I appreciate all the work of CARB and E3 producing the draft report and fully support the policy to achieve carbon neutrality in California.

In discussing the role of biofuels in achieving carbon neutrality the report contains no discussion of fermentation sources of biofuels such as ethanol.  All assumptions are based on thermochemical conversions.

Fermentation ethanol is providing significant carbon reductions in the California transportation sector today having accounted for approximately 40% of all credits in the LCFS program to date.

Improvements in farming practices and ethanol production has lowered the carbon intensity of the average of ethanol pathways in CA by over 30% since the inception of the LCFS.

Continued improvements and the addition of technologies such as MVR, biomass steam production, and CCS can result in a near zero or negative carbon source of ethanol.

The report only assumes the use of waste biomass for biofuel production.  Biomass grown for energy production should be included.  In the case of ethanol, corn farmers are actually sequestering carbon in the ground through no till,  cover cropping  and other precision agricultural practices while providing the feedstock for ethanol production.   While many CCS projects seem expensive and elusive, farmers today are cost effectively practicing carbon capture and sequestration.

Higher blends of ethanol from E15-E100 can provide immediate and sustained carbon reduction in the legacy fleet and in the plug-in hybrids of the future that will need a source of low or zero carbon fuel.

Ethanol is a very competitive source of clean renewable fuel, carbon reductions and higher octane to enable significantly more efficient combustion and enabling higher fuel economy standards.

Ethanol as a molecule with 6 hydrogen atoms can be a renewable source of hydrogen for the future generation of hydrogen vehicles.

Thank you for your consideration of these comments.