



July 26, 2024

Anna Scodel
Lead Staff: ACC II Amendments Rulemaking
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Pearson Fuels Comments on Advanced Clean Cars II – June Workshop

Dear Ms. Scodel,

RTC Fuels, LLC, dba Pearson Fuels (“Pearson Fuels”), appreciates the opportunity to provide comments on potential amendments to Advanced Clean Cars II (“ACC II”). Pearson Fuels is the largest distributor of E85 in California, supplying more than 375 fueling locations across the state. More than 100 additional Pearson Fuels sites are planned to open in the next two years. Pearson Fuels is providing an innovative, low-carbon E85 by replacing the gasoline component of E85 with renewable naphtha. Paired with cellulosic ethanol, this E85 is fully renewable and low aromatic with greenhouse gas reductions approaching 80% compared to CARB unleaded gasoline.

These comments build upon our ACC II Amendments remarks submitted in January and provide updated price and use statistics.

Summary

We continue to urge CARB to leverage E85 as a low-carbon, affordable, renewable gasoline substitute that can substantially displace petroleum, reduce greenhouse gas (“GHG”) emissions and save consumers money – thereby providing a triple benefit to California. Over the past fifteen years, E85 use has skyrocketed due to the positive impact of California’s fuel policies. However, the substantial decline in flex fuel vehicle (“FFV”) manufacturing is increasingly constraining E85’s ability to provide its triple benefits to California. The ACC II amendments process provides CARB with a critical opportunity to establish an FFV policy that will enable CARB’s existing E85 fuel policies to continue to succeed.

The development and deployment of a viable and consumer-friendly strategy to reduce petroleum usage by light-duty vehicles powered by spark-ignition engines is an essential component of achieving net-zero GHG emissions by 2045 as required by the California Climate Crisis Act.¹ We appreciate that CARB recognizes this opportunity and is exploring an ACC II policy amendment that will leverage the power of FFVs and E85 to facilitate achieving California’s climate and consumer policies. Pearson Fuels is available as a resource to provide input to CARB through this process.

¹ See AB-1279, the California Climate Crisis Act (2022), codified at Ca. Health & Safety Code §38562.2, available at https://leginfo.legislature.ca.gov/faces/billCompareClient.xhtml?bill_id=202120220AB1279&showamends=false



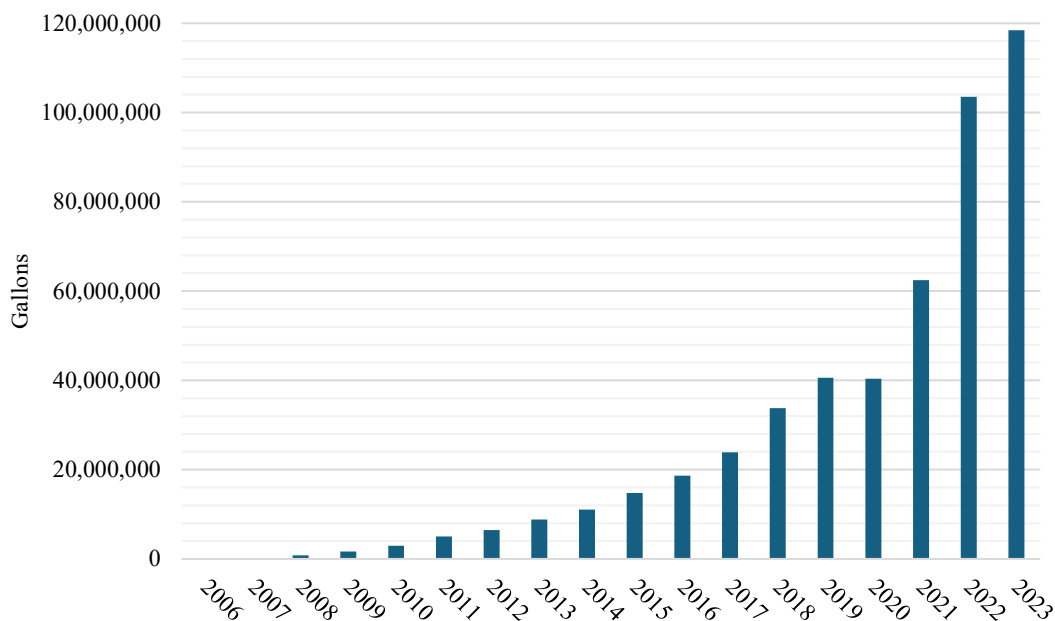
E85 Use and Availability in California

E85 use continues to grow in California. Consumption in 2023 reached a record 118.5 million gallons, an increase of 14.4% from 2022.²

We estimate E85 is currently offered at more than 500 retail sites in California and expect the state will grow to more than 700 E85 retail fueling sites by Jan. 1, 2027. At the current rate of E85 station growth, achieving 1,000 E85 retail stations by the end of the decade is entirely feasible. As mentioned in our previous comments, we ask CARB to send necessary policy signals in the ACC II amendment process as soon as possible to drive infrastructure investments, station expansion and flex fuel vehicle manufacturing.

While U.S. policy in support of FFV manufacturing effectively peaked during the period from 2012-2016, Brazil has expanded its FFV policy for decades and is now the site of intense competition from Toyota and Hyundai. These automakers seek to gain market share from Fiat, Volkswagen and General Motors, who are market leaders.³ Pearson Fuels anticipates that a well-designed California FFV policy could similarly drive automaker competition and innovation in the U.S. FFV market. While U.S. policy supporting FFV development a decade ago failed to spur consumer E85 use nationally, California’s E85 policy has proven that the climate and price benefits of E85 can drive rapid growth.

Annual E85 Volumes



² CARB website, “Alternative Fuels: Annual E85 Volumes,” at <https://ww2.arb.ca.gov/resources/documents/alternative-fuels-annual-e85-volumes>

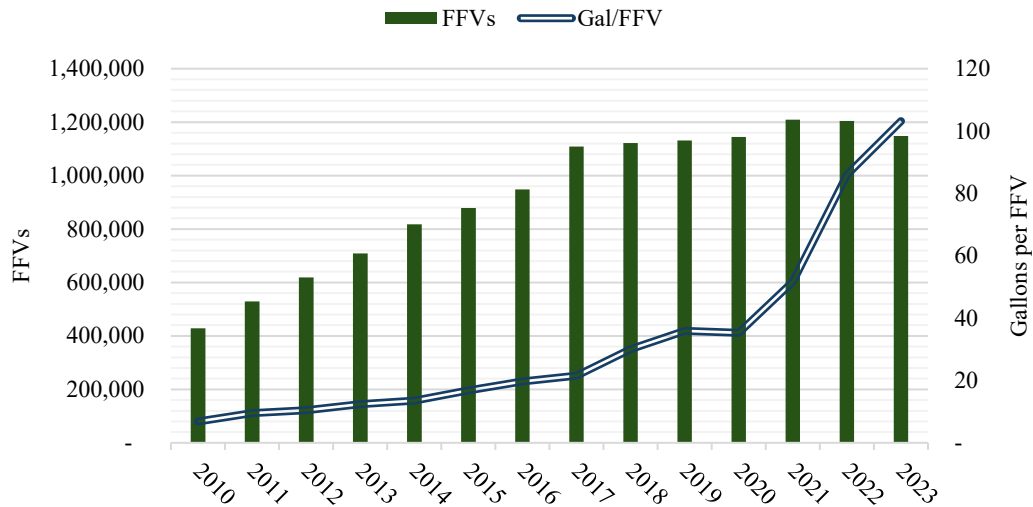
³ See The Korea Economic Daily, “Hyundai Motor, Toyota compete to take upper hand in Brazil,” (March 10, 2024), at <https://www.kedglobal.com/automobiles/newsView/ked202403100001>



Propensity of FFV Drivers to Fuel with E85

It is crucial to recognize the rapid growth in E85 has occurred while the state’s population of FFVs remained relatively flat.

FFVs and Annual E85 Consumed per FFV



From 2017 to 2023, the number of FFVs in California increased 3.6%, according to data from the California Energy Commission⁴ and the California Department of Motor Vehicles.⁵ E85 consumption from 2017 to 2023 jumped nearly 400%.

Further, we calculate annual E85 consumption surpassed 100 gallons per FFV in 2023, a drastic leap from the 21.5 gal per FFV in 2017 when the state’s FFV count first totaled more than one million. This is clear evidence drivers are making a conscious choice to select E85 over gasoline when fueling at the pump.

We project California will set another record for E85 consumption in 2024 – however this growth may be somewhat muted by the uncharacteristically diminished spread between gasoline and E85 for this time of year.

In May, June and July of 2022 and 2023, E85 in the Pearson Fuels station network was priced at approximately 65% of the cost of California gasoline.⁶ While May 2024 fit that seasonal pattern, E85 in our network during June was priced slightly above 70% of the price of California gasoline.

⁴ California Energy Commission (2023). California Energy Commission Zero Emission Vehicle and Infrastructure Statistics. Data last updated Dec. 31, 2022. Retrieved Dec. 26, 2023 from <http://www.energy.ca.gov/zevstats>

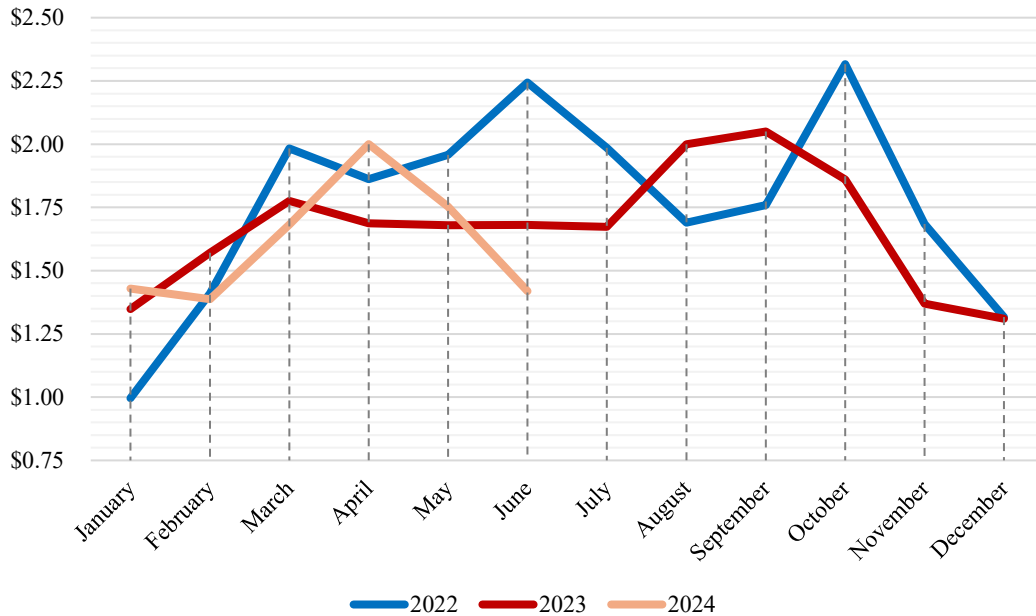
⁵ California Department of Motor Vehicles, retrieved from <https://data.ca.gov/dataset/vehicle-fuel-type-count-by-zip-code>

⁶ U.S. Energy Information Administration, California All Grades All Formulations Retail Gasoline Prices



That spread is usually only observed during winter months when sales are typically lower. July appears to be mirroring that trend also.

Price of California Gasoline Above E85



During the historic gasoline price spikes California faced in 2022 and 2023, E85 use in California climbed dramatically. As we mentioned in our previous comments, this again proves to us drivers are making an economically rational choice to use E85. Our experience with Pearson Fuels customers also indicates some climate conscious consumers choose to purchase E85 even when the economics are less favorable.

As further assurance that future FFVs use E85 rather than gasoline, CARB should require automakers to more clearly highlight a vehicle’s capability to use either fuel. We strongly recommend a consumer education component to any policy requiring or incentivizing FFV technology to ensure drivers are able to make an informed and confident decision that their vehicles will be designed to utilize E85.

SRIA Request for Alternatives

CARB mentioned in its June workshop it would be conducting a test plan with FFVs to learn more about potential compliance costs for meeting future emissions standards. Our hypothesis is that automakers would be able to achieve reductions for marginal added costs and would do so willingly if they were rewarded with some form of credit.

With recent pricing dynamics, we estimate California drivers would have saved hundreds of millions of dollars in recent years by choosing E85 over regular gasoline. The Standardized Regulatory Impact Assessment (“SRIA”) should take this into account. In particular, with



reference to the SRIA that was prepared in January of 2022 for Advanced Clean Cars II, we would recommend the opportunity to save consumers money through the use of E85 as compared to petroleum-based gasoline should be considered in all sections where fuel costs are evaluated.⁷

Recommendations

We urge CARB to work with other state agencies, automakers and federal government agencies to maximize E85's potential to decarbonize vehicles both now and in the future by:

- Incentivizing manufacturers that sell FFVs in California prior to the effective date of any future, potential CARB-imposed requirement.
- Incentivizing manufacturers that use advanced engine technologies to optimize FFVs for E85 rather than gasoline.
- Prioritizing deployment of technology that allows current, gasoline-dedicated ICEs to operate on E85 to realize immediate GHG benefits and lower fuel costs.
- Exploring a dedicated E85-fueled LDV that can achieve higher efficiency than an FFV and reap substantial benefits under CAFE standards, as well as provide significant reductions in GHG emissions.
- Rewarding an optimized E85 powertrain in the medium-duty space, as demonstrated previously in California.⁸ There remains a considerable challenge in Class 2a-3 zero emission vehicles. Many vehicles in this space are centrally refueled or operate in defined areas and represent an ideal application of dedicated E85 engines.

We appreciate the opportunity to provide these comments and look forward to additional engagement with CARB on these issues.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Wilkerson".

Jeff Wilkerson
Government Policy and Regulatory Affairs Manager
Pearson Fuels

⁷ CARB, Public Hearing Notice and Related Material Posted April 12, 2022, for Advanced Clean Cars II Amendments available at <https://ww2.arb.ca.gov/rulemaking/2022/advanced-clean-cars-ii>, SRIA at Appendix C-1: Standardized Regulatory Impact Assessment (SRIA), see e.g., SRIA sections pertaining to benefits to typical businesses, small businesses and individuals (at sections 2.2, 2.3, 2.4), total incremental vehicle cost and pricing (at section 3.1.3), fuel and energy costs (at section 3.2.3), and direct costs on typical businesses, small businesses and individuals (at sections 3.3, 3.4, 3.5), and incentives for innovation (section 5.3.7), available at <https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/accii/appc1.pdf>

⁸ Perfetto, Anthony, Sam Geckler, Cummins, Inc. 2019. Ultra-Low Carbon Powertrain Optimized for Medium-Duty E85 Cargo Vans. California Energy Commission. Publication Number: 600-2019022