August 8, 2022

Chair Liane Randolph and Members of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Public Workshop to Discuss Potential Changes to the Low Carbon Fuel Standard

Dear Chair Randolph and Members of the Board,

Thank you for the opportunity to submit comments regarding the consideration of changes to California's Low Carbon Fuel Standard (LCFS) as presented at the July 7 public workshop. We applaud California's leadership on climate and stand ready to collaborate with the California Air Resource Board (CARB), other state agencies, stakeholders and industry to chart an equitable path to a low carbon future.

Climate change is having a direct and growing impact on the food and agriculture industries. To continue delivering on Cargill's purpose of nourishing the world in a safe, responsible and sustainable way, we must grow, process and move food more sustainably. The transport of food from where it's grown to where it's needed is also a critical component in the journey to a more sustainable food system.

Crop-based biofuels play an important role in the energy transition and when produced sustainably, can create shared benefits at the farm and on the shelf, while paving the way toward a decarbonized transportation system.

We agree with CARB's "Proposed Scenario" in the draft scoping plan which includes a broad portfolio of existing and emerging fossil fuel alternatives and clean technologies, including crop-based biofuels. The inclusion of this "all of the above" strategy aligns with AB 32, which requires the state to achieve "the maximum technologically feasible and cost-effective greenhouse gas emissions reductions" (see California Health & Safety Code Section 38560).

**We Nourish the World**
With a global footprint and presence in major food and agriculture supply chains around the globe, Cargill connects farmers with markets and customers with food. Today, the need to make our food system more sustainable and resilient is urgent, and our company has a key role to play.

Cargill's science-based goals guide our efforts. We are committed to reducing Scope 3 greenhouse gas (GHG) emissions by 30% per ton of product by 2030, while continuing to reduce emissions within our operations. Our approach includes efforts to scale regenerative agriculture practices to 10 million acres in North America and reduce emissions in the beef sector through programs like BeefUp Sustainability. We are helping to move food around the world more sustainably through innovations in the ocean transportation sector including trialing the use of wind sails to reduce fuel-consumption and partnering on new fuel solutions.

The same land that provides people and animals with food and feed also plays a key role in the energy transition. Lower carbon renewable fuels, derived from a range of options including vegetable oil feedstocks, low-carbon intensity feedstocks such as tallow, used cooking oil, and recovered corn oils, are viable and near-term options that will help bridge the gap to a carbon-free future.

Cargill businesses originate, process, and convert these feedstocks into renewable fuels including biodiesel and ethanol, while working closely with our farmer partners to implement sustainable farming and conservation practices every step of the way.

**We Believe Sustainable Transportation is Key to a Sustainable Food System**
Cargill has prioritized leading solutions to build a more sustainable food system. As we do, we will work to decarbonize the global agriculture and transportation systems, which power the movement of food.

Renewable fuels will play an important role in those efforts, by reducing GHG emissions, particularly within the transportation sector. The urgency of the climate challenge requires that we explore all available options while considering near- and long-term food security and environmental impacts. For Cargill, this means offering a range of alternative fuel options to help our customers meet current industry and policy mandates, while prioritizing long-term investment in fully circular fuel possibilities such as waste-based feedstocks. It also means prioritizing food production over fuel during times of extreme food insecurity.

We agree "that dramatic increases in alternative fuel production must not come at the expense of global deforestation, unsustainable land conversion, or adverse food supply impacts." Positive improvements in some industries can't come at the detriment of others. It's why we remain laser focused on delivering on our no deforestation commitments and upholding rigorous sourcing criteria, particularly in vital ecosystems across South America, while also supporting restoration of previously used land.

Agriculture has been serving food and fuel markets for decades and with an unwavering commitment to sustainability, we're going to continue to support both markets as the energy transition evolves. As we invest and modernize assets to support near-term demand, we see a shared benefit for long-term food production supported by more advanced infrastructure.

**We Support a Balanced Transition**
For California to reach its carbon reduction goals, the continued use of crop-based biofuels will be critical during the transition to full deployment of electric vehicle (EV) technologies in the mobility sector. While electrification of the transportation sector is increasing in the U.S., some studies suggest it won't be until 2035 before electric passenger vehicle sales reach 65%.[1] Sectors such as heavy-duty trucking, aviation and shipping, which are the largest contributors to transportation emissions and hardest to electrify, will continue to need a full suite of low carbon fuel alternatives[2].

We support the draft 2022 scoping plan "Proposed Scenario" of "keeping all options on the table" as the state works towards the 2045 GHG reduction goals, including the omission of arbitrary caps. Furthermore, at times of extreme food insecurity and inflation, temporary caps may be necessary to

[1] https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/why-the-automotive-future-is-electric
[2] https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroby2050-ARoadmapfortheGlobalEnergySector_CORR.pdf

ensure adequate supply for food use. In this circumstance, we feel that any deviation from current policy must be nimble and designed to alleviate short-term impacts from extreme events, while balancing the need for long-term certainty for the industry.

A key driver for the long-term success of the industry will be the continued reduction in the carbon-intensity (CI) of crop-based feedstocks. The growing adoption of sustainable farming practices has resulted in less carbon-intensive feedstocks for the use of biofuels. Farmers are increasingly adopting these practices to further reduce and sequester carbon, in addition to seeing clear economic and productivity gains. Recognizing the opportunity and imperative of regenerative agriculture, Cargill is supporting and incentivizing these sustainable practices among growers in our supply chain.

According to the 2017 Census of Agriculture, cover crop adoption increased by 5.1 million acres and no-till increased about 8 million acres above the 2012 census.[3] The U.S. soy industry achieved a 43% reduction in GHG emissions efficiency improvement per bushel from 1980 to 2020[4]. As adoption of these practices accelerate, the CI for these feedstocks will continue to fall. For example, recent research indicates that CI for corn ethanol has decreased by ~50% over the past 30 years and is now at a central estimate of ~55 gCO2e/MJ, which is more than 40% lower than conventional gasoline.[5]

**Looking Ahead**

To address climate change, we must decarbonize our global transportation system and build more sustainable food supply chains.

We believe agriculture can be one of the solutions. It's why we're partnering closely with farmers to support an economically viable transition to sustainable agriculture in support of lower carbon food, fuel and feed.

At the end of the day, biofuels are one step in the journey – not the end goal itself. There is no single solution that will address our current energy challenges. We need a range of options to incentivize sustainable agriculture practices, provide a pathway for near-term emissions reductions and spur investment in the continued modernization of our food system.

We appreciate this opportunity to provide the Board with our initial feedback regarding potential changes to California's LCFS. We value continued visibility into the state's goals and CI reduction targets. This will allow for the market to more readily react and provide adequate supply to meet demand.

We stand ready to be a resource and partner with the state in these efforts into the future.

Sincerely,

Warren Feather
Managing Director
Cargill, Incorporated

---

[3] https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_1_US/usv1.pdf

[4] https://ussoy.org/wp-content/uploads/2022/03/USBCSR030222.pdf

[5] Melissa J. Scully *et al* 2021 *Environ. Res. Lett* in press https://doi.org/10.1088/1748-9326/abde08