

A clean, safe and fair petroleum phaseout plan

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UCS Resources on Petroleum Phaseout

FACT SHEET

A Petroleum Phaseout Plan for California

Charting a path to clean transportation

HIGHLIGHTS

As California makes the transition to a transportation system powered by clean electricity, it must also ensure the existing petroleum fuel supply chain is phased out in an orderly process that protects communities, workers and consumers. This is an opportunity to dramatically reduce pollution and rebuild communities harmed by fossil fuel production and use. Careful planning and new policies will be needed to ensure that the oil industry does not exploit the transition to evade its responsibilities to workers and communities or unfairly profit from reduced competition in the fuel marketplace.

California has set its sights on phasing out fossil fuels and is making progress. Gasoline demand has peaked and is in decline as more drivers choose electric vehicles and gasoline vehicle efficiency improves (Reichmuth 2024). While a complete phaseout will take a couple of decades, it is essential to meet California's climate change reduction goals. Replacing fossil fuels requires a massive scale-up of renewable energy and electric vehicles and strategies to help people get around without always needing to drive. The flip side of scaling up clean energy solutions is phasing out polluting fossil fuels in a clean, safe and fair manner.

Petroleum infrastructure runs throughout California: oil wells, pipelines, refineries, storage tanks, and gas stations are polluting air, soil and water and harming everyone, especially the communities near the refineries where gasoline and diesel are produced, and the highways where it is burned. California's petroleum infrastructure has evolved over time, but much of it is decades old. It has been around so long that people stop noticing it and take for granted that it is inevitable. But in the coming decades, the vast majority of this infrastructure will become obsolete and unnecessary. Phasing out petroleum offers great opportunities but also poses significant challenges.

Opportunities

A transportation system without fossil fuel pollution

California's transportation sector accounts for about 50 percent of the state's greenhouse gas

Lessons Learned from the Philadelphia Refinery Closure

March 27, 2023 | 10:09 am



MATT ROURKE/AP PHOTO

The petroleum era is drawing inevitably to a close. Over the next few decades most of the oil refineries in the United States will close. Car companies are quickly shifting their focus to electric vehicles (EVs), and as new EVs replace older gasoline cars, demand for gasoline and diesel will decline, slowly at first and then more quickly. Based on a recent [UCS study of this transition](#), half of the oil



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To: California Energy Commission and California Air Resources Board
From: Jeremy Martin
Date: May 17, 2024
Subject: Comments on the Transportation Fuels Assessment and the Fuels Transition Plan

The Union of Concerned Scientists (UCS) has been actively involved in California vehicle and fuel policy for many years. We appreciate that the California Energy Commission and the Air Resources Board have initiated the critical work of implementing SB X1-2 including the Transportation Fuels Assessment and the Fuels Transition Plan. We encouraged California to begin the crucial work of planning for a safe and equitable petroleum phaseout¹ and we are pleased that this critical work is now underway.

The Draft Transportation Fuels Assessment is an excellent resource for guiding this important process, and we appreciate the sound analysis and clear writing. As the draft assessment makes clear, the transition away from petroleum fuels has already begun. Gasoline consumption has begun to decline, and as electrification and VMT reduction strategies progress, the decline in gasoline consumption will accelerate. Today, California's fuel market concentrates a great deal of market power in a small number of companies that have the means and incentive to act in a manner that is harmful to consumers. The establishment of the Division of Petroleum Market Oversight and other elements of SB X1-2 brings increased scrutiny, transparency and accountability to this market. As gasoline consumption declines, the level of concentrated market power in the industry is likely to increase, and new authorities and regulatory structures will be required to protect consumers. The fuel market will change rapidly as the state phases out petroleum over the next two decades, and the required regulatory framework will also need to change to keep up. Two refineries have closed in the last 5 years and additional closures may occur in the next few years. As shown in Table 1., within the next two decades there could be just a single operating refinery in at least one of California's major fuel markets. This would give the last remaining companies market power unprecedented since the breakup of the Standard Oil Trust more than a century ago. However, where dissolution of the Standard Oil Trust was intended to create multiple competing companies and a more competitive fuel marketplace, new entrants are unlikely to enter a gasoline market in terminal decline. Instead, California must consider how to manage a transition that protects consumers and communities and prevents exercise of market power against the public interest.

In this dynamic context, what is needed is a predictable series of steps increasing the level of market oversight and regulation as the market becomes increasingly concentrated, moving toward a utility style cost of service regulatory model. This is a substantial change in the regulatory model for fuel markets and will take time and potentially new legislative authority to implement. It should be debated and developed well in advance of the date when an effective monopoly is established within the California fuel market. It is important to start an inclusive dialog now about the advantages and disadvantages of different options and the circumstances that would dictate each step forward before the state's hand is forced by sudden

ucs-documents.s3.amazonaws.com/clean-vehicles/ucs-petroleum-phaseout-factsheet.pdf

blog.ucsusa.org/jeremy-martin/lessons-learned-from-philadelphia-refinery-closure/

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