



January 7, 2022

Ms. Rajinder Sahota
Deputy Executive Officer
California Air Resources Board
Low Carbon Fuel Standard Program
1001 I St.
Sacramento, CA 95814

RE: NCGA Comments on the December 7, 2021, Workshop on Potential Futures Changes to the LCFS Program

Dear Ms. Sahota:

The National Corn Growers Association (NCGA) appreciates the opportunity to provide feedback following the December 7, 2021, public workshop on Potential Future Changes to the Low Carbon Fuel Standard (LCFS) program. On behalf of our 40,000 dues-paying corn farmers nationwide and the more than 300,000 corn growers who contribute to corn promotion programs in their states, NCGA writes to share our views, as the primary producers of the feedstock for ethanol, on CARB's extensive opportunity to achieve the state's carbon neutrality goals through use of low carbon fuels in transportation.

The LCFS continues to be a successful policy that is driving innovation in commercially viable low carbon transportation fuels, diversifying California's fuels portfolio, and is critical in implementing California's long-term climate goals. NCGA encourages approaches that strengthen the program in ways that will accelerate sector development and innovation in this market for years to come. The proposed rulemaking timeline will allow CARB time to work with stakeholders to properly update the LCFS, but it should not extend longer than what's already proposed. Market certainty remains a crucial concern for LCFS participants, and any extensions of a rulemaking period will inject significant market uncertainty, disadvantaging those that are ready to provide low carbon solutions.

As the producers of the sustainable, primary feedstock for ethanol, corn farmers have demonstrated continuous improvements in farming practices and widespread adoption of production technologies that improve soil health and reduce GHG emissions, supporting lower carbon intensity of biofuels. We encourage CARB to recognize and incorporate these voluntary emission reductions from agriculture production that contribute to reduce carbon intensity of fuels.

We would like to provide specific comments on slide 18 of the staff presentation used during the December 7 workshop. At a high level, NCGA supports the further development of site-specific agricultural inputs in fuel pathway carbon intensity

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calculations. Currently, there are multiple stakeholder proposals that have been offered, but NCGA does not endorse any individual plan and will remain neutral until more details are available. However, NCGA would encourage staff to continue to stay engaged on this topic.

Regarding CARB staff's request for feedback about adjusting default farming values, NCGA assessed how to address this issue according to the broad principles outlined on slide 11 of the staff presentation. To further incentivize private investment and support exportability of the program to other regions, site-specific agricultural inputs for lifecycle analyses will best meet these goals. Allowing farmers the opportunity to report site-specific data creates a huge opportunity for investment and for new farming practices to become standard practice. Currently there is no such incentive under the LCFS, and farmers who adopt lower carbon practices or investments are not rewarded through environmental credits. By aligning LCFS credit value with lower carbon farming practices, there is massive opportunity to improve the carbon performance on the farm. Furthermore, this approach is consistent with how average default values have been applied to the electricity grid and obligated parties under the program.

Building on progress that is already decreasing ethanol's CI, additional low-carbon production improvements on farms and in ethanol production can result in ethanol with up to 70 percent fewer GHG emissions than gasoline, according to 2018 analysis from the U.S. Department of Agriculture. With carbon capture and sequestration technology and soil carbon sequestration on farms, ethanol has pathways to reach net zero carbon emissions.

With regard to land use change (LUC) values in CI measurement, NCGA encourages CARB to give further consideration to new 2021 analyses on the CI of corn ethanol that address recent LUC considerations.^{1,2} While CARB uses the Department of Energy Argonne National Laboratory Greenhouse Gases, Regulated Emissions, and Energy Use in Technologies (GREET) model as the basis for CA-GREET, we believe the GREET model without those adjustments is the government's most accurate tool for evaluating biofuel and energy lifecycle emissions. Since GREET is regularly updated, this model, including Argonne's Carbon Calculator for Land Use and Land Management Change from Biofuels Production (CCLUB), is capable of most accurately capturing updated crop yields, GHG emission reductions from farmers' improved production practices, and can incorporate other ongoing, voluntary climate-smart improvements in agriculture production.

Corn farmers have increased corn production, not by bringing more land into production, but through higher yields that have resulted in more corn produced with less land and fewer resources. U.S. Department of Agriculture data shows both planted corn acres and the area planted to principal crops in the United States are not expanding overall. Corn production has increased primarily because crop yields have increased from an average of

¹ Scully, Melissa J., et al, "Carbon intensity of corn ethanol in the United States: state of the science," (2021) Environmental Research Letters 16 043001. <https://iopscience.iop.org/article/10.1088/1748-9326/abde08>

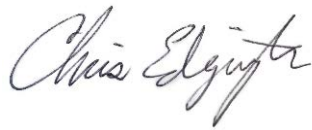
² Lee, Uisung & et al. ANL, "Retrospective Analysis of the U.S. Corn Ethanol Industry for 2005–2019: Implications for Greenhouse Gas Emission Reductions," (2021). <https://onlinelibrary.wiley.com/doi/10.1002/bbb.2225>

150 bushels per acre in 2007 to 172 bushels per acre in 2020. With the average yield in 1980 at just 91 bushels per acre, corn farmers' productivity growth is a long-term trend.

Corn farmers are proud of our leadership in expanding conservation and best management practices and are committed to further sustainability achievements. These improvements will continue to reduce the CI of ethanol. Ethanol can bridge the gap between petroleum-based fuels, such as gasoline and diesel, and electric vehicles. With Governor Newsom's Executive Order N-79-20 that creates a goal of 100 percent ZEV sales by 2035 and former Governor Brown's Executive Order B-55-18 that creates a goal to become carbon neutral by 2045, now more than ever it is important to find GHG reductions that can make an immediate impact. Ethanol can achieve those immediate reductions.

Thank you for the consideration of our comments, and we look forward to working with staff on these topics in the future.

Sincerely,

A handwritten signature in cursive script, reading "Chris Edgington". The signature is written in dark ink and is positioned above the printed name.

Chris Edgington, President
National Corn Growers Association