



April 25, 2022

Mr. Debebe Dererie
Rulemaking Lead
Washington State Department of Ecology
300 Desmond Drive SE
Lacey, WA 98503

RE: Washington's Clean Fuels Program Rulemaking

Dear Mr. Dererie,

Cargill appreciates the opportunity to provide comments regarding the Washington Department of Ecology's ("Department") clean fuels rulemaking process. Washington's goal to reduce the carbon intensity (CI) of transportation fuels 20% by 2038 from a 2017 baseline is ambitious; this is an important opportunity to ensure the Department and other state agencies work together with industry and other stakeholders to achieve this goal.

With a global footprint and presence in major food and ag supply chains around the globe, Cargill is committed to protecting the earth's vital natural resources and reducing its environmental impact. From small family farms to global shipping lanes, Cargill works every day to implement new sustainable practices to reduce our impact on the planet and communities in which we operate. In alignment with our climate commitment, Cargill has adopted a Scope 3 target of reducing greenhouse gas emissions in its global supply chains by 30% per ton of product by 2030. Additionally, Cargill signed on to the [CEO climate statement](#) and the [We Are Still In](#) coalition to continue supporting the Paris Climate Accord. Throughout our long history, we've seen agriculture play an important role in addressing some of the world's most urgent challenges.

Cargill's Agricultural Supply Chain businesses originate, process, and convert crop inputs, vegetable oils and animal fats into renewable fuels including biodiesel and ethanol while working closely with our farmer partners to implement sustainable farming and conservation practices. Through microbiology and fermentation, Cargill is deploying its wet corn mills across the country to develop alternatives to petroleum-based chemicals and products.

As the Department continues to develop its rule for this new program, Cargill respectfully requests the Department considers adopting the current carbon intensity (CI) models used by Argonne National Lab's Greenhouse Gas and Regulated Emissions and Energy in Transportation (GREET) model or more recent data from the United States Department of Agriculture (USDA).

Additionally, we ask that any CI model reflect recent industry advances including the adoption of voluntary and sustainable farm practices such as the planting of cover crops to improve soil health, no till/strip till farming, precision agriculture, crop rotation, and other regenerative agriculture practices. Farmers are increasingly adopting these practices across the country to further reduce and sequester carbon.

According to the 2017 Census of Agriculture, cover crop acres increased from 10.3 million acres in 2012 to 15.4 million acres in 2017, and no-till acres increased about 8 million acres above the 2012 census.¹ These practices should be reflected in the CI values for biofuels such as corn ethanol, biodiesel, and renewable diesel derived from row crops and other feedstocks. Additionally, facilities where these fuels are processed have increasingly worked with utility providers to source more green energy for operations, and carbon reductions from green power supplies should be accounted for in renewable fuels pathways. Furthermore, these green power supplies lower the carbon intensity from supply both before and after the meter and the models should recognize this.

For the state to reach its carbon reduction goals, the use of updated and accurate data when determining the CI of biofuels will be critical. 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.² However, data used in current models significantly overestimates the CI of corn ethanol and all other associated corn-based products, thus limiting their ability to enter certain markets.

Finally, Cargill requests the Department to consider dextrose as a critical feedstock for production of biobased, renewable chemicals and products ranging from jet fuel to biodegradable plastics. As a replacement to fossil fuel-derived chemicals and fuels, dextrose can play an important role in reducing the greenhouse gas (GHG) impacts of our nation's chemical manufacturing, energy and transportation sectors in the future. Unfortunately, current biofuel and low carbon fuel policies do not adequately recognize the role that dextrose plays as part of the lifecycle of the corn wet milling process, putting corn-based biobased chemicals, fuels, and products at a significant market disadvantage. This recognition would assist Washington in not only its GHG reductions in on-road transportation, but in meeting its overall GHG reduction goals.

Cargill also produces a number of other feedstocks used in renewable fuels, including biodiesel, renewable diesel and sustainable aviation fuel. Our facilities produce soybean, canola, and other seed oils, as well as beef tallow and other fats that may be used as a renewable feedstock. Given the number of potential feedstocks, we suggest the program incorporate feedstock specific pathways, allowing suppliers and renewable fuel producers to partner and supply low carbon fuels to the program in a more efficient manner.

We appreciate this opportunity to provide the Department with our initial feedback. We stand by to be a resource and partner with the state in these efforts into the future.

Sincerely,



Warren Feather
Managing Director
Cargill, Incorporated

¹ https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_1_US/usv1.pdf

² Melissa J. Scully *et al* 2021 *Environ. Res. Lett* in press <https://doi.org/10.1088/1748-9326/abde08>