



November 1, 2021

Attention: Docket ID USDA-2021-0010

Mr. Robert Ibarra
Commodity Credit Corporation
U.S. Department of Agriculture
1400 Independence Ave., S.W.
Washington, DC 20250

Re: Comments in Response to the Request for Information on a Climate-Smart Agriculture and Forestry Partnership Program (86 Fed. Reg. 54149; September 30, 2021)

Dear Mr. Ibarra:

The Renewable Fuels Association (RFA) appreciates the opportunity to submit these comments in response to the U.S. Department of Agriculture's (USDA) request for information on a Climate-Smart Agriculture and Forestry Partnership Program (86 Fed. Reg. 54149; September 30, 2021).

RFA is the leading trade association for America's ethanol industry. Founded in 1981, RFA's mission is to drive expanded demand for American-made renewable fuels and bioproducts worldwide. RFA's 300-plus members are working to help America become cleaner, safer, more energy secure, and more economically vibrant.

The USDA defines a climate-smart commodity as "an agricultural commodity that is produced using farming practices that reduce greenhouse gas (GHG) emissions or sequester carbon."¹ Corn-based ethanol is the perfect climate-smart commodity: It already cuts GHG emissions in half compared directly to gasoline,² and in July the RFA's producer-members resolved to "ensure that ethanol reduces GHG emissions by at least 70 percent, on average" by 2030 and that "ethanol achieves a net-zero carbon footprint, on average, by 2050 or sooner."³ The utilization of enhanced management practices and advanced technologies in the production of corn and other agricultural feedstocks is expected to play a critical role in meeting this goal.

With this commitment in mind, the RFA is pleased to respond to the following questions in the USDA's request for information (RFI) about the Climate-Smart Agriculture and Forestry (CSAF) Partnership Program.

¹ 86 Fed. Reg. 54149

² <https://onlinelibrary.wiley.com/doi/10.1002/bbb.2225>

³ <https://ethanolrfa.org/pledge>

2. In order to expand markets, what should the scope of the Climate-Smart Agriculture and Forestry Partnership Program be, including in terms of geography, scale, project focus, and project activities supported?

Given that both national and global initiatives will be needed to slow and eventually stop GHG emissions on a net basis, the geographic scope of the USDA's CSAF Partnership Program should be national. Projects should be eligible for support if they involve commodities that are under the USDA's purview (including the production of crops and biofuels) and have the potential to significantly reduce GHG emissions and/or sequester carbon. Among the projects that are eligible, the USDA should prioritize those that have the greatest potential to reduce emissions and/or sequester carbon in the shortest amount of time.

The transportation sector is the single largest source of GHG emissions in the U.S., followed closely by electricity generation and industry. Although emissions from the sector are lower than they were in the mid-2000s, they still accounted for 29% of total U.S. emissions in 2019.⁴ Therefore, for the CSAF Partnership Program to have the greatest impact, projects that involve the transportation sector, specifically including biofuels, should be eligible for support. This is consistent with the program scope noted in the RFI: "Opportunities also include markets for low-carbon biofuels and renewable energy."

For ethanol, there are several technologies and practices that can be used to reduce carbon intensity (CI) significantly. Some of these, such as the use of renewable natural gas, renewable electricity and carbon capture, utilization, and storage (CCUS), are associated with the processing stage of ethanol production, which accounts for 43% of ethanol's total life cycle emissions according to Argonne National Laboratory. Others, such as the use of cover crops, green ammonia and other farming practices, can address the 40% of emissions that occur through the farm gate.

Corn is the feedstock for a large majority of ethanol produced in the U.S., and corn and ethanol production are concentrated in the Midwest. Grain sorghum is also an important feedstock for ethanol facilities that are located in the Plains region. Accordingly, while the scope of the overall CSAF Partnership Program should be national, the projects geared toward corn, sorghum and ethanol would be focused on, but not limited to, the Midwest and Plains. (Please note that for purposes of brevity, subsequent comments about feedstock mostly reference corn, but they generally apply to sorghum as well.)

3. In order to expand markets, what types of CSAF project activities should be eligible for funding through the Climate-Smart Agriculture and Forestry Partnership Program?

There are two prerequisites to monetizing the CI reduction associated with climate-smart ethanol and the corn used to produce it. First, the relevant government agencies with jurisdiction over low-carbon fuel regulations (e.g., the Environmental Protection Agency and the California Air Resources Board) will need to allow specific farming practices and technologies to be recognized in the CI scoring used in clean fuels

⁴ <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#transportation>

programs. Second, climate-smart corn may necessitate segregation from commodity grain—or, in some cases, identity preservation—as it is supplied to the processor.

Regarding this second prerequisite, a highly efficient supply chain for corn and other grains and oilseeds has developed over many decades; however, it is based largely on the premise that such crops are traditional commodities that can be commingled. Supply chains and related systems will need to adapt to facilitate the product tracking required for climate-smart corn and ethanol.

Systems that could be used in supply chains for climate-smart corn or that could serve as analogs already exist or are taking shape. For example, identity-preserved networks are in place for specialty products, there has been substantial investment in information technology tailored to the agriculture sector in recent years, and blockchain has become commercially available. However, the vast majority of corn is still handled in the traditional commodity supply chain, and the use of systems that facilitate the tracking of crops and their associated attributes is not yet widespread.

In addition to adaptation of the supply chain, it also is likely that a program will need to be established to certify climate-smart commodities. Agencies that administer clean fuels programs—and perhaps private companies that want to reduce their climate impact—will want to ensure that the claimed GHG emissions reductions are actually occurring.

Accordingly, it would be beneficial for the USDA to fund projects that help bridge the gap between current structures/systems and those that will be needed for climate-smart corn and ethanol to expand to commercial scale. It is not necessary that USDA fully fund projects, but rather it should provide the support needed to help get climate-smart agriculture “off the ground” and demonstrate to private-sector participants that this market segment will have the size and staying power to merit their investment.

Specific activities and projects that should be eligible for CSAF funding include, but are not limited to:

- Cost-sharing, loans and loan guarantees for corn growers and ethanol facilities to add bins/storage tanks and associated equipment required to segregate or preserve the identity of climate-smart products and prevent comingling with commodity products. An example of associated equipment for an ethanol facility could be the installation of an additional truck dump.
- Cost-sharing for corn growers to purchase software applications to record data regarding criteria such as input usage and management practices on the farm and to convey those data in connection with the delivery of climate-smart corn to ethanol facilities. Ethanol facilities and grain elevators might need to add the same or compatible applications, in which case cost-sharing would be appropriate. Training farmers and grain handlers on the use of these applications could also be funded, in whole or in part, by USDA.
- Cost-sharing for technology companies to fill gaps in digital infrastructure to permit product tracking, transactions and potentially payment along supply chains for climate-smart commodities.

- Initiation of a certification program, funding to scale up the capacity of certifiers, and sharing of fees charged to climate-smart commodity producers for certification services (at least in the initial years of the program).
- Finally, the USDA should consider funding research to confirm or improve estimates of the GHG emissions reductions associated with certain technologies and management practices, especially at the farm level. Currently, there remains uncertainty around some of the estimates, which might hinder the ability of producers to receive the full value of climate-smart corn and ethanol.

4. In order to expand markets, what entities should be eligible to apply for funding through the Climate-Smart Agriculture and Forestry Partnership Program?

In connection with climate-smart corn and ethanol production, the following entities should be eligible for funding:

- Ethanol producers and non-profit trade organizations that represent them;
- Companies and cooperatives that have agreements to supply corn to ethanol facilities or that have supplied at least a threshold volume of corn over the last few years;
- Cooperatives that operate within the typical corn “draw” (i.e., origination) areas of ethanol facilities;
- Individual farming operations that have supplied corn or other feedstocks to ethanol facilities over the last few years or that have entered contracts to do so in the future;
- Non-profit and trade organizations representing agricultural producers, agricultural input manufacturers, transportation companies, and other supply chain participants; and
- Technology companies and other service providers to corn growers, grain elevators and ethanol producers that would need to incur costs directly in connection with participation in the climate-smart program.

In addition, it might be necessary to modify the Greenhouse gases, Regulated Emissions, and Energy use in Technologies (GREET) model, which is the gold standard for estimating the GHG emissions from transportation fuels, in order to fully incorporate climate-smart commodities. GREET is maintained by Argonne National Laboratory, which is part of the Department of Energy (DOE), so it is assumed that the DOE would be the primary funder of any modifications to GREET. However, USDA might consider cost-sharing with DOE to implement improvements in the GREET model that better reflect the carbon impacts of certain climate-smart farming practices.

5. In order to expand markets, what criteria should be used to evaluate project proposals for receiving funding through the Climate-Smart Agriculture and Forestry Partnership Program?

As noted above, the USDA should prioritize eligible projects that have the greatest potential to reduce emissions and/or sequester carbon in the shortest amount of time. In

making this determination, the cost per ton of expected GHG emissions savings (or per unit of carbon expected to be sequestered) should also be considered.

USDA should also strongly consider the potential rural economic benefits of proposed projects, including impacts on farm income, value added to farm products, employment, and gross domestic product. A specific criterion would be the number of producers expected to be involved in a project, including historically underserved producers.

In cases where other government programs (e.g., the California Low Carbon Fuel Standard, or LCFS) or private markets provide sufficient returns to compensate climate-smart commodity producers for their costs and risks (including the risk of participating in a new program), the USDA does not need to establish a payment per ton of GHG reduction. However, where this is not the case, the USDA should consider such a payment to incentivize participation in the initial years of the program.

6. In order to expand markets, which CSAF practices should be eligible for inclusion?

Ultimately, the primary metric to determine the impact of the overall CSAF Partnership Program is the total reduction in GHG emissions that it achieves, and a secondary metric would be the cost per ton of GHG emissions savings. In a related way, projects funded through the program should be assessed based on the resulting reduction in GHG emissions, the size of that reduction relative to the expected reduction when the project was funded, and the cost per ton of GHG emissions savings achieved by the project.

An additional metric that should be considered is the number of crop and ethanol producers participating in CSAF projects.

The Argonne GREET model should be used to estimate the GHG emissions reductions associated with climate-smart corn used in ethanol production, as well as the resulting climate-smart ethanol.

The USDA will need to establish a requirement for periodic reporting by the recipients of CSAF funding, along with an auditing system.

7. How should ownership of potential GHG benefits that may be generated be managed?

Specific to climate-smart corn used in ethanol production, the monetization of the GHG benefits would be expected to occur in the form of a higher ethanol price (including carbon credit value), from which the additional value of the corn that is used is derived. Accordingly, it could be beneficial for the entity(ies) involved in a CSAF project to determine a value-sharing arrangement in advance. In such an arrangement, the ethanol producer would retain a portion of the higher ethanol price, in order to compensate it for additional costs incurred (such as investments made, operational changes and personnel time). Since a profit is not guaranteed on ethanol production, there would need to be an

agreement on how to allocate the profit or loss. The remainder would flow through as a premium to the corn grower.

Value-sharing arrangements probably would not be appropriate for all projects funded by the CSAF Partnership Program. For example, in the case of a cooperative or other farmer-owned ethanol plant, financial benefits would already flow through to growers, although it is possible that not all growers would be involved in the climate-smart commodity project. Accordingly, such arrangements should not be a requirement, but rather they should be considered on a case-by-case basis.

8. How can USDA ensure that partnership projects are equitable and strive to include a wide range of landowners and producers?

The inclusion of ethanol and related corn production in the CSAF Partnership Program has the potential to involve a very large number of growers, given that there are over 200 ethanol plants located in the Midwest and beyond, there are more than 300,000 operations growing corn in the U.S., and 35% of the corn crop is used for ethanol and co-products. The geographic footprint of the ethanol industry likely encompasses a substantial number of underserved producers and economically disadvantaged communities.

The inclusion of ethanol and related corn production in the CSAF Partnership Program would benefit historically underserved communities more broadly, including economically and environmentally disadvantaged communities in urban areas and beyond. Such communities are disproportionately harmed by air pollution from fossil fuel production, refining, and usage. Further reducing the GHG emissions of ethanol compared to petroleum will allow it to assume a larger role in the lower-carbon fuel pool of the future, contributing to improved air quality across the U.S., including in underserved communities.

Conclusion

Thank you again for the opportunity to submit these comments. Should you have any questions or wish to discuss these comments further, please contact Scott Richman, the RFA's chief economist, at srichman@ethanolrfa.org.

Sincerely,

A handwritten signature in black ink that reads "Geoff Cooper". The signature is written in a cursive, flowing style.

Geoff Cooper
President & CEO