ensure Proper Remediation of Contaminated Soils

### *Refinery Community Support & Transition*

22. Establish Local Community Recovery & Transition Fund with State/Federal Support
23. Improve & Update Contra Costa Community Warning System
24. Prevent Displacement with Renter Protections, Housing Preservation, & New Homeowner Programs
25. Complete a Detailed Contra Costa County Tax Impacts Analysis
26. Pursue Establishment of a Federal Energy Transition Tax Remediation Fund

### *Just Transition Economic Development in Contra Costa County*

27. Adopt a Uniform Just Transition Standards Policy for Public Investments in Contra Costa
28. Develop a Contra Costa County Just Transition Economic Development Plan
29. Integrate Community-Centered Principles into Contra Costa County Economic Development Planning Processes
30. Advocate for State/Federal Prioritization of Economic Development Investment in Contra Costa
31. Advocate for Aligning & Embedding Just Transition Standards in All State & Federal Investments



## INTRODUCTION

The State of California has established itself as a global leader in responding to the climate crisis, taking a whole-of-government approach to decarbonize the economy. This is in alignment with the goals of the Paris Climate Agreement to keep global warming under 1.5 degrees C (3.6 degrees F) by mid-century to avoid the most extreme impacts of climate change. Decarbonizing transportation is central to the state's goals. The transportation sector is responsible for approximately 40% of California's greenhouse gas emissions. Oil refineries are the largest sources of industrial greenhouse gas emissions and among the single largest sources of harmful pollution that have resulted in significant public health impacts to local communities and workers.<sup>1</sup>

Within this context, Governor Gavin Newsom signed Executive Order N-79-20 in September 2020, requiring all new passenger cars and trucks sold in California by 2035 to be 100% zero-emission vehicles with a planned phase-out of sales in the years prior. Later formalized into the California Air Resources Board's Advanced Clean Car Rule II and incorporated into the state's economy-wide decarbonization plan (CARB's 2022 Scoping Plan), achieving California's climate goals is directly dependent on a successful transition away from oil.

One month prior to the Governor's executive order, the executives of the Marathon Martinez oil refinery in Contra Costa County, Northern California's oil refining hub, and the home to four of the Bay Area's five refineries, announced that they would be indefinitely idling the 160,000 barrel per day facility after over 100 years of continuous operation. The closure of the oil refinery resulted in the loss of over 700 jobs, including 350 members of the United Steelworkers Local 5.<sup>2</sup> The job losses were a shock to workers and their families, who were only given 60 days' notice of layoff, prohibited from transferring to other Marathon facilities, and only supported by the union-negotiated severance, which for most workers only lasted a few months.<sup>3</sup>

This moment acted as a wake-up call in Contra Costa County. For years, labor, environmental, and environmental justice groups in Contra Costa had closely collaborated to strengthen refinery safety, including a successful campaign to establish the nation's strongest refinery safety rules after a major fire at Chevron Richmond in 2012 that threatened workers' safety and sent 15,000 residents to seek medical care.<sup>4</sup> Now—amidst the backdrop of the climate crisis and the clear policy direction of the State of California—the closure of the Marathon Martinez oil refinery signaled an urgent and critical need to plan for refinery transition and to ensure that the needs of workers and communities are placed at the center of this process.



For labor unions, this meant learning the lessons from the Marathon Martinez closure to identify the needs and transition strategies for impacted workers. For environmental justice and community groups, it meant demonstrating solidarity with impacted workers while also making sure that the decades of disproportionate public health impacts on working-class communities and the needs of these frontline communities were also foregrounded in the transition process. For both, it meant collaborating to envision a future economy—rooted in quality jobs, equity, and environmental justice—and with strategies for how to get there.

The Contra Costa Refinery Transition Partnership (CCRTP) came out of this moment, with a goal to bring together impacted refinery workers and frontline communities to understand the pace and scale of transition facing Contra Costa's refineries, and to design strategies and policy recommendations to ensure that the needs of workers and communities are centered in this process. CCRTP is an initiative of the California Workforce Development Board's High Road Training Partnership program.

This report summarizes the findings and recommendations from three years of dedicated work together, including multiple research studies and an extensive engagement process that included numerous additionally impacted stakeholder organizations, as well as hundreds of individual workers and community members. These recommendations are deeply rooted in the experiences, hopes, fears, and needs of workers and communities in Contra Costa County. While the challenges and opportunities of other refinery communities elsewhere in California and the United States will differ, we hope that these recommendations provide a strong foundation for how local, state, and federal decision-makers, labor and community advocates, and allied organizations can advance a collaborative, worker/community-driven model for just transition in the oil refining industry.

## PURPOSE AND GOALS

The purpose of the CCRTP is to develop and implement a unified vision for a fair and just transition of the Bay Area's five oil refineries that meets the needs of refinery workers, frontline communities, and the climate. This project was designed to analyze the impacts of the transition to clean energy on the Bay Area's refineries, identify shared values across stakeholder groups, and develop a set of strategies to ensure that the transition to a clean economy results in economic sustainability for the region, improved public health, and environmental justice, alongside meaningful and timely reduction in greenhouse gas emissions.

### PARTNERSHIP GOALS:

1. Strengthen relationships between key Bay Area labor and community refinery stakeholders
2. Develop a set of strategies and policies for ensuring a fair and just transition across multiple potential transition scenarios
3. Develop a worker and community-centered economic vision to provide sustainable high-road employment, community health, and regional economic benefits in the Bay Area's refinery region as the fossil fuel sector declines
4. Advocate and advance the implementation of the recommended strategies



CCRTP members break for lunch at a Partnership strategy retreat in January 2024 (Photo: Josh Sonnenfeld)



## PARTNERSHIP STRUCTURE AND PROCESS

The CC RTP was intentionally modeled as a non-governmental collaborative of labor and environmental justice organizations, believing that a thoughtful and equitable just transition planning process should center on the workers and communities most impacted by refinery transition, and support their leadership in identifying and advocating for recommendations that most address their needs.

The Partnership is made up of nine core organizations, five of which have voting power within the Partnership (\*)—reflecting their direct representation of impacted frontline workers and communities—with the other three organizations acting as non-voting supporting organizations:

- United Steelworkers Local 5\*
- United Steelworkers District 12\*
- United Steelworkers International Union
- Asian Pacific Environmental Network\*
- UA Plumbers & Steamfitters Local 342\*
- Contra Costa Labor Council\*
- California Federation of Labor Unions
- UC Berkeley Labor Center
- BlueGreen Alliance Foundation

United Steelworkers represent workers in four out of five Bay Area refineries—a majority of California refineries—and over 30,000 oil workers across the United States. The Asian Pacific Environmental Network is a 30-year leader within the environmental justice movement in California, rooted in the Asian immigrant and refugee community in Richmond, Oakland, and now Wilmington, CA. APEN mobilizes over 30,000 Asian immigrant and refugee voters

across California, engaging with people in 7 different languages to advance a shared vision for racial justice, economic equity, and climate solutions. UA Plumbers & Steamfitters Local 342 represents over 4,000 plumbers, pipefitters, and steamfitters in Northern California, and is one of the largest Building Trades locals in the region that performs significant construction and maintenance work at the refineries. Contra Costa Labor Council is a federated body of 90 unions representing over 87,000 workers in Contra Costa County, a wide range of organized industries from refinery workers to public sector and healthcare workers. UC Berkeley Labor Center acts as the Partnership's research lead, the California Federation of Labor Unions advises the Partnership on worker transition strategies, and BlueGreen Alliance Foundation acts as the fiscal agent and overall project director and facilitator.

To gather additional feedback from impacted stakeholders outside of the Partnership, the CC RTP convened two working groups, a Worker Safety Net and Transition Working Group and a Community Solutions Working Group; organized a three-session workshop series with frontline community members in Richmond, CA; and conducted multiple sets of briefings and feedback sessions with a wide range of additional community, labor, and government stakeholders.

We thank the many participants of our working groups, additional stakeholder organizations, and hundreds of valued workers and community members who provided their time and expertise to help shape the recommendations in this report.

## COMMUNITY SOLUTIONS WORKING GROUP

- Asian Pacific Environmental Network (lead)—Megan Zapanta, Emma Ishii, Connie Cho
- Communities for a Better Environment—Lazuli Trujano, Luna Angulo
- Richmond Our Power Coalition—Katherine Ramos
- Natural Resources Defense Council—Ann Alexander
- UC Berkeley Othering and Belonging Institute—Eli Moore
- Urban Tilth—Kiara Pereira, Rafael Castro-Chavez
- Contra Costa Central Labor Council—Josh Anijar

## WORKER SAFETY NET AND TRANSITION WORKING GROUP

- California Federation of Labor Unions (co-lead)—Cesar Lara
- BlueGreen Alliance (co-lead)—Josh Sonnenfeld
- United Steelworkers Local 5—Tracy Scott, Nick Plurkowski
- United Steelworkers District 12—Ron Espinoza
- United Steelworkers International Union—Jim Savage
- UC Berkeley Labor Center—Carol Zabin
- Machinists Local 1173—Steve Older, Brian Fealy
- International Brotherhood of Electrical Workers (IBEW) Local 302—Tom Hansen
- UA Plumbers & Steamfitters Local 342—Chuck Leonard
- Contra Costa Central Labor Council—Josh Anijar
- Asian Pacific Environmental Network—Megan Zapanta, Emma Ishii



CCRTP members and allies join USW Local 5's picket line in support of striking Chevron Richmond refinery workers in February 2022 (Photo: Josh Sonnenfeld)

## DEFINING JUST TRANSITION FOR WORKERS AND COMMUNITIES

Throughout this report, the CC RTP has chosen to use the language of Just Transition to speak towards the Partnership’s shared goals of advancing an energy transition that acknowledges and minimizes, to the greatest extent possible, the significant impacts to workers because of refinery closures and conversions, as well as the legacy impact of refinery pollution on local communities and their decades-long demand for community health and revitalization.

We recognize and honor the work of the thousands of oil refinery workers who have given their labor—and too often their lives—to this industry, and fought with pride for the dignity of refinery jobs and the safety of refineries for workers and communities.

We recognize and honor the many thousands of community members who have often been forced to live near refineries by racist housing policies like red-lining and other forms of racial and economic exclusion and have fought valiantly for decades for the basic right of healthy air, lifespans, and health outcomes that are not dictated by zip code.

We honor the origins of the phrase “just transition,” popularized by Tony Mazzocchi, a trailblazing leader within the Oil, Chemical and Atomic Workers International Union (OCAW).<sup>5</sup> Originally referred to as a “Superfund for Workers,” Mazzocchi, OCAW, and allies advocated tirelessly in the 1970’s and 1980’s for what today are bedrock environmental and environmental health regulations. As companies discontinued highly hazardous products and closed manufacturing facilities in response to increasing scrutiny, Mazzocchi argued that in addition to a superfund to clean up the land, there should be a superfund for workers to support those who were losing their jobs to transition to new, less hazardous jobs. As Mazzocchi wrote, “We need to provide workers with a guarantee that they will

not have to pay for clean air and water with their jobs, their living standards or their future.”<sup>6</sup>

The phrase Just Transition was expanded shortly afterward by environmental justice advocates to include support for communities “who bear the pollution burden from a fossil fuel economy but have been largely shut out of the economic benefits and fossil fuel jobs.”<sup>7</sup>

With the increased global attention on the climate crisis and the urgent need to transition the economy to clean energy, the term Just Transition has become mainstream, and in 2015 was included in the preamble of the Paris Climate Agreement.<sup>8</sup> However, as the term becomes more widespread, Just Transition has been used in a variety of contexts that does not always include the original focus on workers or the expanded focus on communities.

In the CC RTP’s use of Just Transition, we are referring to our shared goals to ensure both the successful support and transition of refinery workers and refinery communities to a new, just economy powered by clean energy that centers the shared goals of quality jobs, community health, and economic resilience—informed by the leadership and engagement of those workers and communities that are most impacted.

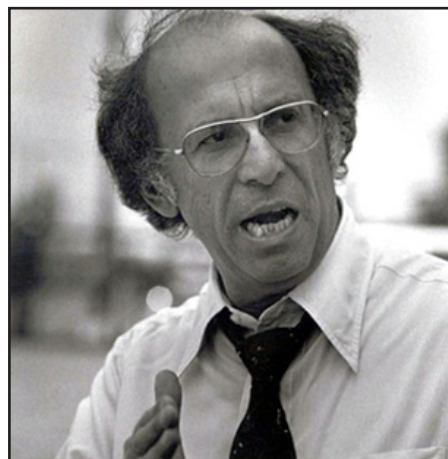


Figure 1: OCAW Leader Tony Mazzocchi  
(Credit: U.S. Dept of Labor)

## RESEARCH SUMMARY

Our core research questions for this project were:

1. What is the pace and scale of refinery transition, and what potential transition scenarios might we anticipate for Bay Area refineries?
2. What are the impacts of refinery transition on workers, and how can we prepare workers for successfully transitioning to new high-quality jobs?
3. What are the impacts of refinery transition on communities as it relates to the tax base, and how can we diversify the tax base to replace revenues from the refineries?
4. What is the policy landscape around refinery closure and decommissioning, and what policy strategies can we advance to prepare for future closures?
5. How can we build a diversified high-road economy in Contra Costa that can ensure good jobs, healthy communities, and economic resilience for people in our region?

We explored these questions through a series of expert commissioned reports, that are discussed in greater detail in our companion report from UC Berkeley Labor Center, *Refining Transition: A Just Transition Economic Development Framework for Contra Costa County*. Each of these detailed reports is also included in our appendix.

To frame our recommendations, we also summarize below the challenges and opportunities facing Contra Costa County from refinery transition, as informed by our research.

### FRAMING THE CHALLENGE AND THE OPPORTUNITY

Responding to the urgency of the climate crisis and meeting the goals of the Paris Climate Agreement to keep global warming under 1.5 degrees C (3.6 degrees F) by mid-century to avoid the most extreme impacts of climate change requires a transformation of our global economy. The State of California and the federal government have established the policy framework, and a mix of regulations, incentives



Figure 2: Contra Costa County is the Industrial Hub for Oil Refining for Northern California, with four out of five Bay Area refineries (Image: UC Berkeley Labor Center)

and investments, including billions of dollars from the Inflation Reduction Act, Bipartisan Infrastructure Law, and additional programs to support this transition.

In California, the California Air Resources Board has established a statewide plan to decarbonize the economy by 2045 (the 2022 Scoping Plan), and the policy mechanism to phase out gasoline-powered vehicles by 2035, in the form of the Advanced Clean Car Rule II, and additional rules, regulations and incentives across other transportation sectors such as trucks, rail and medium and heavy-duty vehicles.

These policies respond not just to the climate crisis, but also to the century of disproportionate environmental and public health impact that has occurred to communities that are geographically

and economically tied to oil extraction and refining, predominately low-income and communities of color. The direct proximity of communities to refineries in the Bay Area has resulted in significant public health impacts, including elevated rates of asthma and other respiratory illnesses, heart problems, and cancers such as leukemia. For many people in Contra Costa's refinery communities, the closure of refineries brings a long-awaited sense of hope for relief from this health impact, and hope for the opportunity to revitalize communities that have long felt left behind by the state's economic progress.

At the same time, refinery transition brings significant economic anxiety to Contra Costa's refinery workers, communities, and local government. Contra Costa County is Northern California's oil refining hub, and the Bay Area's five refineries (four in Contra Costa, one in neighboring Solano County) provide the vast majority of the transportation fuels consumed in Northern California and Northern Nevada. Oil refining is the single largest economic sector by economic output in Contra Costa County. In 2022, petroleum refining in Contra Costa contributed over \$42 billion in output—24% of total industry output in Contra Costa County. The industry contributed an estimated \$136 million in direct taxes and \$836 million in indirect taxes from the refinery supply chain and related industries to Contra Costa County, local cities and Special Districts in 2022, encompassing 5% (direct) and 31% (indirect) of Contra Costa County's locally-generated tax revenue (1% and 5%, respectively, of Contra Costa County's total revenue from all sources), and 3.5% (direct) and 22% (indirect) of Special District tax revenue that year. Indirect inputs for Contra Costa's refinery industry include activities like construction maintenance, truck transportation, machinery repair and maintenance, and building services, among others.<sup>9</sup>

Refineries in Contra Costa employ around 3,000 workers directly, and the industry results in approximately 15,000 local jobs in refinery supply chain industries.<sup>10</sup> These jobs include some of the

highest-paying blue-collar jobs in Contra Costa County, as a result of unionization among refinery operators and building trades workers that provide ongoing construction and maintenance for the facilities. Refinery operators typically earn upwards of \$50 per hour plus benefits, and trades workers often earn more. Comparable non-union jobs in Contra Costa County tend to earn substantially less—median wages for non-refinery manufacturing workers are around \$25 per hour. For these workers and their families—as experienced at the Marathon Martinez refinery in 2020—the closure, conversion, and repurposing of refineries represents an enormous risk to their livelihoods.

For workers and communities in Contra Costa, there is an urgent need to work with local, state, and federal government and other stakeholders to proactively plan for refinery transition; build systems of support for workers and communities to minimize the risks and impacts; and collaboratively work to build a new worker and community-centered economy in Contra Costa rooted in social equity, environmental sustainability, and high-quality jobs. The work of the CC RTP demonstrates that this collaboration is possible—and our recommendations are intended to provide a holistic framework for how we build the foundation for a just transition in Contra Costa County.

## **THE NEED TO PREPARE FOR REFINERY TRANSITION**

The work of the CC RTP has been based on the premise that refinery transition is already here and will be escalating, as a necessary result of climate action and transportation decarbonization policies that reduce demand for petroleum products. The CC RTP commissioned an analysis (Appendix A) from energy economists Dr. Christina Simeone and Dr. Ian Lange (Colorado School of Mines) to provide a better understanding of the potential pace and scale of this transition and different factors that could influence the refinery transition process. Below is a summary of that analysis.

Unlike many other regions of the United States, California's refineries largely operate on a geographic "island," overwhelmingly producing fuels to be consumed here within California. As a result, as the state experiences a significant reduction in demand for California-grade diesel and gasoline (the primary product that refineries produce at 52% and 17%, respectively), refinery owners will be forced to consider closing, converting, or repurposing their facilities.<sup>11</sup>

Simeone and Lange utilized data from CARB's 2022 Scoping Plan to chart the anticipated decline in gasoline and diesel consumption in the state. The result is what the economists describe as "demand destruction." While decarbonization of the economy and the impacts on refineries will be uneven, complicated, and unpredictable, the core fact that refineries will be losing their primary market for their main products (gasoline and diesel) means that California can and should expect significant refinery closures and transitions across the state's entire refining sector.

While Simeone and Lange's analysis is the first public analysis of the Bay Area refinery transition, their assessment is reinforced by a recent analysis from the California Energy Commission (CEC) which anticipates similar rapid declines in demand for gasoline at the statewide level and corresponding closures and conversions of refineries in their 2024 Transportation Fuels Assessment. The Assessment anticipates that

by 2044 the State of California may have no refineries left under a "Rapid" decarbonization scenario, or just 1 Northern California and 1 Southern California refinery under a "Fast Scenario," if refiners do not pivot to exporting significant additional product to other regions of the globe.<sup>12</sup> Regarding exports, the CEC Transportation Fuels Assessment notes that it is likely for California refiners to continue producing fuel for export, not only to Nevada and Arizona, but also to Latin America and Asian markets, and potentially seek to increase exports. However, they note that the extent to which increasing exports is feasible is uncertain, requiring further analysis.

Simeone and Lange provide two main scenarios to chart the demand destruction for Northern California's refineries:

- **Scenario 1:** Reduction in needed production capacity for Bay Area refineries to satisfy demand, assuming **no change in exports**. Under this scenario, the needed refinery capacity is reduced by 65%, economically sufficient to sustain one large or two small oil refineries in the Bay Area in 2045.
- **Scenario 2:** Reduction in needed production capacity for Bay Area refineries to satisfy demand, assuming **exports reduce at the same pace** as in-state consumption. Under this scenario, needed refining capacity is reduced by 92%, likely insufficient to economically sustain an oil refinery in the Bay Area in 2045.

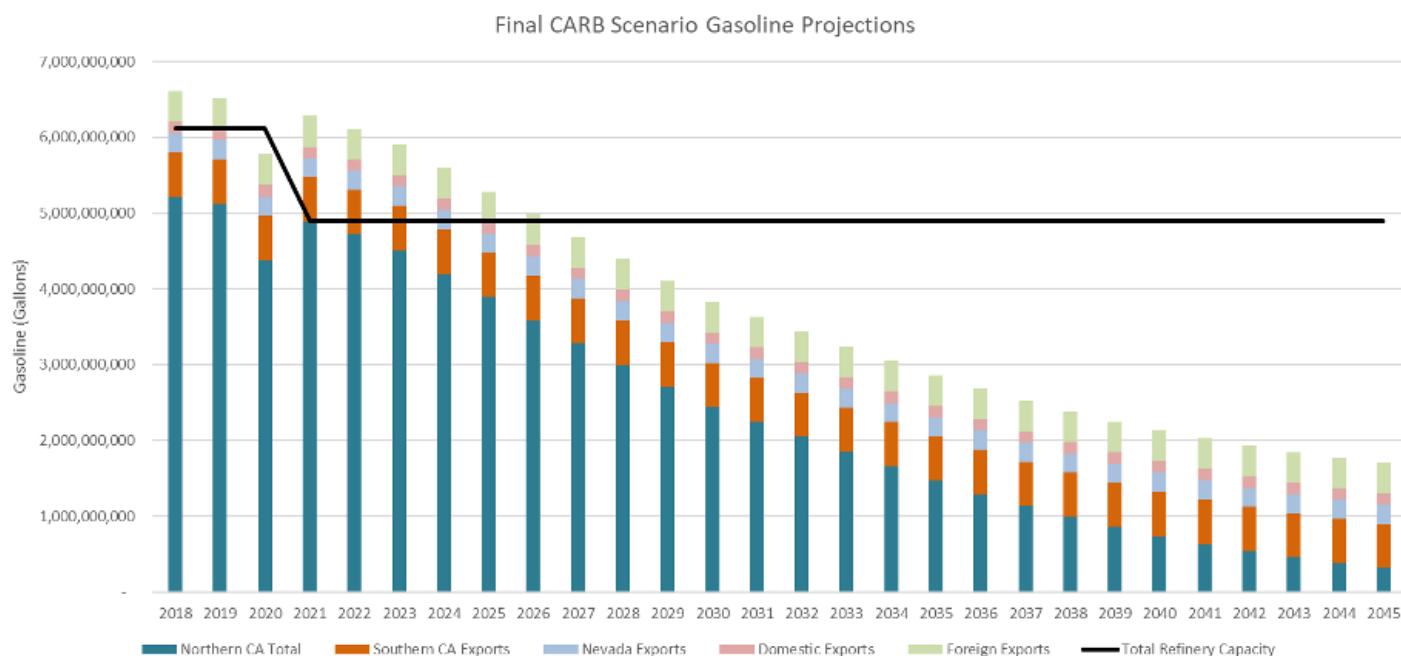


Figure 3: Scenario 1: Reduction in demand for gasoline in Northern California, compared to 2021 Bay Area refinery production capacity (includes Phillips 66 Rodeo, which has since converted to renewable fuel production), assuming exports remain constant. This scenario results in a 65% reduction of needed gasoline.

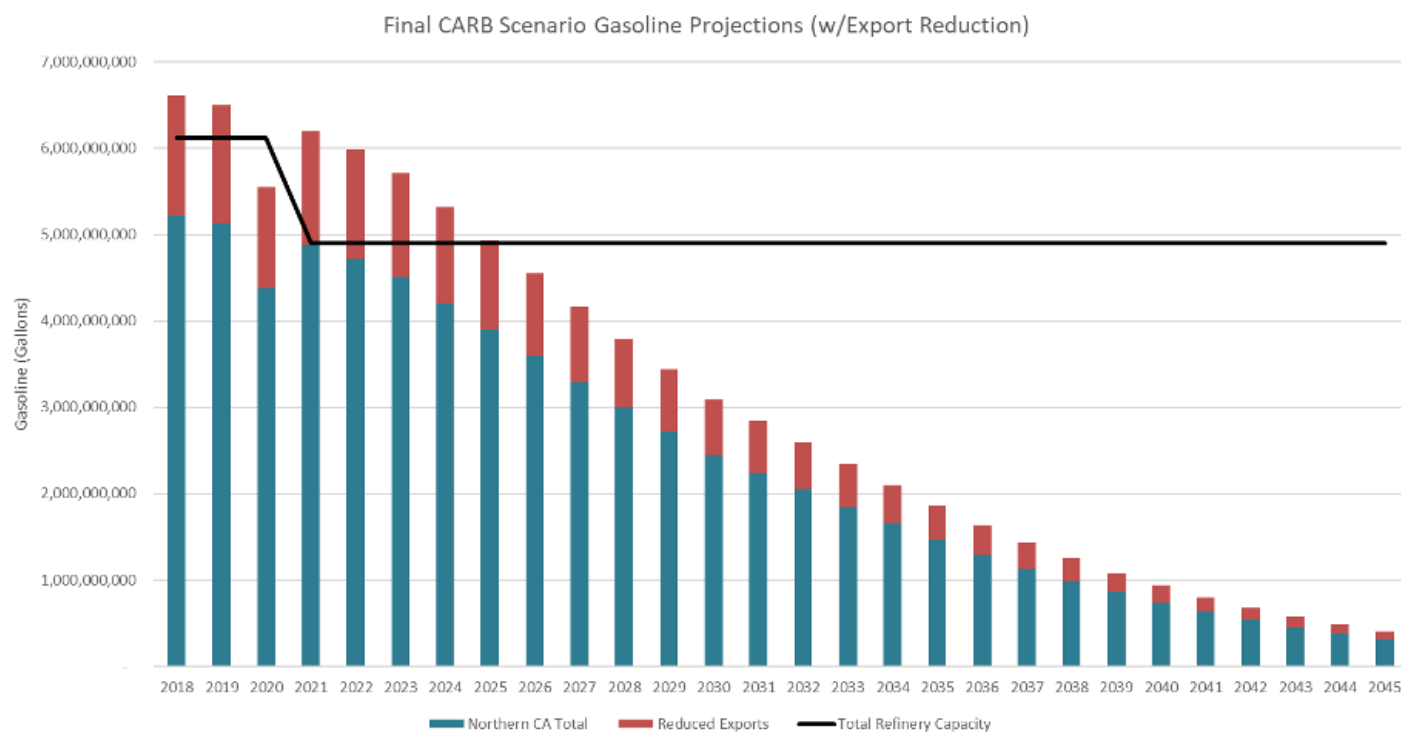


Figure 4: Scenario 2: Reduction in demand for gasoline in Northern California, compared to 2021 refinery production capacity, assuming exports reduce at the same rate as in-state consumption. This scenario results in a 92% reduction of needed gasoline.



Under both scenarios, Simeone & Lange identify the potential for additional facility conversions to renewable fuel facilities, the possibility that remaining refineries may be required to install carbon capture technology in response to increased regulatory requirements, and a likelihood that refinery lands could be cleaned up and re-utilized for other uses as a result of refinery closures. Simeone and Lange also discuss the factors shaping these transition scenarios and various wild cards that may influence refinery owners' decisions under the shifting regulatory landscape.

In summary, Simeone and Lange's analysis, reinforced by the CEC's recent assessment, identifies that for California to stay on track to achieve the state's climate goals, widespread refinery closures will necessarily occur throughout the Bay Area and California. While there are numerous factors, most notably the private ownership of refineries, the wide range of refinery products and markets, and the shifting regulatory landscape, that make it impossible to predict the exact timing of closures or potential

changes to specific facilities, the data is clear that Contra Costa County and California as a whole must begin to prepare for widespread refinery transition, developing strategies to support the economic and environmental resilience of refinery workers and refinery communities impacted by this change.

## HOW HAVE REFINERIES IMPACTED PUBLIC HEALTH & THE ENVIRONMENT?

Understanding the significant impact of refinery pollution on public health and the environment is an essential element to understanding the hopes and needs of communities as it relates to preparing for refinery transition. While Contra Costa's refineries have provided the fossil fuels that have powered the regional economy for the past century, the refineries and refinery industry are also some of the single largest sources of pollution in the region, which have had a century of impact on the health of workers and local communities, particularly low-income communities and communities of color in Contra Costa.



APEN members hold ceremony during a mural unveiling at the Richmond Art Center. Photo: Monet Khanyahl.

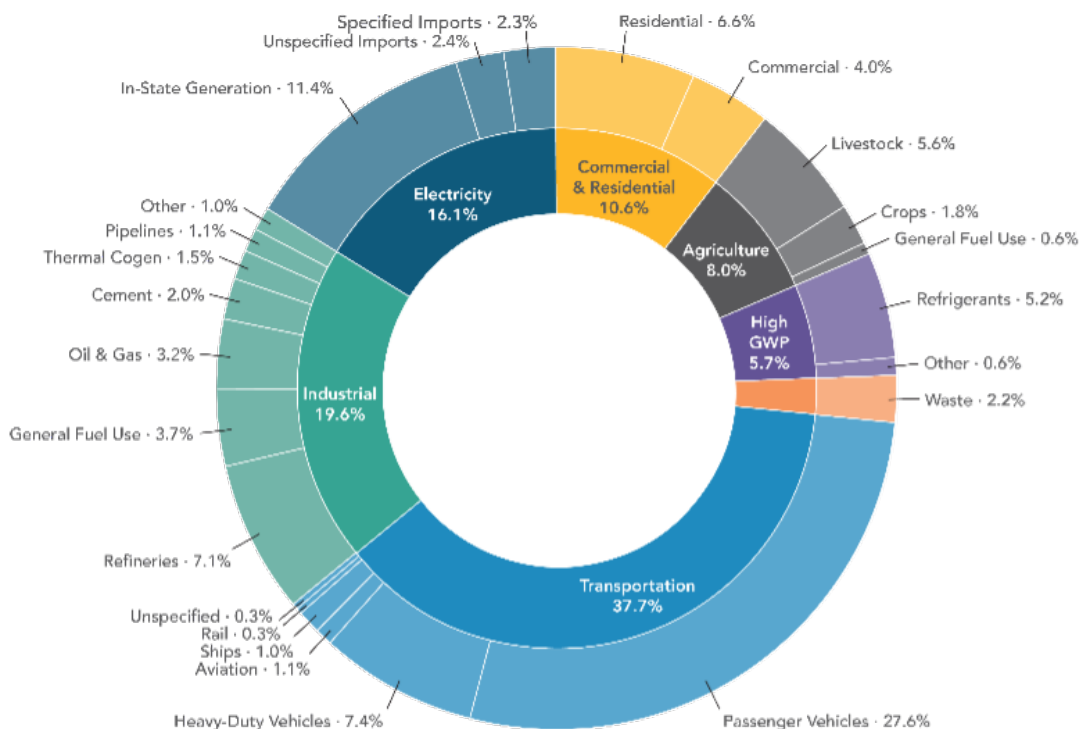
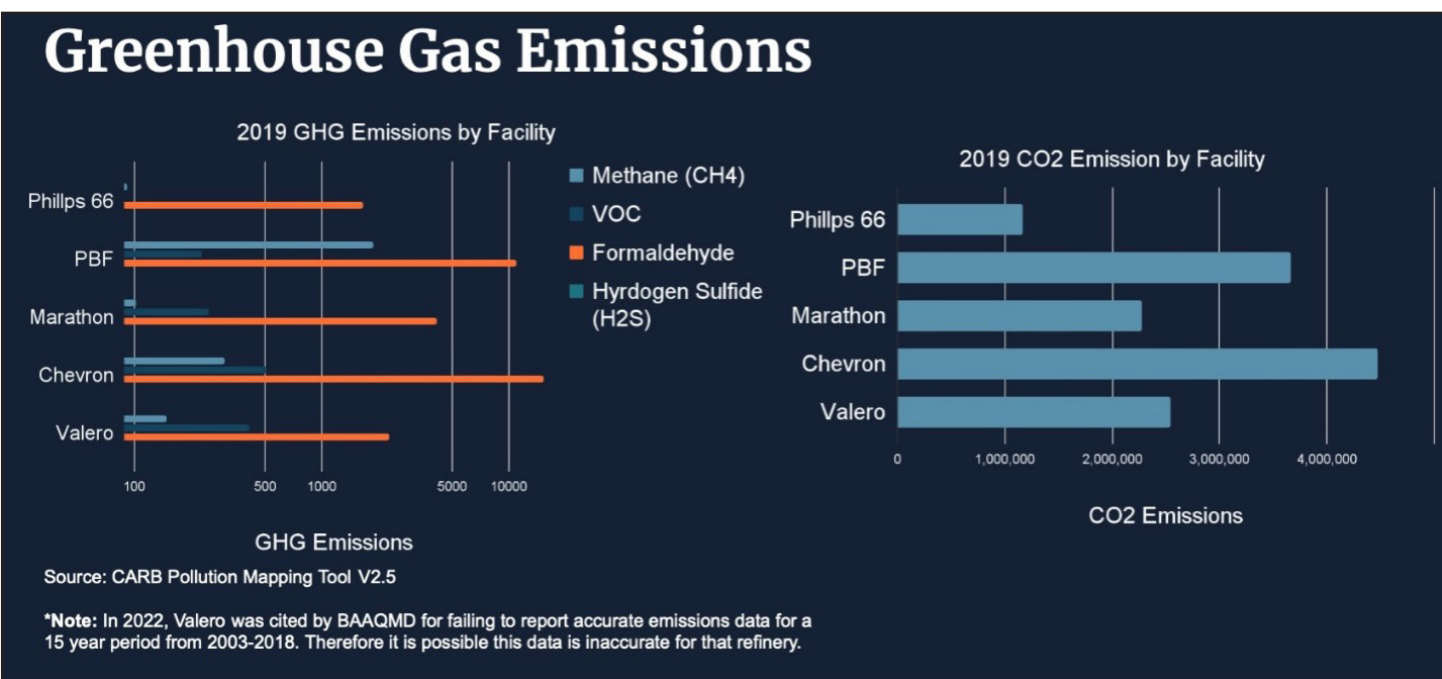


Figure 5: 2022 Greenhouse gas emissions in California by sector (CARB)

### GHG Emissions

Refineries are a major contributor to greenhouse emissions in California, the largest industrial sector emitter, directly producing 7.1% of the state’s total emissions. In addition, the emissions of the petroleum-based products that refineries produce are responsible for the single largest sector of greenhouse emissions in California: the Transportation sector (37.7% of California’s GHG emissions).<sup>13</sup>

The specific GHG emissions of individual Bay Area refineries largely correlate to the production capacity of the facilities, with Chevron Richmond the largest GHG emitter of the Bay Area refineries, followed by PBF Martinez, Valero Benicia, Marathon Martinez, and Phillips 66 Rodeo as of 2019.<sup>14</sup>



**Air Pollution**

In addition to greenhouse gases, Contra Costa’s refineries also release significant criteria and hazardous pollution, known to have the greatest impacts on public health, including Nitrogen Oxides (NOx), Sulfur Oxides (SOx), PM10, PM 2.5, and Benzene. These criteria and hazardous pollutants are known to contribute to illnesses such as asthma, cancer, respiratory illnesses, heart disease, and leukemia.

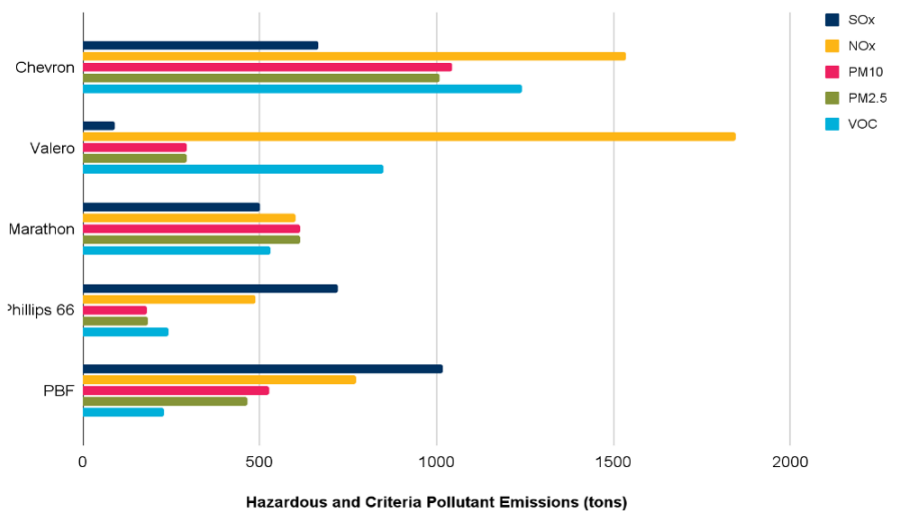
Unlike GHG emissions, which the data demonstrates to be relatively consistent year to year as part of the ongoing operation of the refineries, the release of criteria and hazardous pollutants can spike with flaring incidents, and especially fires or explosions at the refineries, which has unfortunately occurred far too frequently in Contra Costa.<sup>15</sup> Despite the committed and oftentimes heroic work of union workers in refineries to advocate and act for facility safety, and ongoing collaborative efforts between labor, government, and community partners to advance refinery safety, petroleum refining is a highly volatile process that has an ongoing history of pollution and public health impacts on workers and community members.

Numerous reports have documented increased negative health outcomes because of criteria and hazardous air pollutants in refinery communities.<sup>16</sup> These health impacts have also

been compounded by the COVID-19 pandemic, as those residents with existing conditions such as diabetes and respiratory illnesses are at increased risk of COVID-19 mortality. Pollution-connected health impacts have also been demonstrated to incur additional costs and burdens on residents, including economic impacts from treating health ailments including missed school or workdays, psychological toll, and worsening inequality based on race and income. EPA estimates the pollution-related economic impact of the oil refining industry in Contra Costa County to be between \$290 Million and \$560 Million annually, when accounting for the value of increased mortality, hospital admissions, asthma, cancers, lost school and workdays, and other impacts.<sup>17</sup> Additional studies are underway to offer more comprehensive insight into the health impacts of various refinery transition scenarios in the Bay Area and nationally.<sup>18</sup>

The impacts of pollution on refinery worker health have not been thoroughly independently studied, but anecdotal evidence from union members tells similar stories of fellow workers lost to various cancers and illnesses, sometimes just months after retirement. Included in CCRTTP’s recommendations is completing an in-depth study on the health impacts on refinery workers to better understand this impact and ensure refinery worker health is supported through the refinery transition process.

*Figure 6: Criteria Pollutant Emissions from Bay Area Refineries (2019)*  
 Source: CARB Pollution Mapping Tool v2.6 analyzed by UCB Labor Center



### An Unequal Impact

When it comes to residents, the impact of refinery pollution has also not been felt evenly in Contra Costa County, with low-income and people of color most exposed. As demonstrated by UC Berkeley Labor Center’s illustration of CalEnviroScreen data, Contra Costa’s refinery communities are the primary communities most burdened by pollution in Contra Costa County, in addition to Pittsburg and Antioch, the site of the Bay Area’s largest gas power plant and the West Coast’s largest chemical production facility, among other industrial facilities.<sup>19</sup>

While recognizing the significant economic impacts of refinery closures on workers and the community’s tax base, discussed in the next several sections of this report, for many people in refinery communities, there is a long-awaited and long-deferred hope and demand for improved public health as a result of the energy transition.

At the same time, there is continued anxiety about future economic development—wanting to ensure that the new industries that may come to refinery communities do not perpetuate the historic and ongoing harm of cumulative pollution burdens, displacement, and unequal access to a healthy environment and economic opportunity.

In CC RTP’s Recommendations around Just Transition Economic Development (see pages 30-33), we recommend specific strategies for how Contra Costa County and local jurisdictions can avoid perpetuating these harms and support the recovery of refinery communities by integrating community-centered principles into economic development planning processes. Some of these strategies include:

- Prioritize the siting and growth of economic sectors, services, and resources that can help meet community needs in currently underserved communities.
- Partner with community members, community-based organizations, and regulatory agencies to prepare community-scale plans for reducing and mitigating air pollutant emissions and industrial hazards.
- Avoid exacerbating local pollution in already pollution-burdened communities, and increasing levels of protection for residents from health-harming pollution.
- Maximize pollution mitigation strategies through environmental impact analysis and health risk assessments, and seek project-level commitments that avoid or minimize pollution from traffic, such as through requirements of zero-emission commercial vehicles.

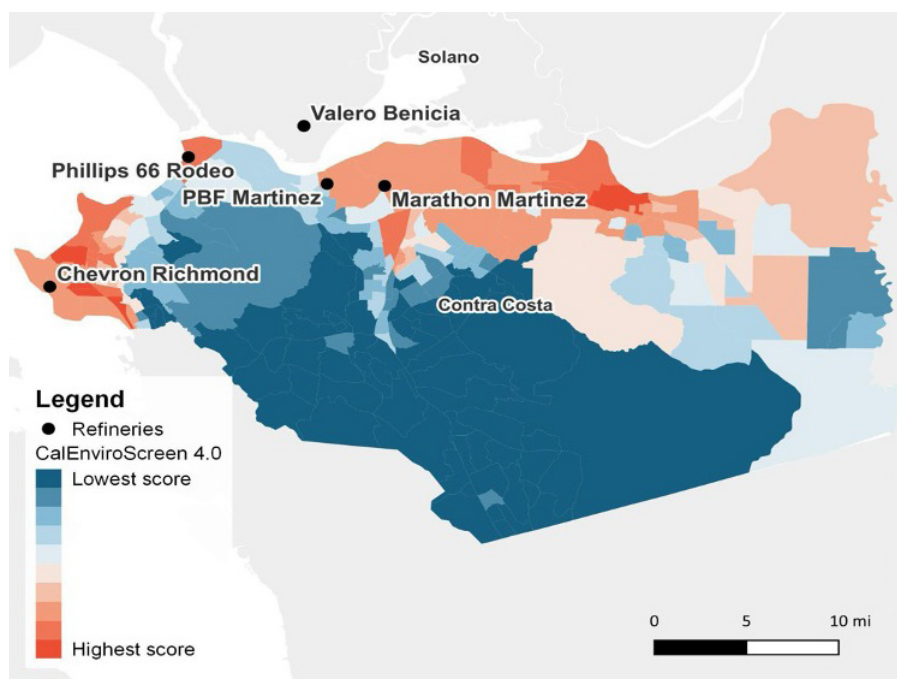


Figure 7: Map showing communities in Contra Costa County most burdened by pollution, in relationship to the locations of each of the five Bay Area refineries. Source: UC Berkeley Labor Center using CalEnviroScreen 4.0 data

- Decline to support projects opposed by the community, and/or engage in efforts to support the revision or relocation of proposed projects.
- Complete regulatory gap analysis for novel projects utilizing new technologies where the full risk to the environment, community, and worker health may not be fully known, and project-specific measures to protect workers and communities will be important.
- Partner with communities to identify and develop local projects that can be incorporated into future Community Benefit Agreements.
- Support projects that demonstrate commitment to high-quality jobs in the construction and ongoing operations and maintenance of a facility through Project Labor Agreements, Collective Bargaining Agreements, and labor neutrality agreements, as well as projects that employ members of Disadvantaged Communities and Limited-English-Proficient communities.

## HOW DO REFINERY CLOSURES IMPACT WORKERS?

The CC RTP commissioned two reports to understand the potential impacts on refinery workers from refinery closures. First was a jobs analysis and economic analysis, initially completed by Inclusive Economics and updated and summarized by UC Berkeley Labor Center in their companion report, *Refining Transition: A Just Transition Economic Development Framework for Contra Costa County*. The second was a detailed academic study on the impacts on the Marathon Martinez workers following layoff in 2020, detailed in Dr. Virginia Parks and Ian Baran's *Fossil Fuel Layoff: The Economic and Employment Effects of a Refinery Closure on Workers in the Bay Area*.

### **Contra Costa Refinery Jobs Analysis**

Inclusive Economics and UC Berkeley Labor Centers' analysis looked at jobs, job quality, and demographics within the refining industry in Contra Costa County. Their analysis identified a total of approximately 18,000 jobs tied to the Contra Costa refining industry, including 3,000 workers directly employed in the refineries, and 15,000 workers employed in the supply chain and related industries, such as jobs performing regular turnover, construction, and maintenance work in the refineries represented by the Building Trades.

While the refineries directly provide less than 1% of the County's total jobs, what makes the Contra Costa refinery jobs unique is their high quality. Thanks largely to decades of labor organizing efforts within the oil and construction industries, Contra Costa refinery industry jobs are generally represented by unions, well paid, with good benefits, and a strong voice on the job for workers.

**Refinery jobs represent the type of blue-collar union manufacturing jobs that were once a cornerstone of the U.S. economy prior to decades of deindustrialization and plant closures; jobs that are rare in the current, increasingly unequal economy.**

Notably, this trend is beginning to shift, due to the passage of the Inflation Reduction Act, Bipartisan Infrastructure Law, and CHIPS and Science Act. Since January 2021, more than 775,000 manufacturing jobs have been added to the economy.<sup>20</sup>

The data demonstrates that union jobs in the refineries and connected industries have provided an important pathway to the middle class for the working class in Contra Costa, particularly those without college degrees.

### **Study on Impacts to Marathon Martinez Workers Following Layoff**

Following the closure of the Marathon Martinez refinery in 2020, the CC RTP commissioned a detailed academic study, *Fossil Fuel Layoff: The Economic and Employment Effects of a Refinery Closure on Workers in the Bay Area*, authored by Dr. Virginia Parks and Ian Baran, to develop an understanding of the impacts to Contra Costa refinery workers following layoff at the facility, and identify needs and strategies that the workers themselves said would have been helpful to assist them in the transition.<sup>21</sup>

The study interviewed a representative sample (41% or 140) of the 345 United Steelworkers Local 5 members who were laid off from the Marathon Martinez refinery one year following the layoff.

Below is a summary of the study's findings:

- 26% of workers were still unemployed 1 year after layoff;
  - Workers who secured new employment experienced an average 24% wage cut;
  - 5 workers were within 1 year of early retirement, 4 were within 6 months at the time of layoff;
  - A majority (54%) of re-employed workers took 2 or more jobs since layoff, and 43% at the time of the study were still looking for a high-quality job;
  - 81% of workers impacted were homeowners, 82% chose not to relocate following layoff;
  - Just 28% of workers stayed in fossil fuels;
  - The primary industries refinery workers moved into after oil/gas were: utilities, chemical treatment, and manufacturing;
  - 1/3 of workers reported falling behind financially following layoff (vs. just 3% before layoff);
  - 32% of workers took early retirement withdrawals;
  - Most workers had children under the age of 18 at home, and workers reported pulling kids out of extra-curricular activities, selling cars, and other strategies to make ends meet;
  - Many workers expressed shock at the layoff and significant mental and financial stress for themselves and families; and
- 91% of workers were willing to enroll in a training program, but they would like to see those programs subsidized with a clear pathway to new employment at the end.

The *Fossil Fuel Layoff* study illustrates the risks and significant impacts to refinery workers from a facility closure in the absence of any meaningful safety net put in place, and in the case of Marathon Martinez, the absence of any meaningful assistance from the company to support worker transfers or transition to other careers.<sup>22</sup>

The study also illuminates the clear needs and strategies that can better support future refinery workers facing layoff, identified by the workers themselves, including:

- Establishing third-party certification to define and verify the skills of refinery workers, and support their hiring in comparable positions in other industries;
- Targeted individual job search assistance that focuses on a broad scope of strategies for identifying good job opportunities, and preparing for and applying for those jobs;
- A bridge-to-retirement program to provide full retirement benefits to workers close to retirement;
- A robust financial safety net for workers including extended cash payment to maintain pre-layoff income levels for unemployed workers and wage gap support to lessen the impact of the 24% average wage gap for workers securing employment in new industries;
- Targeted, short-term training for a specific set of occupations and industries, with income support during that training;
- Short-term, stand-alone training modules to enable workers to maintain certifications they had obtained on the job such as CPR and HAZMAT; and
- Counseling services for workers and their families during layoff and transition.

A just transition will require a robust economic development strategy that focuses on developing high-quality jobs within the region that can employ future displaced refinery workers, in addition to creating job opportunities for low-income workers who have historically faced barriers to quality employment in Contra Costa.

We have incorporated these recommendations into our Worker Safety Net & Transition Recommendations (see pages 27-29), in addition to suggestions on how policymakers can ensure proper preparation for refinery closure through advanced notification and requirements of employers to develop Workforce Transition Plans in collaboration with impacted labor representatives.

**With such a clear understanding that the energy transition will necessarily result in refinery closures, the state, employers, labor representatives, and communities need to plan ahead to minimize the significant impacts.**

The story of the Marathon Martinez idling, closure, and conversion, demonstrates the need for new policies and regulations to ensure positive outcomes.

In addition to proactively planning for refinery transition, including establishing a robust safety net and transition support programs for impacted workers, the long-term economic success of transitioning refinery workers will require addressing the current uneven economy in Contra Costa County and the lack of job quality in many of the industries that refinery workers are well-qualified to transition into.

In their Refinery Worker Job Match Analysis, the UC Berkeley Labor Center identified a lack of alternative job opportunities in Contra Costa County for at-risk refinery occupations and a significant disparity in job quality and wages between refinery occupations and comparable occupations in other industries.<sup>23</sup> While refinery operators typically earn upwards of \$50 per hour plus benefits, median wages for non-refinery manufacturing workers in the County is around \$25 per hour.

A just transition will require a robust economic development strategy that focuses on developing high-quality jobs within the region that can employ future displaced refinery workers, in addition to creating job opportunities for low-income workers who have historically faced barriers to quality employment in Contra Costa.

## HOW DO REFINERY CLOSURES IMPACT THE COMMUNITY'S TAX BASE?

The local economic impact of Contra Costa's refineries reaches across multiple industries. The longstanding presence of the refineries has resulted in a cluster of interconnected activities in the County, including hydrogen plants, chemical facilities, fuel transportation providers (rail, marine, trucks), subcontractors performing significant maintenance, turnover, and construction work, and more. This cluster is concentrated along Contra Costa's "Northern Waterfront" from Richmond in the west to Pittsburg and Antioch in the eastern portion of the county. A complete understanding of the economic impact of refinery transition requires a consideration of the impact of transition on the refinery-dependent supply chain in Contra Costa, in addition to the refineries themselves.

The tax analysis completed by UC Berkeley Labor Center shows that the refineries themselves are a relatively small portion of total local tax revenue, but that the cumulative impact of the industry's supply chain and connected economic activities is substantial. In 2022, Contra Costa

County government, local cities, and Special Districts received an estimated \$136 million in direct taxes from the refining industry, and \$836 million in indirect tax revenue from the supply chain and connected industries. This amounted to 5% (direct) and 31% (indirect) of the County's locally generated tax revenue that year (or 1% and 5%, respectively, of Contra Costa County's total revenue from all sources) and 3.5% (direct) and 22% (indirect) of Special District revenue. Special Districts' revenue supports critical services such as fire protection, water, sewage, and transportation, as well as quality public-sector jobs.<sup>24</sup>

Table 1 below shows the share of the refinery industry's Contra Costa County tax impact from direct and indirect activities in 2022, split up between local cities, Special Districts, and Contra Costa County. Of this total, direct taxes from the refineries were 14% and indirect taxes 86%. Direct refers to impacts from the refinery industry itself; indirect refers to impacts from businesses that sell goods and services to refinery industries, including activities like construction maintenance, truck transportation, machinery repair and maintenance, and building services, among others. These findings indicate that with refinery transition, a significant source of Contra Costa County's local tax revenue is at risk, threatening public sector jobs and funding for essential public services.

Table 1: Petroleum Refining Industry Estimated Tax Impacts in Contra Costa (2022, in millions)<sup>25</sup>

Impact	Cities	Special Districts	Contra Costa County	Total Local Impact
<b>Direct</b> <i>Petroleum refining industry</i>	\$33.6	\$60.0	\$42.7	\$136.3
<b>Indirect</b> <i>Petroleum refining input activities</i>	\$206.0	\$368.9	\$261.2	\$836.1
<b>Cumulative Local Impact</b>	\$239.6	\$428.9	\$303.9	\$972.4

Source: IMPLAN 2022, analyzed by UC Berkeley Labor Center



## WHAT HAPPENS TO THE LAND WHEN REFINERIES CLOSE? PLANNING AHEAD FOR CLEAN-UP AND DECOMMISSIONING

Contra Costa County's refineries have each been operating for more than 100 years, with facilities established 50 years or more before modern environmental regulations were adopted, such as the Clean Water Act in 1972 and the federal Superfund law, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) in 1980. As a result, the thousands of waterfront acres that house the Bay Area's refineries in Richmond, Rodeo, Martinez, and Benicia are expected to be significantly contaminated due to many cumulative accidents, spills, and chemical releases, known and unknown.

- Chevron Richmond – 2,900 acres, Est. 1902
- Phillips 66 Rodeo – 1,100 acres, Est. 1896
- PBF Martinez – 860 acres, Est. 1915
- Marathon Martinez – 2,000 acres, Est. 1913
- Valero Benicia – 900 acres, Est. 1969

Further, with all of the Bay Area's refineries located on water (either San Francisco Bay or the Carquinez Strait) to utilize marine vessel loading and unloading, there is the added risk and concerns as the region prepares for sea level rise and associated groundwater rise, which threatens to spread toxic chemicals from refinery lands into waterways and surrounding communities.<sup>26</sup> At the same time, these waterfront sites, totaling thousands of acres in one of the most expensive real estate markets in the United States, offer significant redevelopment potential in the future, if a refinery were to seek to close completely.

As we prepare for future refinery closures and conversions, it is therefore critical to understand the extent to which refinery lands are polluted, the current regulatory requirements around facility decommissioning and clean-up, and prepare policy approaches to close potential loopholes that could result in toxic lands being abandoned or inadequately remediated, impacting land and water quality, and the community's ability to reuse the lands for future purposes.

To address this issue, the CC RTP incorporated information about refinery decommissioning as part of our *San Francisco Bay Area Refinery Transition Analysis*, commissioned a clean-up policy analysis from attorneys at Asian Pacific Environmental Network and Communities for a Better Environment, and reviewed the lessons learned from the 2019 closure of the Philadelphia Energy Solutions (PES) Refinery in Philadelphia, which due to the size and age of the facility and similar location in a heavily populated urban area, provides comparison opportunity.<sup>27</sup>

Here is a summary of the takeaways:

- We can expect refinery lands to currently contain significant contamination in soil, soil vapor, surface water, and groundwater systems, which will be exacerbated by rising sea levels and groundwater levels. This includes hazardous waste, with examples such as arsenic, benzene, hydrocarbons, and chromium.
- There are real public health impacts of unabated contamination, with studies identifying risks related to respiratory illnesses, cardiovascular diseases, cancer, immunity system damage, negative birth outcomes, and other negative health impacts.
- There are existing state and federal laws around the clean-up of contaminated industrial lands that will govern the clean-up of refinery lands in the circumstance of a facility closure. Those laws include the Resource Conservation and Recovery Act (RCRA), California Hazardous Waste Control Act, California Porter-Cologne Act, and SB 1082 (1993), which specifically identified the Water Board as the lead agency for refinery closure and clean-up.
- Numerous agencies with overlapping jurisdiction would be responsible for the clean-up of refinery lands in the Bay Area, with the most significant roles played by the San Francisco Bay Regional Water Quality Control Board (Water Board) and CA Department of Toxic Substances Control (DTSC), with DTSC responsible for overseeing clean-up of designated hazardous waste sites, which could be re-assessed, and the Water Board responsible for overseeing the rest.

- There is, however, inadequate current publicly accessible and up-to-date information on the extent of contamination on Bay Area refinery sites, which makes estimating potential clean-up costs difficult. This cost is anticipated to be significant.
- In the *San Francisco Bay Area Refinery Transition Analysis*, Dr. Simeone and Dr. Lange identify this significant clean-up cost as a potential major factor for refinery owners to seek to delay or postpone full facility closures, for example, choosing to indefinitely idle a facility or convert just a portion of refinery lands to other uses.
- There is also significant risk and concern about oil companies seeking to avoid or minimize clean-up responsibilities, such as through bankruptcy, and/or negotiating with regulators and land-use agencies for reduced clean-up standards (as seen with the PES refinery).<sup>28</sup>

In reviewing the study on lessons learned from the Philadelphia Energy Solutions refinery closure as well as our own policy and regulatory analysis, the CCRTTP's major recommendation is for communities, regulators, and local government to prepare ahead for potential facility closures, both to ensure proper clean-up takes place in event of a facility closure or conversion, and to ensure that the community has the opportunity to re-envision the use of valuable refinery lands in the event of a closure or significant downsizing, rather than have that determination be made through a bankruptcy proceeding (as occurred with PES), or sale of a facility to a new entity with a land use proposal that may or may not be in alignment with community interests and values.

The CCRTTP views it as critical to act now to close regulatory loopholes that might prevent responsible clean-up and re-use of refinery lands, as well as to pursue policies to ensure proper labor, community and environmental standards for how that clean-up takes place, and community involvement in that process. Additionally, we see an urgent need to put policies in place to ensure that in the event of a facility closure announcement, the community has the opportunity to collaboratively re-envision land use to balance the many competing constraints, needs, and desires for refinery lands.

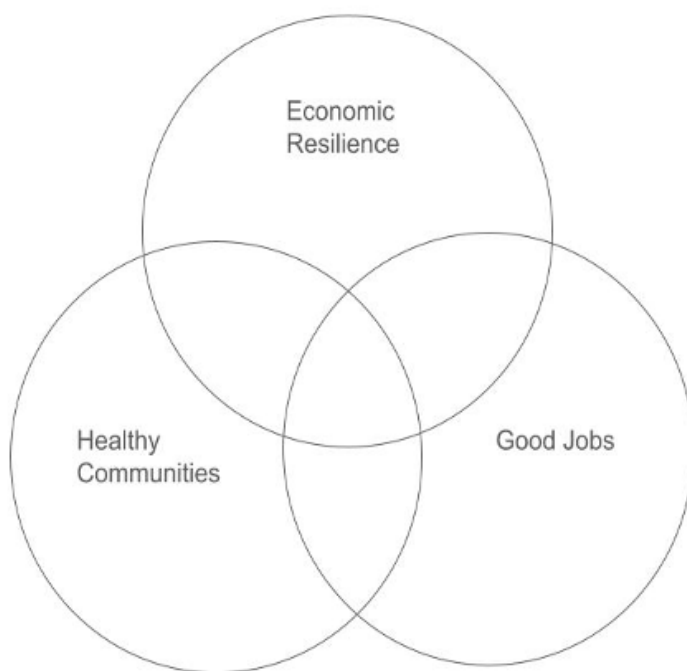
“A just transition approach to economic development planning: One in which the quality of growth matters as much as the quantity, and local communities are at the center of shaping the county’s vision for its future economy. In a just transition approach, environmental justice and economic justice are not oppositional forces to growth; instead they are necessary, complementary strategies for achieving a certain quality of growth.”

– UC Berkeley Labor Center

## A JUST TRANSITION FRAMEWORK FOR ECONOMIC DEVELOPMENT

The UC Berkeley Labor Center completed an economic development analysis for the Partnership—*Refining Transition: A Just Transition Framework for Economic Development in Contra Costa County*—that details the economic challenges facing Contra Costa prepares for refinery transition and proposes a framework for pursuing economic development that advances a just transition for workers and communities.

The UC Berkeley Labor Center’s Just Transition Economic Development Framework is anchored by CCRTP partners’ three shared priorities as it relates to a just transition approach for economic development: good jobs, healthy communities, and economic resilience. These goals are not mutually exclusive; local government and communities in Contra Costa should work together to explicitly prioritize economic development that advances all three of these objectives.



- **Good jobs:** Increase access to quality jobs, particularly for displaced refinery workers and workers from historically marginalized communities.
- **Healthy communities:** Stop polluting land, air, and water in communities that have had disproportionate pollution burdens and target environmental and health improvements in these areas.
- **Economic resilience:** Reduce economic dependency on fossil fuel production by diversifying and increasing other sources of tax revenue.

The Labor Center then details the policy tools and investment strategies that Contra Costa County, local government, and local communities can pursue to achieve these shared priorities, summarized in the chart below:

*Table 2: Just transition economic development framework for Contra Costa County. Source: UC Berkeley Labor Center*

<b>Priorities</b>	<ul style="list-style-type: none"> <li>● Good jobs</li> <li>● Healthy communities</li> <li>● Economic resilience</li> </ul>
<b>Principles</b>	<ul style="list-style-type: none"> <li>● Commit to democracy</li> <li>● Pursue demand-driven strategies that ensure just transition outcomes</li> </ul>
<b>Policy tools</b>	<ul style="list-style-type: none"> <li>● <b>Game plan:</b> Tools to ensure communities and workers are at the table, identifying shared priorities for investment</li> <li>● <b>Goal posts:</b> Tools to direct growth and investment at activities that support shared priorities</li> <li>● <b>Guard rails:</b> Tools to ensure community and worker-defined outcomes are achieved</li> </ul>
<b>Strategies</b>	<ul style="list-style-type: none"> <li>● Invest in <b>infrastructure</b> that supports just transition priorities</li> <li>● Invest in <b>industries</b> that support just transition priorities</li> </ul>
<b>Next steps</b>	<ul style="list-style-type: none"> <li>● Adopt a just transition framework to guide planning and implementation and align local efforts</li> <li>● Leverage opportunities to grow a green economy</li> </ul>

*Source: UC Berkeley Labor Center, Refining Transition: A Just Transition Economic Development Framework for Contra Costa County, California*

The UC Berkeley Labor Center’s Just Transition Economic Development Framework offers a hopeful vision for the resilience of Contra Costa’s economy as it prepares for significant change and a detailed playbook for how stakeholders in Contra Costa can work together to build this vision.

Implementing this vision will require policy change at the county and state level—for which our Partnership provides recommendations (see pages 31-34) to ensure that public resources are directed towards economic development

approaches and projects that advance a just transition. However, building a just transition requires more than just new policy; it requires a shared vision and committed collaboration from the wide array of key stakeholders—labor, community, government, employers, workforce entities, educational institutions, economic development agencies, and more—that all play an important role in building Contra Costa’s economy. Our intention in sharing this framework is to promote this commitment to collaboration, which is an essential component of advancing a just transition in Contra Costa.

## RECOMMENDATIONS

### I. REFINERY TRANSITION PLANNING & OVERSIGHT

#### *Recommendation #1: Advanced Notification of Closures and Maintenance Oversight*

- A.** Advocate for policy measures to require refineries to provide advanced notification to the public 2 years prior to a facility closure, idling, downsizing, or conversion that results in the loss of 25 or more jobs.
  - » This notice should be posted to the community in multiple languages necessary for accessibility
  - » Prohibit conversion, sale, or new use without proper notification
  - » Require refinery operators who fail to provide timely notification to pay 2 full years of salaries to workers regardless of the length of notice
- B.** Require refiners to submit refinery maintenance and staffing plans to the appropriate state agencies during the 2-year transition period, ensuring safe staffing levels and successful completion of regular and necessary maintenance.
  - » Require maintenance and staffing plans to be updated at least quarterly and immediately after any deviation is identified
  - » Require refiners to meet quarterly with impacted labor representatives to coordinate on ensuring safe staffing levels and maintenance activity for the facility during 2-year transition period
- C.** Long-term, identify and advocate for options to ensure necessary and regular long-term maintenance as economic conditions for refining decline.

#### *Recommendation #2: Workforce Transition Plans*

Advocate for the California Labor and Workforce Development Agency (LWDA) to require employers to develop, in close collaboration with impacted labor representatives, Workforce Transition Plans within 6 months of a refinery closure announcement that includes:

- A.** Number/classification of employees impacted, including:
  - a.** Employees whose employment will end without being offered other employment by the company;
  - b.** Employees who will retire as planned or be offered early retirement;
  - c.** Employees who will be retained in their current positions;
  - d.** Employees who will be retrained to continue to work for the company in a new job classification onsite; and
  - e.** Employees who will be retained by being transferred to other facilities within the company.
- B.** A program to support the transfer of employees to other employer locations and financial support.
- C.** Identification of the number and type of employees needed to safely close/convert the facility and financial incentives to keep employees on through closure.
- D.** A collaborative Worker Transition Assistance Program, funded by the employer, between the employer, labor representatives, and case management/transition navigator organization(s) identified by the labor representatives to provide workers with job search support, access to benefits, access to mental health and financial counseling, and additional resources.

### **Recommendation #3: Contra Costa Refinery Transition Oversight Commission**

Establish an ongoing Contra Costa County refinery transition oversight Commission with labor, community, and other impacted stakeholders to oversee and provide guidance on Contra Costa's refinery transition planning efforts, including workforce transition, community economic transition, site contamination and remediation, and other matters pertinent to refinery transition that impact the community. Ensure the oversight board has clear decision-making power to ensure

transparent and meaningful oversight, with role and decision-making authority clearly outlined and confirmed before the board begins to meet.

The initial focus of this oversight Commission may be advising the completion of Contra Costa County's Just Transition Economic Revitalization Plan (JTERP). However, this Commission should continue past the completion of JTERP to advise and provide oversight of this multi-year transition process.

## **II. WORKER SAFETY NET AND TRANSITION**

### ***Defining a Meaningful Worker Safety Net:***

A meaningful safety net for workers requires the establishment of programs and services, as well as direct financial assistance, administered by a Transition Navigator / Peer-to-Peer Case Management programs and includes:

- Wage replacement or a wage differential
- Healthcare support to allow workers to keep their plan or secure similar coverage
- Education benefits provided to cover postsecondary education for affected workers or their spouses
- Subsidized short-term training for workers or their spouses
- Mental health counseling for workers and their families
- Financial counseling and planning for workers
- Wraparound services such as childcare support, transportation stipends, and other benefits that provide comprehensive support to workers during transition

### **RECOMMENDATION #4: Establish Financial Support for Worker Transition**

Pursue establishment of programs to provide direct financial assistance for impacted workers to successfully navigate transitioning to high-quality new jobs, including case management support, wraparound services, and direct financial assistance through Transition Navigator / Peer-to-Peer Case Management programs.

- A.** Advocate for making permanent the CA Displaced Oil and Gas Worker Fund, with ample funding levels to meet the anticipated needs of workers.
- B.** Pursue opportunities to establish a similar federal program to support, match funding, and/or replace the state's Displaced Oil and Gas Worker Fund.

### **RECOMMENDATION #5: Establish Third-Party Certification**

Establish a third-party certification program for refinery workers and relevant supply-chain classifications that lack an industry-valued certification that recognizes existing skills and experience of workers.

### **RECOMMENDATION #6: Require Employer Verification of Employment**

Advocate to require employer verification of employment, identifying worker skill and experience from the date of hire.

### **RECOMMENDATION #7: Explore Policy Mechanisms for Refinery Industry Funding of Worker & Community Safety Net**

Identify potential policy mechanisms that could promote the refinery industry directly funding safety net programs for refinery workers and community recovery and transition so these programs are not exclusively reliant on taxpayer funding.

### **RECOMMENDATION #8: Establish and Fund Transition Navigator / Peer-to-Peer Case Management programs for Impacted Oil Refinery Workers**

Establish and fund Transition Navigator / Peer-to-Peer Case Management programs that include the following services:

- A.** Direct financial assistance to impacted workers in the form of need-based cash payments;
- B.** Referrals to benefit programs, mental health counseling, and financial counseling services, including retirement preparation and financial planning assistance;
- C.** Referrals to subsidized short-term training and education programs;
- D.** Referrals to relevant union apprenticeship programs;
- E.** Skills assessment, individual job search assistance and career counseling; and
- F.** Identification of employers seeking workers with comparable skill, and matching of impacted workers with these employment opportunities.

### **RECOMMENDATION #9: Create Bridge to Retirement Program**

Assess policy tools to create an employer-funded bridge to retirement program for refinery workers facing layoff within 5 years of employer-sponsored retirement.

### **RECOMMENDATION #10: Contra Costa Supply Chain Analysis**

Complete a report identifying the supply-chain industries, including specific employers, employee numbers and classifications, that are dependent on Contra Costa's refineries and provide recommendations to the State of California for inclusion of supply-chain worker support by the Displaced Oil and Gas Worker Fund and supported services.

### **RECOMMENDATION #11: Statewide Severance Standards & Employee Protections**

Establish statewide severance standards, including:

- A.** Minimum standards for severance for involuntary layoff;
- B.** Protect employee ability to seek employment elsewhere within company, affiliates/contractors; and
- C.** Prohibit employer withholding of severance if employee does not stay at company through closure of facility.

### **RECOMMENDATION #12: Establish Incentives for Employers to Hire Impacted Refinery Workers**

Advocate for the establishment of incentives for employers to hire impacted refinery workers, such as one-time payments, temporary subsidized wages, and/or tax incentives.

### **RECOMMENDATION #13: Create An Outreach Program to Employers to Hire Impacted Oil Refinery Workers**

In collaboration with labor partners, actively recruit public sector and private sector employers to participate in hiring impacted workers, with a focus on employers seeking positions that provide good skills match for refinery workers along with comparable wages and benefits.

Explore establishing a preferential hiring policy and program within Contra Costa County, cities, and public entities aimed at connecting displaced refinery workers with high-quality public service jobs.

***RECOMMENDATION #14: Complete a Statewide Study Assessing the Long-Term Health Impacts to Refinery Workers from Working in a Hazardous Industrial Facility***

Complete a study analyzing the long-term health impacts to refinery workers as a result of years of daily work in a facility surrounded by known health hazards, including carcinogens. The report must include: a summary of all known health hazards from working within a refinery, average life expectancy for refinery workers in comparison to the general population, prevalence of certain diseases for refinery workers vs. the general public, an assessment of barriers accessing health coverage for retired refinery workers, and recommendations for improving refinery worker health.

### **III. LAND USE, DECOMMISSIONING, AND CLEAN-UP**

***RECOMMENDATION #15: Community and Worker Visioning for Refinery Lands***

Advocate for lead local agencies to initiate a land-use planning process at the point of notification for closure, idling, downsizing, or conversion of facility that results in loss of 25 or more jobs, sale, or new use. The land use planning process should engage community members from the surrounding area, affected workers in the refinery, and other relevant stakeholders to develop a shared vision for future potential uses of refinery lands based upon opportunities and constraints of the land, as well as community needs and desires.

***RECOMMENDATION #16: Establish Refinery Decommissioning/Clean-Up Standards***

Advocate for the establishment of statewide standards for refinery decommissioning and site clean-up, similar to other hazardous industries such as nuclear power, oil extraction, and other inherently dangerous industries, which include soil and groundwater remediation, removal of equipment, and proper disposal.

***RECOMMENDATION #17: Require Site-Specific Plans to Meet Refinery Decommissioning and Remediation Standards***

Advocate for a requirement for each refinery to have in place a complete plan for decommissioning and site clean-up to ensure comprehensive and safe clean-up at the time of facility closure, idling, downsizing, or conversion of facility that results in loss of 25 or more jobs, sale or new use.

***RECOMMENDATION #18: Secure Enforceable Financial Assurances for Environmental Remediation***

Advocate for regulatory agencies responsible for soil and groundwater contamination monitoring and remediation of refinery land, including the San Francisco Bay Regional Water Quality Control Board (SF Bay RWQCB) and the CA Department of Toxic Substance Control (DTSC), to hold refineries accountable for safe decommissioning and current environmental remediation obligations. Advocate for agencies to utilize enforceable financial assurance mechanisms with updated levels of assurance based on updated site contamination assessments while exploring mechanisms that secure funds for remediation over time and prior to closure or transfer.

***RECOMMENDATION #19: Require Labor Standards for Refinery Decommissioning & Clean-Up***

Advocate for the requirement of refineries to have in place a Project Labor Agreement or Collective Bargaining Agreement at the time of facility closure, covering labor and operations in place to ensure the safe and orderly deconstruction and clean-up of a refinery facility, including dismantling of facilities and soil remediation.

***RECOMMENDATION #20: Promote Maximum Environmental Restoration of Refinery Lands in Land Use Policy***

Advocate for the incorporation of language into Contra Costa County and City General Plans to promote the maximum level of environmental restoration of refinery lands as the policy of the City or County in the case of closure, conversion, idle, sale, or new use to maximize future uses of refinery lands.



**RECOMMENDATION #21: Ensure Proper Remediation of Contaminated Soils**

Advocate for the proper remediation of contaminated soils, including avoiding shipment of contaminated soils to other states/countries with less stringent remediation standards and/or require those soils to be cleaned to the same level as in California.

**IV. REFINERY COMMUNITY SUPPORT AND TRANSITION**

**RECOMMENDATION #22: Establish Local Community Recovery & Transition Funds with State/Federal Support**

Advocate for the establishment of Community Recovery & Transition Funds, supported by state and federal funds, managed at the city and/or county level with a community oversight body with funds to invest in much needed community health projects and services as well as the economic diversification necessary to prepare for a post-fossil fuel tax base, such as:

- A.** Expansion of health services through additional and new brick-and-mortar, mobile, and social infrastructure, especially in neighborhoods with the highest rates of asthma, cancer, and other chronic diseases;
- B.** Expansion of wellness centers, mental health resources, and other community-identified high-need health resources made available for free;
- C.** Expansion of screening and other preventive care services for transition-related impacts;
- D.** Creating climate-resilient infrastructure for public institutions (schools, health Institutions, community centers, etc.) and frontline communities and the creation and maintenance of greening projects, air filtration projects, and related educational programming for youth and adults; and
- E.** Increase micro-grant funding for pop-up community health equity and mutual aid projects in impacted unincorporated areas.

**RECOMMENDATION #23: Improve and Update Contra Costa's Community Warning System**

Advocate for the continued improvement and updating of Contra Costa's Community Warning System, with a focus on improving response times and language access.

**RECOMMENDATION #24: Prevent Displacement Due to Property Values Change with Refinery Closures and Potential for Redevelopment**

Recognizing the Bay Area's enormous housing costs and the potential for a refinery closure to result in increasing property values and/or market speculation in refinery communities, advocate for the following anti-displacement practices in refinery communities:

- A.** Renter Protection: Pass local policies and incorporate policies into General Plans or other regional planning processes that aim to keep existing residents in their homes, including tools such as rent control, renter-protections, eviction moratoriums, and just-cause rules to strengthen these protections.
- B.** Preservation: Explore policy options to prevent speculative investors from buying up current resident properties, which may be newly relieved of the environmental hazards of an active refinery.
- C.** New Homeowners: Create assisted home buying programs for long-time refinery-community residents while exploring social housing options.

**RECOMMENDATION #25: Complete a Detailed Contra Costa County Tax Impacts Analysis**

Advocate for Contra Costa County to complete a detailed Refinery Industry Tax Impacts Analysis, including:

- A.** Full listing of all refinery industry employers (including supply chain employers) in Contra Costa County and current annual tax contributions to Contra Costa County, City, and special districts;
- B.** An overall assessment of annual growth/decline in Contra Costa County, City and Special District tax revenue;
- C.** An assessment of how Contra Costa County, City, and special district tax revenue may be impacted by a decline in the refining industry as the state decarbonizes and demand for petroleum products reduces;
- D.** An assessment of how tax revenue reductions would impact public services in Contra Costa County, including specific communities that may be disproportionately impacted; and

- E. An assessment of strategies for reducing dependence on refinery tax revenues that can be implemented prior to refinery closures including but not limited to diversifying the local tax base; identifying state, federal, and local opportunities to increase tax revenues for local services; accounting changes to reduce reliance on refinery tax revenues to fund ongoing expenses and services, and pursuing just transition economic development activities that benefit community health and environment.

**RECOMMENDATION #26: Establishment of an Energy Transition Tax Remediation Fund**

Pursue the establishment of a federal fund to make annual payments to state, local, tribal governments, and local special districts to replace lost tax revenue due to the closures of energy sector employers in their jurisdiction. Pursue the establishment of a similar program in the State of California until the federal government establishes such a fund.

**V. JUST TRANSITION ECONOMIC DEVELOPMENT IN CONTRA COSTA COUNTY**

**RECOMMENDATION #27: Adopt a Uniform Just Transition Standards Policy for Public Investments in Contra Costa County.**

Advocate for Contra Costa County and its cities require that all economic development projects receiving over \$1m of public investment (or involving use of publicly owned land) include a Community Benefits Agreement involving (but not limited to) the following:

- A. Job quality and job access standards on construction: Community Workforce Agreements that include a Project Labor Agreement with a preferential hiring policy for hiring apprentices from local disadvantaged communities and former refinery workers
- B. Job quality and job access standards on operations and maintenance, and other non-construction work: Prevailing wage and labor neutrality agreements for employers and subcontractors responsible for operating and

maintaining facilities, with preferential hiring policy for workers from local community and former refinery workers.

- C. Environmental justice and accountability standards: Environmental accountability agreement, specifying the project's projected pollutants and GHG emissions and impacts on air, water, and land, including direct impacts and indirect impacts, e.g., via changes in traffic patterns and corresponding health risk assessments. Agreements should specify strategies to minimize harmful impacts as well as monitoring and enforcement mechanisms. Agreements should incorporate CEQA criteria.
- D. Community benefits for environmental justice communities: CBAs should also include specific strategies to maximize environmental and economic benefits associated with a project, specifically prioritizing benefits distribution for refinery fenceline communities.

**RECOMMENDATION #28: Develop a Contra Costa County Just Transition Economic Development Plan.**

Advocate for Contra Costa County and its cities to develop a worker and community-driven plan that develops clear priorities and actions to advance just transition economic development throughout Contra Costa County, centered on advancing high-quality jobs that meet the needs of underserved and disproportionately pollution-burdened communities as well as those that may be displaced by transitions in the refining industry in the coming years, along with environmental sustainability and social equity.

Building off of the recommendations from UC Berkeley Labor Center report, *Refining Transition: A Just Transition Economic Development Framework for Contra Costa County*, elements of this plan should include:

- A.** Worker and community leadership structure and resources: The Plan should involve clear structure and resources for community and worker organizations to guide and shape the process, focusing on the participation and leadership of workers and communities most affected by refinery transitions, such as fenceline community-based organizations and refinery worker unions.
  - B.** Economic development planning and prioritization: The Plan should involve a process for identifying shared economic development priorities and projects, including the following strategies:
    - a.** Establish clear objectives to guide economic development planning:
      - i.** Grow broadly accessible, high-quality jobs;
      - ii.** Generate quality jobs for displaced refinery workers and for workers from local disadvantaged communities;
      - iii.** Increase local tax revenue;
      - iv.** Improve environmental and community health and safety; and
      - v.** Serve local communities' needs and address historic injustices.
    - b.** Invest in infrastructure that serves the community, environment, and economy
      - i.** Natural and Physical Infrastructure
      - ii.** Social Infrastructure
    - c.** Grow high road, just transition-aligned industries and close off the low road.
  - C.** Develop clear criteria for identifying and supporting industries and firms that help advance shared objectives. Adopt policies and strategies to raise the floor on job quality, equity, and environmental standards in the region.
  - D.** Ensure local communities benefit from economic development and are protected from health-harming pollution.
    - a.** Incorporate strategies to prevent displacement, such as adopting anti-displacement policies for renters (see Recommendation #24)
    - b.** Incorporate strategies for leveraging the County's role in just transition economic development, such as adopting uniform just transition standards policy for public investments (see Recommendation #27).
    - c.** Incorporate strategies to reverse historic patterns of pollution and disproportionate public health burdens, including the establishment of buffer zones for health-harming pollution, as well as utilizing community criteria (see Recommendation #29) for environmental justice communities.
  - E.** Implementation Plan: The plan should incorporate an Implementation Plan identifying actions for the County to successfully execute the plan, including identifying available or needed funding to support the activities identified in the plan, including from state or federal sources, articulate strategies for obtaining resources needed, as well as identifying staffing and internal coordination needs for County to successfully execute the plan, and adopting policies and ordinances that further this work.
- RECOMMENDATION #29: Integrate Community-Centered Principles into Contra Costa County's Economic Development Planning Processes**  
 Recognizing that refinery fenceline communities have faced disproportionate burdens due to racially motivated state divestment and policies like redlining, advocate for economic development plans, incentives, policies, and proposed projects that support the revitalization and recovery of refinery communities from health, economic, and environmental harm. Contra Costa County, cities, and lead agencies should use the following criteria as a framework for setting economic development and land use priorities and evaluating new industries:
- A.** Prioritize Meeting Existing Needs and Prevent Exacerbation of Existing Needs
    - a.** The policy of the County and cities within the county should be to solicit and prioritize the siting and growth of sectors, services, and resources that would meet the communities' existing needs over exacerbating existing needs.
  - B.** Protect Communities from Health Harming Pollution and Safety Risks
    - a.** Maximize pollution mitigation strategies by conducting full and robust environmental impact review analysis and

corresponding health risk assessments in promulgating economic development and land use policies and plans or permitting projects.

- b.** Build capacity to conduct required upstream and downstream environmental impact analysis and design mitigation strategies for proposed economic development projects.
  - c.** Oppose policy and project-based efforts to avoid pollution mitigation strategies.
  - d.** Additional traffic burdens should be minimized, and commercial vehicles associated with new economic development projects should be required to be electric within 0-4 years.
- C.** Protect Disproportionately Pollution-Burdened Communities and the Most Vulnerable Community Members
- a.** In General Plans, the County and cities in the county should guarantee higher levels of protection from increases to cumulative pollution (e.g., buffer zones) to sensitive receptors located in the top quintile of cumulative health burdens in the state, as defined in the the CalEnviroScreen 4.0 Health Screening Tool (“Disadvantaged Communities”).
  - b.** Prioritize and support projects that provide or support accessible public services that address unmet or underserved community needs to lower income and/or Limited-English Proficient communities.
  - c.** Prioritize and support projects that employ residents residing in the closest Disadvantaged Communities, as well as youth and Limited-English Proficient residents, for jobs and workforce training opportunities.
- D.** Proactively Enact Systematic, Community-Led Solutions to Address Historically Systemic Injustices
- a.** Prioritize free, prior and informed consent from communities for project development, especially ‘Disadvantaged Communities’ in the top quintile of cumulative health burdens in the state, according to the CalEnviroScreen 4.0

Health Screening Tool. Since not all communities are willing to bear additional sources of cumulative health-harming pollution, the County and cities should decline to support proposed projects opposed by impacted Disadvantaged Communities and/or engage in efforts to support the revision of the proposed project to meet community standards, or relocation of the proposed project.

- b.** Partner with community members, community-based organizations, and regulatory agencies to prepare community-scale plans for reducing and mitigating air pollutant emissions and industrial hazards, such as pipeline risks, accidents, potential water or soil contamination, and impacts to sensitive ecological resources, which can further damage the health and well-being of communities living in “Disadvantaged Communities” in the top quintile of cumulative health burdens in the state, according to the CalEnviroScreen 4.0 Health Screening Tool. Require future projects to demonstrate consistency with those plans.
- c.** In anticipation of the need to establish Community Benefits Agreements associated with new development projects, the County and cities should partner with community members, community-based organizations, community funds or foundations, and administrative agencies that provide direct community services to begin identifying potential benefits by and for communities experiencing the top quintile of disproportionate cumulative health burdens in the state, as defined in the CalEnviroScreen 4.0 Health Screening Tool (“Disadvantaged Communities”).
- d.** Support projects that demonstrate commitment to high-quality jobs in the construction and ongoing operations and maintenance of a facility through Project Labor Agreements, Collective Bargaining Agreements, and labor neutrality agreements.

- e. Support or add partial or complete community and/or worker governance or ownership in projects where possible
- f. For novel projects utilizing new technologies, materials and/or processes, lead local agencies should conduct an environmental, community, and worker health and safety regulatory gap analysis to identify whether additional interim, project-specific measures protective for workers and community should be instituted until other agencies can institute new rulemakings.

***RECOMMENDATION #30: Advocate for State/ Federal Prioritization of Economic Development Investment in Contra Costa County***

Advocate for prioritization of economic development investment in Contra Costa County and other communities disproportionately impacted by the energy transition.

***RECOMMENDATION #31: Advocate for Aligning and Embedding Just Transition Standards in All State and Federal Investments***

Advocate for the embedding of just transition labor and community standards in all state and federal investments, as well as strengthening existing standards, such as local and targeted hire and environmental accountability.

## CONCLUSION AND NEXT STEPS

The CCRTP was formed out of the closure of the Marathon Martinez refinery, with a mission to identify the pace, scale, impacts, and opportunities of refinery transition in the Bay Area, and to design strategies and recommendations for how to center refinery communities and workers in the transition process. This report demonstrates that refinery transition is a core component of the energy transition that is already underway in California, as a necessary result of governmental actions to avert the worse impacts of climate change. This report identifies that refinery transition in Contra Costa County will be challenging, unpredictable, and disruptive. However, this report and the work of this labor and environmental justice partnership also identifies that with proper advanced planning, interventions by policymakers, collaboration between frontline workers and communities, and robust state and federal support, we can successfully leverage the energy

transition as an opportunity to revitalize Contra Costa's long-impacted communities and build a robust future regional economy that results in quality jobs, equity, and environmental justice and sustainability.

The 31 recommendations in this report provide a holistic strategy to address the core policy needs to prepare Contra Costa and other refinery communities for this transition. Implementation of these recommendations will take time, but as demonstrated by the Marathon Martinez closure in 2020, refinery closures or proposed conversions can occur at any time. There is urgency to establish these new policies and systems of support as soon as possible in order to minimize the significant impacts, as well as to ensure Contra Costa is working proactively to advance a vision for Just Transition and building a new worker and community-centered economy.

This implementation is already underway:

- Contra Costa County has taken important actions to prepare for this transition, with the establishment of the Green Empowerment Zone (AB 844), identification of planning for refinery transition as a core need within its new General Plan, and imminent launch of the Just Transition Economic Revitalization Plan.
- The State of California established the Displaced Oil and Gas Worker Fund pilot, dedicating \$30M to establish and launch oil worker transition programs statewide. The Steelworkers Charitable and Educational Organization and Contra Costa Workforce Development Board both received funding to initiate this work in Contra Costa County.
- The California State Legislature passed SB X1-2, providing greater oversight over the petroleum industry, and includes creating a Transportation Fuels Transition Plan to develop strategies to responsibly manage the decline in petroleum fuels during the energy transition.

We hope this report and policy recommendations help to guide these and future efforts of local, state, and federal policymakers and other engaged stakeholders.

The CC RTP will continue as a labor and environmental justice partnership committed to advancing and implementing these recommendations and collaborating with other stakeholders and communities to uplift the recognition that refinery workers and communities require focused attention and support as part of collective governmental efforts to thoughtfully transition the economy away from fossil fuels.

## APPENDIX – COMMISSIONED RESEARCH STUDIES

1. UC Berkeley Labor Center, Refining Transition: A Just Transition Economic Development Framework for Contra Costa County. Available online: <https://laborcenter.berkeley.edu/refining-transition/>
2. UC Berkeley Labor Center, Fossil Fuel Layoff: The Effects of a Refinery Closure on Workers in the Bay Area. Available online: <https://laborcenter.berkeley.edu/fossil-fuel-layoff/>
3. Christina Simeone and Ian Lange, San Francisco Bay Area Refinery Transition Analysis, November 2022. Available online: <https://www.bluegreenalliance.org/wp-content/uploads/2025/01/San-Francisco-Bay-Area-Refinery-Transition-Analysis.pdf>

## ENDNOTES

- 1 San Francisco Chronicle, "Three of California's biggest climate polluters are in the Bay Area," December 31, 2023. <https://www.sfchronicle.com/climate/article/greenhouse-gas-emissions-18531155.php>
- 2 Hammerling, Jessie HF, Will Toaspern and Laura Schmahmann. 2025. Refining Transition: A Just Transition Economic Development Framework for Contra Costa County, California. Berkeley, CA: UC Berkeley Labor Center. <https://laborcenter.berkeley.edu/refining-transition/>.
- 3 Parks, Virginia, and Ian Baran. 2023. "Fossil fuel layoff: The economic and employment effects of a refinery closure on workers in the Bay Area." Berkeley, CA: UC Berkeley Labor Center. <https://laborcenter.berkeley.edu/fossil-fuel-layoff/>.
- 4 In 2012, a serious fire at the Chevron Richmond refinery injured multiple workers and sent 15,000 residents to seek medical care. In the aftermath of that fire, labor and environmental justice advocates, with BlueGreen Alliance's support, launched a campaign that resulted in the nation's strongest refinery safety standards in history ("Process Safety Management" California Code of Regulations Section 5189.1) BlueGreen Alliance, "After Five-Year Effort, California Adopts the Nation's Strongest Refinery Safety Regulations." <https://www.bluegreenalliance.org/the-latest/after-five-year-effort-california-adopts-the-nations-strongest-refinery-safety-regulations/>
- 5 The Oil, Chemical and Atomic Workers International Union (OCAW) merged with the United Paperworkers International Union in 1999, forming the Paper, Allied-Industrial, Chemical and Energy Workers International Union (PACE). In 2005, PACE merged with the United Steelworkers International Union. Source: <https://www.usw.org/union/history>
- 6 Earth Island Journal, A Superfund for Workers. Winter 1993.
- 7 USC Dornsife College of Letters, Arts, and Sciences, "Just Transition / Transition to Justice: Power, Policy and Possibilities," June 2021. [https://dornsife.usc.edu/eri/wp-content/uploads/sites/41/2023/01/New\\_Just\\_Transition\\_Report\\_v4\\_FINAL.pdf](https://dornsife.usc.edu/eri/wp-content/uploads/sites/41/2023/01/New_Just_Transition_Report_v4_FINAL.pdf)
- 8 United Nations, Paris Climate Agreement, 2015. [https://unfccc.int/files/essential\\_background/convention/application/pdf/english\\_paris\\_agreement.pdf](https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf)
- 9 Hammerling, Jessie HF, Will Toaspern and Laura Schmahmann. 2025. Refining Transition: A Just Transition Economic Development Framework for Contra Costa County, California. Berkeley, CA: UC Berkeley Labor Center. <https://laborcenter.berkeley.edu/refining-transition/>.
- 10 Ibid.
- 11 Data from the California Energy Commission, analyzed and discussed in the San Francisco Bay Area Refinery Transition Analysis.
- 12 California Energy Commission, Final Transportation Fuel Assessment, August 2024. <https://www.energy.ca.gov/publications/2024/transportation-fuels-assessment-policy-options-reliable-supply-affordable-and#:~:text=This%20assessment%20identifies%20potential%20alternative,production%20from%20refinery%20maintenance%20and>
- 13 California Air Resources Board. GHG Emission Inventory Graphs. <https://ww2.arb.ca.gov/ghg-inventory-graphs>
- 14 2019 was the last year that Marathon Martinez and Phillips 66 both operated as oil refineries. Updated GHG emissions data has not been made available for Marathon Martinez and Phillips 66 Rodeo following their conversions to renewable fuels production. Data source: Bay Area Air Quality Management District, as analyzed by Inclusive Economics.
- 15 From 1992-1999, there were eleven "Level 3" incidents at Contra Costa refineries, killing six workers and injuring almost 50 more, as well as sending 23,000 residents to the hospital for treatment. In 1999, there was a major explosion at Tosco (now Marathon) refinery in Martinez, which killed four workers and severely burned a fifth, immediately after Contra Costa County adopted an Industrial Safety Ordinance. In 2012, there was a major explosion at Chevron Richmond which sent 15,000 residents to seek medical care, and led to a successful joint labor and environmental campaign to pass an even stronger statewide refinery safety regulation, Process Safety Management, codified in California Code of Regulations 5189.1. Source: Contra Costa Times, "You thought Monday's Chevron fire was bad, look back to the '90s" (2012) <https://www.contracosta.ca.gov/ArchiveCenter/ViewFile/Item/2448>
- 16 JNCI Cancer Spectr, Proximity to Oil Refineries and Risk of Cancer: A Population-Based Analysis, October 7, 2020. <https://pmc.ncbi.nlm.nih.gov/articles/PMC7691047/>
- 17 U.S. Environmental Protection Agency (EPA), Co-Benefits Risk Assessment Health Impacts Screening and Mapping Tool (COBRA). <https://www.epa.gov/cobra>
- 18 EPA, Community Health and Air Quality Implications of Refinery Retrofits and Retirements (CHAIRS). [https://cfpub.epa.gov/ncer/abstracts/index.cfm/fuseaction/display.abstractDetail/abstract\\_id/11399/report/0](https://cfpub.epa.gov/ncer/abstracts/index.cfm/fuseaction/display.abstractDetail/abstract_id/11399/report/0).
- 19 California Office of Environmental Health Hazard Assessment, CalEnviroScreen 4.0. <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>
- 20 BlueGreen Alliance, "Then and Now: U.S. Manufacturing Under the Trump and Biden-Harris Administrations," August 20, 2024. <https://www.bluegreenalliance.org/resources/then-and-now-u-s-manufacturing-under-the-trump-and-biden-harris-administrations/>
- 21 UC Berkeley Labor Center, Parks, Fossil fuel layoff: The economic and employment effects of a refinery closure on workers in the Bay Area, 2023. <https://laborcenter.berkeley.edu/fossil-fuel-layoff/>.
- 22 As the largest petroleum refinery operator in the United States with 15 refineries across 12 states, Marathon Petroleum could have offered opportunities for workers to transfer to other company locations as an alternative to layoff. Instead, not only did Marathon fail to offer a transfer opportunity, they also explicitly prohibited transfer of Marathon Martinez workers to other Marathon locations or subcontractors within a year of layoff as a condition of receiving severance. This company failure undoubtedly added additional burdens to workers that could have been avoided. The CCRTF calls for the explicit banning of this practice in our recommendations. Source: UC Berkeley Labor Center, Parks, Fossil fuel layoff: The economic and employment effects of a refinery closure on workers in the Bay Area, 2023. <https://laborcenter.berkeley.edu/fossil-fuel-layoff/>.
- 23 The Refinery Worker Jobs Match Analysis is Appendix B of UC Berkeley Labor Center's report, "Refining Transition: A Just Transition Economic Development Framework for Contra Costa County" <https://laborcenter.berkeley.edu/refining-transition/>
- 24 Ibid.
- 25 Ibid.
- 26 UC Berkeley School of Public Health and UCLA Fielding School of Public Health. Toxic Tides report: More than 400 hazardous sites in California face flooding, November 30, 2021. <https://publichealth.berkeley.edu/news-media/research-highlights/research-suggests-more-than-400-hazardous-sites-in-california-face-flooding>
- 27 Union of Concerned Scientists, An Unrefined Ending: Lessons Learned from the Creation and Closure of the Philadelphia Energy Solutions Refinery, March 2023. <https://www.ucsusa.org/sites/default/files/2023-03/unrefined-ending-pa-energy-solutions-refinery.pdf>
- 28 Ibid.



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