



701 8th Street, NW, Suite 450, Washington, D.C. 20001

PHONE 202.545.4000 FAX 202.545.4001

GrowthEnergy.org

August 5, 2020

Rajinder Sahota  
Division Chief, Industrial Strategies Division  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814  
Via electronic mail

RE: Comments for July 15, CARB Workshop on Fuels and Infrastructure for a Carbon Neutral Economy

Dear Ms. Sahota:

Thank you for this opportunity to comment in conjunction with the recent workshop on Fuels and Infrastructure for a Carbon Neutral Economy. Growth Energy is the world's largest association of biofuel producers, representing 89 U.S. plants that each year produce more than 7.5 billion gallons of cleaner-burning, renewable fuel; 96 businesses associated with the production process; and tens of thousands of biofuel supporters around the country. Together, we are working to bring better and more affordable choices at the fuel pump to consumers, improve air quality, and protect the environment for future generations. We remain committed to helping our country diversify our energy portfolio in order to grow more green energy jobs, sustain family farms, and drive down the costs of transportation fuels for consumers.

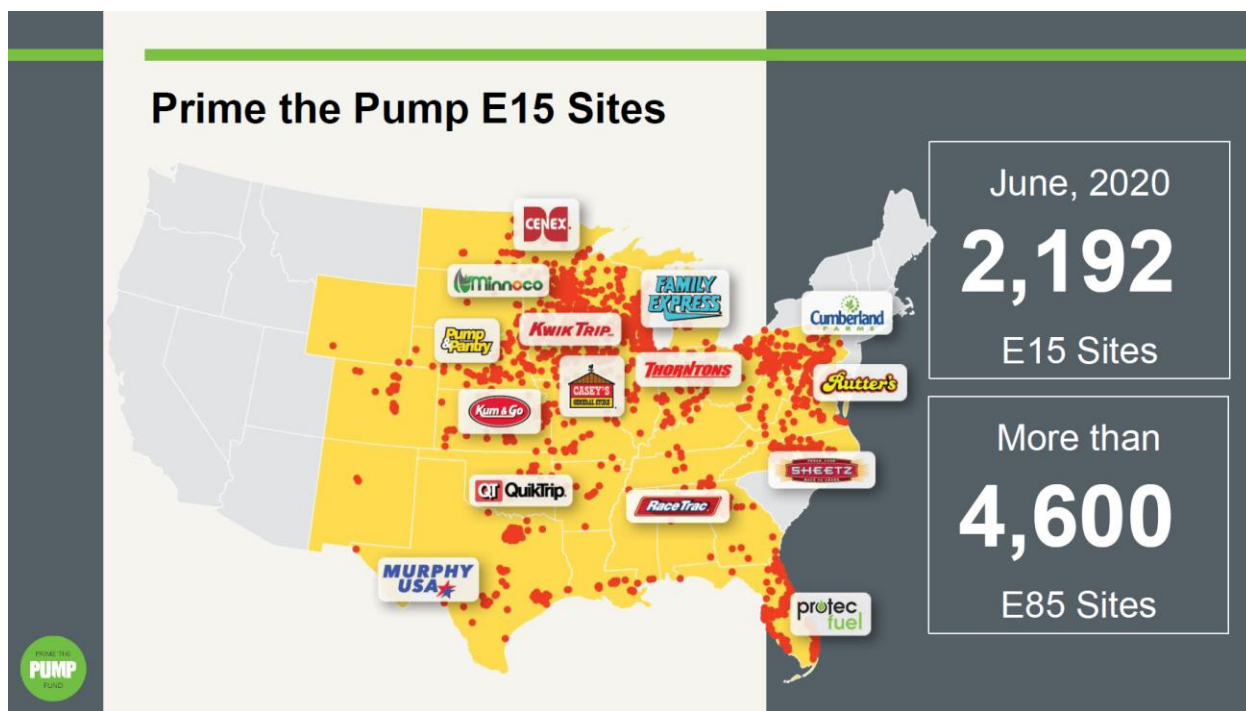
We sincerely appreciate the Air Resources Board's (CARB) attention and hard work to reshape California's fuel mix to make it more sustainable. This aim is a central driver for our industry, and we look forward to continuing our work with California on our common goals. Specifically, liquid fuels will continue to play an important role in the transportation sector, even as alternative technologies flourish. As such, it is imperative to look at ways to improve the availability and affordability of more environmentally sustainable fuel options that can be used in current vehicles or in future internal combustion engines.

One option for cleaning up the liquid fuel supply is the promotion of additional use of ethanol, from starch or cellulosic sources. According to recent data from the U.S. Department of Agriculture, today's starch ethanol reduces greenhouse gas emissions by an average of 39 percent, and, with further development of cellulosic technologies, biofuels are poised to do much more. Further, higher ethanol blends can be immediately deployed in existing vehicles to achieve immediate greenhouse gas reductions, reduce harmful air toxics, and reduce consumer costs at the pump.

Already, we've seen the implementation of the state's Low Carbon Fuel Standard (LCFS) rely heavily on biofuels. In fact, biofuels like ethanol have generated more than 75 percent of LCFS credits. Additionally, even with room to further improve greenhouse gas lifecycle modeling, CARB recognizes the significant improvement in ethanol's carbon intensity. In 2011, CARB reported the average carbon intensity (CI) for ethanol at 88 g/MJ. Through the first half of 2019, the average recorded CI for ethanol has decreased to 63 g/MJ, a 29 percent reduction in CI.

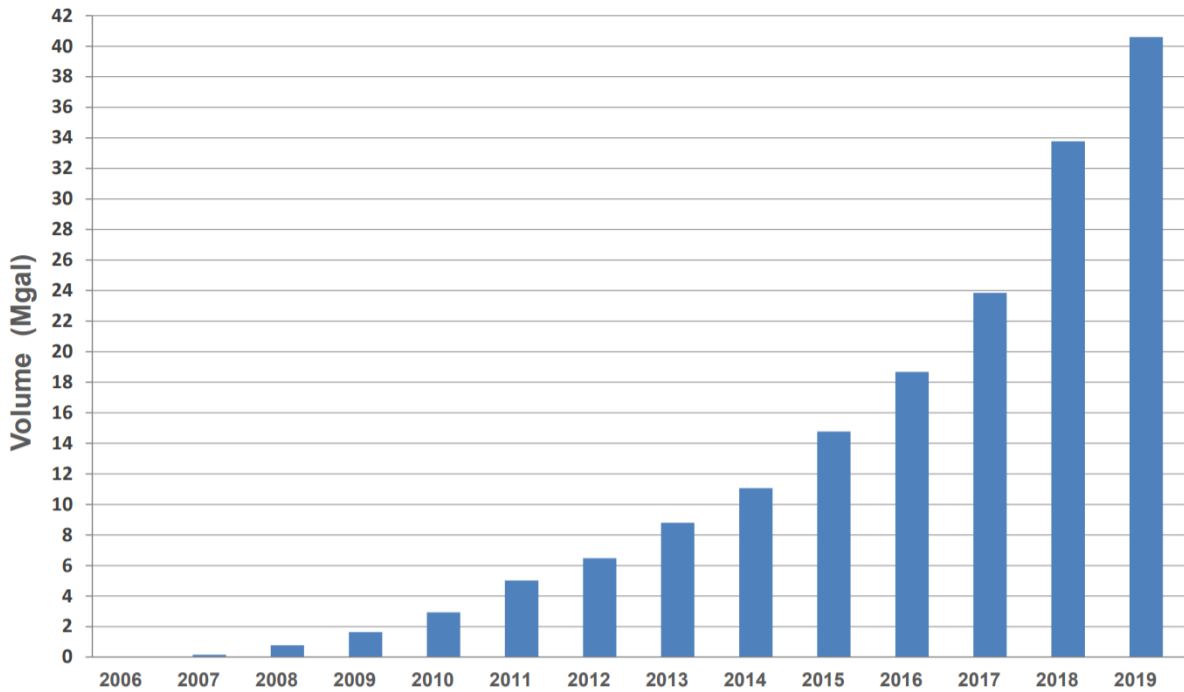
Ethanol's other environmental benefits are also noteworthy. As has been researched by the University of California-Riverside and the University of Illinois-Chicago, the use of more ethanol and ethanol-blended fuel reduces air toxics such as carbon monoxide, benzene, and other harmful particulates. To fully realize these and other important air quality benefits, there needs to be a clear policy with a firm future for the role and growth of cleaner-burning, affordable ethanol fuels.

We would urge CARB to further develop clear policies that recognize the realities of today's fuel market and examine how homegrown biofuels can immediately contribute to achieving greenhouse gas reductions. Today, nearly all gasoline in California is blended with 10 percent ethanol. E15, a blend consisting of 15% ethanol, has been approved for use by the U.S. EPA in all passenger vehicles model year 2001 and newer, 9 out of 10 vehicles on the road today, and is now for sale at more than 2000 locations in 29 states. California is in the process of evaluating E15 through its multi-media evaluation process. We will continue to work with CARB and the other state agencies to complete their multi-media evaluation of E15, so that it can be approved for use and made available to California drivers to further drive down greenhouse gas emissions and help the state achieve its carbon neutrality goals.



Additionally, California has seen significant growth of E85 used in flex-fuel vehicles with more than 40 million gallons sold at nearly 100 locations in 2019 alone. The use of E85 will promote even greater reductions in greenhouse gas emissions and reductions of air toxics. We would encourage CARB to push for policies that continue to strongly encourage and incentivize the production and use of flex-fuel vehicles as well as continued investment infrastructure for the expanded use of E85 in the state.

**Annual E85 Volumes**  
(Million Gallons)



*Last Updated 2/18/2020*

This chart shows annual E85 volumes in California and is based on reported Test Program Exemption data.

More broadly, we look forward to working with you to make California's fuel mix more sustainable and help the state achieve its progressive climate goals through the expanded use of biofuels like ethanol.

Thank you in advance for your consideration.

Sincerely,

Chris Bliley  
Senior Vice President of Regulatory Affairs  
Growth Energy