

COMMENTS OF STEVE BERRY & TIM SEARCHINGER  
REGARDING SECOND 15-DAY RULE MODIFICATION OF TO LOW CARBON FUEL STANDARD  
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We are an economist at Yale University and an environmental scientist at Princeton University and have written papers analyzing the emissions from biofuel use as well as economic land use models. We have previously submitted comments on the proposed amendments to the LCFS, to the first 15-day amendment, and to the draft Environmental Impact Statement.

We have previously explained why the incentives provided by the LCFS for crop-based biofuels, including biomass-based diesel, lack an underlying scientific basis. Our comments have also explained how these biofuels are contributing to global deforestation and other land use changes and why properly evaluated, they are increasing greenhouse gas emissions. These comments still hold. For this reason, the proposed “cap” on biomass-based diesel from vegetable oil is inadequate:

- The new amendments extend the cap to sunflower oil but not to other biomass-based fuels from other possible vegetable oils including those from corn oil. As we have discussed, vegetable oil prices move globally and across different vegetable oils in harmony. This means that the ILUC from all should be similar. If corn oil is used for biofuels, it will be replaced by roughly the same mix of vegetable oils globally as if any other vegetable oil is used. Accordingly, the “cap” should be extended to all biofuels from virgin vegetable oil.
- The new amendments continue to assign large greenhouse gas reductions to biofuels over the cap because they are assigned the benchmark rate. This means, for example, that biomass-based diesels from soybean oil will be credited with achieving roughly a 28% reduction relative to diesel in 2030 and will have the same reduction as if they were uncapped by 2040. This “cap” therefore has limited effect. Biomass-based diesels in excess of the cap should be assigned the ULSD.
- It is unclear to us if the “cap” applies to biomass-based diesels used in aviation. If it does not, this lacks justification. The potential implications of CARB encouraging vegetable oils for aviation are highly significant. For example, if even just 25% of expected aviation fuel in 2050 were to derive from vegetable oils, that would require roughly 40% of global cropland. The cap should therefore apply to all liquid fuels for aviation.