



November 5, 2020

(Submitted electronically as Comment to LCFS Public Workshop)

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California Air Resources Board
1001 I Street
Sacramento, CA 95812

Subject: FBN and Gradable response to October 14-15, 2020 Low Carbon Fuel Standard
Public Workshop

Dear Ms. Sahota,

Farmer's Business Network, Inc. (FBN) and Gradable thank the California Air Resources Board (CARB) for the opportunity to provide comments in response to the October 14-15, 2020 Low Carbon Fuel Standard (LCFS) Public Workshop. We applaud CARB for continuing to improve the LCFS in an effort to reduce greenhouse gas emissions and fight climate change.

FBN is an independent agriculture technology platform and farmer-to-farmer network with a mission to power the prosperity of family farmers around the world, while working towards a sustainable future. Our network consists of over 16,000 farmer members comprising over 49 million acres. FBN launched Gradable to provide technology and services to growers and buyers to facilitate the scoring, sourcing, and pricing of Low-Carbon Grain, building the infrastructure to make environmental transparency in the agriculture supply chain a reality.

Our proposal to CARB advocates for the inclusion of field-level Carbon Intensity (CI) scoring for biofuel feedstocks. We argue for this change to the standard because:

- According to the Environmental Protection Agency approximately 5% of greenhouse gas emissions in the United States result from crop production and this proposal incentivizes adoption of farm conservation practices that will directly reduce emissions from farmland across the country
- This change will reverberate beyond biofuels, establishing the infrastructure to support lifecycle carbon assessments for agriculture products across a variety of industries, including food, feed, and fiber
- Farmers are eager to participate in these programs and to improve their efficiency, but require a consistent market to de-risk investments in conservation
- Advancements in and adoption of agriculture data technology not only makes field-level farm data accessible and verifiable, but also enables a third party to collect that information and not overburden the farmer, allowing for widespread participation
- Infrastructure for measuring the carbon impact of crop production is urgently needed as both industry and government face pressure to make lifecycle carbon assessments for agriculture products



Unlocking Variable Feedstock Scoring

The GREET model for variable feedstock scoring built by Argonne National Laboratory is able to measure the efficiency of production of individual farms, attributing CO₂ equivalent emissions to field operations and energy use. Adoption of sustainable practices—including conservation tillage, nitrogen management strategies, and incorporation of livestock—directly reduce farm level emissions, both producing Low-Carbon Grain and investing in soil health.

If adopted, our proposed changes will drive reductions in CO₂ equivalent emissions and incentivize more sustainable crop production on farmland across the country, which nationally contributes approximately 5% of total emissions. Further, farm-related emissions represent a significant amount of the total greenhouse gases associated with biofuels, as much as 52% in some estimates. By unlocking field-level carbon intensity scoring in the LCFS, CARB would not only reduce emissions within the California biofuel supply chain and set a precedent for clean fuel policies in other states, but also solidify a framework and establish an infrastructure for use in commodities across food, feed, and fiber.

On Cherry Picking

Incorporating variable feedstock scoring into the LCFS creates a structure to incentivize and help producers lower their CI score over time. Some argue that to avoid cherry picking, or selecting top performers to earn credits without actually reducing emissions, each farm needs to be assigned a baseline score calculated using recent production history, and only improvements over that score should earn credits. Although this approach has logic in theory, it immediately disincentivizes those same top performing producers—those who have already invested in conservation practices to make their production more carbon efficient—from participating.

It is important to remember that, over decades of innovation and experimentation, farms have led the charge in developing the practices and techniques scientifically proven to reduce carbon emissions. Engaging growers is crucial to a successful grassroots movement and penalizing them would stymie further innovation and adoption. Our recommendation to the LCFS relies on grower buy-in to succeed and we will not see widespread adoption of variable feedstock scoring if CARB assigns each farmer a baseline. The key to continuing to see reductions in carbon emissions across farms is to create a framework where farmers, regardless of their current operations, can easily submit data to calculate their CI score and assess through personalized analysis and agronomic recommendation how they improve their scores and earn premiums.

Pilot with POET Ethanol Demonstrates Scalability

FBN and Gradable's pilot with POET Ethanol around their Chancellor, South Dakota biorefinery proves the readiness of farmers to participate in a Low-Carbon Corn market as well as the scalability of the program. In 2019, 64 farms across 126,000 acres participated in the pilot and scored approximately 20% better for carbon intensity than the national average. The results not only showed improvements over the assigned value used in the LCFS today, but also showed significant variance in performance among the grower group, which demonstrates opportunity for additional reductions.

Recent advancements in and adoption of on farm data technology enable FBN to collect farm data and calculate carbon intensity scores for the POET pilot. FBN validates all of the information collected, which is crucial in building a verifiable, identity preserved grain supply chain. Collection and validation does not



overburden the farmer, which combined with high adoption rates of technology allows for widespread participation. FBN member farmers are eager to participate in programs that reward them for investing in the health of their land. With a consistent market to sell into we expect to see wide adoption and substantial improvements.

FBN and Gradable encourage CARB to take urgent action in response to our public comments. Not only state, but regional and national policy groups look to California for leadership in designing clean fuel markets. Action taken in response to our comments will have significant impacts on global climate and farms across the country.

Best regards,

A handwritten signature in black ink, appearing to read "Devin Lammers", written over a light blue horizontal line.

Devin Lammers
President, Crop Marketing and Financial Services
Farmer's Business Network, Inc.