

March 10, 2025

Hon. Craig Headland  
Chairman  
House Finance and Taxation Committee  
State Capitol  
600 E Boulevard Ave  
Bismarck, ND 58505

Chairman Headland:

Growth Energy is the world's largest association of biofuel producers, representing 97 U.S. plants that each year produce more than 9.5 billion gallons of cleaner-burning, renewable fuel, including two biorefineries in North Dakota. We also represent 130 businesses and groups, including the North Dakota Corn Growers and North Dakota Ethanol Producers Association, working with them and tens of thousands of biofuel supporters around the country. Together, we remain committed to bringing better and more affordable choices at the fuel pump to consumers, helping our country by rebuilding the farm economy, lowering fuel costs, driving American energy dominance, and winning global markets.

Thank you for the opportunity to provide written testimony in support of SB 2333, important legislation that would help North Dakota bioethanol producers compete in the global carbon economy. The future of bioethanol production in North Dakota lies in ability to produce lower carbon liquid fuel. CO<sub>2</sub>, whether through sequestration, utilization, or process improvements at the biorefinery, has the potential to be as valuable of a commodity as any of the co-products that come from our facilities.

There are a variety of methods and processes that bioethanol producers can use to reduce the carbon intensity of their product. Research conducted by the Energy Futures Initiative Foundation (EFIF) on the decarbonization potential for bioethanol captured these methods and processes along with the carbon intensity (CI) reduction potential, each measure's cost and their feasibility.<sup>1</sup>

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<sup>1</sup> <https://growthenergy.org/wp-content/uploads/2024/09/Decarbonizing-The-US-Ethanol-Industry.pdf>

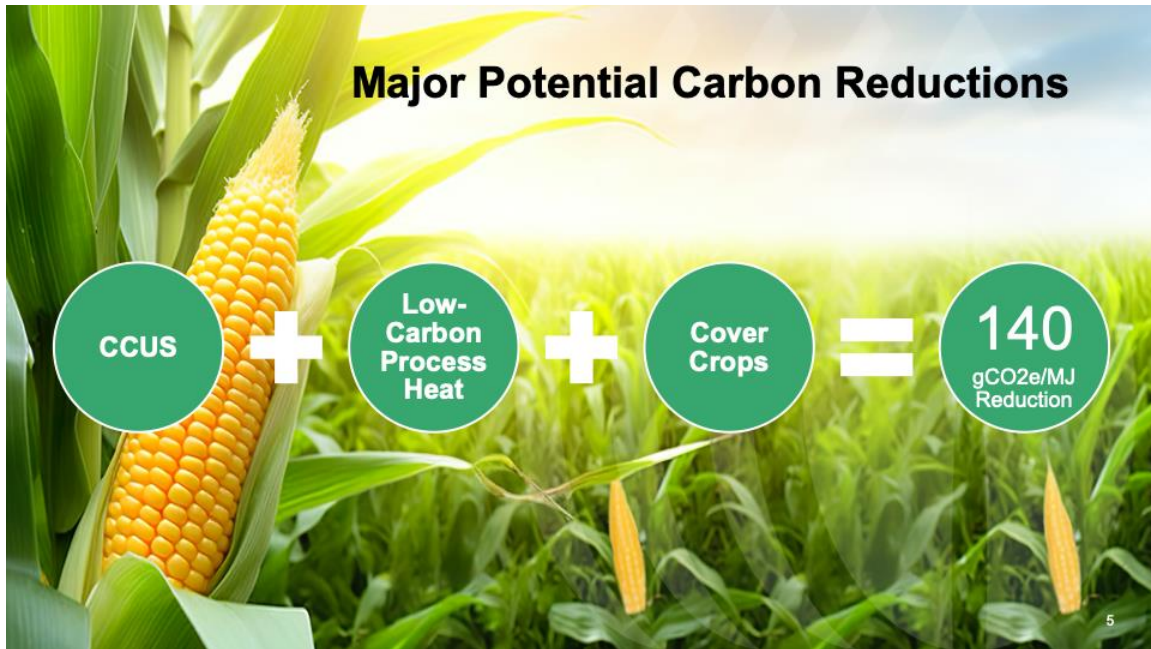
## Biorefinery Decarbonization Measures

			Feasibility		
		CI Reduction Potential	Cost	Widespread Adoption	Readiness for Adoption
Ethanol Yield Improvement		6%	< zero	High	Near Term
Fermentation CCUS		57%	-\$48 (with 45Q) to \$37/ton CO <sub>2</sub>	High	Near Term
Carbon-Free Electricity Use		6%	-\$49 (PPAs) to \$180/ton CO <sub>2</sub> (RECs)	High	Near Term
Decarbonize Thermal Energy Use	Fuel Switching to Hydrogen	37%	\$124 (with 45V) to \$412/ton CO <sub>2</sub>	Medium	Long Term
	Fuel Switching to RNG	32-160%	\$76 to \$220/tCO <sub>2</sub>	Medium	Mid Term
	Biomass CHP	37%	< zero	Medium	Mid Term
	Hydrogen CHP	37%	\$71 (with 45V) to \$376/tCO <sub>2</sub>	Medium	Long Term
	RNG CHP	32-160%	\$57 to 201/tCO <sub>2</sub>	Medium	Mid Term
	CCUS - Thermal Energy Generation	37%	\$21 (with 45Q) to 106/tCO <sub>2</sub>	Medium	Mid Term
Renewable Diesel Use in Ethanol Delivery		<2%	\$127 to 139/tCO <sub>2</sub>	Medium	Near Term

As can be seen above, the reduction potential of each method can range from a few percentage points to as much as 160%. Similarly, the costs of implementing each method ranges from near zero to more than \$400 per ton of CO<sub>2</sub>.

Bioethanol has been a demonstrated leader in low carbon markets like California's Low Carbon Fuel Standard. Ethanol is responsible for 31% of mobile source cumulative GHG reductions to date in California<sup>2</sup>. In the medium- and long-term, the path for bioethanol's deeper decarbonization is real and will be key to competing in the global carbon economy. Yet, as EFIF's research shows, the adoption of many of these technologies and processes are a longer-term investment.

<sup>2</sup> <https://www.transportationenergy.org/research/reports/decarbonizing-combustion-vehicles-a-portfolio-approach-to-ghg-reductions/>



We applaud the introduction and consideration of SB 2333, which supports North Dakota biorefineries to make capital investments reducing their carbon intensity or otherwise improving efficiency. This will help them take advantage of economic opportunities in carbon markets. The previously mentioned EFIF study shows that the combination of three practices, carbon capture utilization and sequestration (CCUS), the use of low-carbon fuels for process heat at the biorefinery, and utilization of cover crops by feedstock producers would result in as much as 140 gCO<sub>2</sub>/MJ in reductions. SB 2333 would provide an incentive for North Dakota's biorefineries to invest in processes like low-carbon process heat or CCUS, positioning them for long-term success in the global carbon economy.

We urge the House Finance and Taxation Committee to recommend Do Pass on SB 2333. Additionally, we are happy to assist the committee with technical questions and thank the committee for its interest in ensuring North Dakota bioethanol remains competitive in the future.

Sincerely,

Chris Bliley  
Senior Vice President of Regulatory Affairs  
Growth Energy