

2026 POLICY GUIDES

Carbon Markets

Issue

The intersection of agricultural commodity production, renewable energy incentives and environmental policy has culminated in the rapid expansion of carbon markets, fundamentally redefining the bioeconomy. For Nebraska's farming and ranching members, the agricultural industry is actively transitioning from traditional volume-based biofuel incentives to performance-based carbon intensity metrics. This massive shift is primarily driven by the emergence of the federal Section 45Z Clean Fuel Production Tax Credit, the anticipated rapid expansion of the Sustainable Aviation Fuel (SAF) industry, and the new infrastructure requirements for carbon capture and sequestration pipelines. While these developments present unprecedented financial opportunities for rural economies, they also introduce significant complications. These challenges include complex regulatory hurdles, logistical supply chain bottlenecks, severe data privacy concerns regarding farm-level agronomic records and deeply contentious private property rights challenges surrounding the use of eminent domain for pipeline routing.

Background

The modern agricultural bioeconomy extends far beyond the traditional conversion of corn to ethanol or soybeans to biodiesel. It now encompasses a highly monetized, data-driven ecosystem where the environmental footprint of agricultural production is treated as an economically significant attribute, entirely separate from the physical crop yield itself. In the context of this modern bioeconomy and federal tax policy, the fundamental currency of value is the Carbon Intensity (CI) score. A CI score is a comprehensive lifecycle assessment of the greenhouse gas emissions associated with producing, transporting, converting and ultimately consuming a fuel, traditionally measured in kilograms of carbon dioxide equivalent per million British Thermal Units of energy produced. Historically, a bushel of corn was treated identically by end-users regardless of the agronomic practices used to grow it. However, under the new carbon market paradigm, specific farming practices utilized at the field level are quantified to establish a farm-specific CI score.

When a producer utilizes climate-smart agriculture practices, the carbon sequestered in the soil or the emissions avoided during cultivation directly reduce the overall CI score of the harvested grain. Practices that heavily influence a crop's score include transitioning to no-till or strip-till systems, integrating winter cover crops, optimizing nutrient management through precision agriculture and utilizing enhanced efficiency fertilizers or low-carbon ammonia. If an ethanol or biodiesel refinery purchases this low-carbon grain, the facility can dramatically lower the lifecycle CI score of its finished biofuel. The federal government, in turn, provides lucrative tax credits to the biofuel producer based on how low that final score drops below a specific statutory baseline. For the first time, the United States tax code treats a gallon of fuel as a carbon-reduction service, rewarding producers based on the precision of their lifecycle emissions rather than the raw volume of their output.

The Nebraska bioeconomy relies on several interconnected pathways to transform agricultural outputs into low-carbon energy, each presenting unique opportunities and challenges. Corn remains the primary feedstock for United States ethanol production, and by lowering the CI score of the corn at the farm gate while capturing biogenic carbon emitted during industrial fermentation, ethanol facilities can achieve ultra-low or negative scores to qualify for maximum federal subsidies. Additionally, the aviation sector represents a massive new demand vector for Nebraska commodities through the production of SAF, a drop-in replacement for conventional jet fuel. SAF can be produced from lipid feedstocks, such as soybean oil and animal fats, or through advanced alcohol-to-jet technologies utilizing ethanol, provided these commodities meet strict carbon reduction thresholds. Finally, livestock operations play a critical and expanding role in the bioeconomy, as anaerobic digesters can convert manure and agricultural waste into renewable natural gas, while animal fats and soybean oil serve as primary feedstock for biodiesel and renewable diesel.

Farm Bureau Policy

STATE POLICY:

CARBON MARKETS (2022). We support research and education to create standards in the climate and carbon credit market.

CLIMATE CHANGE (2025). We oppose laws or policies that implicate agricultural activity of any kind as a cause for climate change without empirical evidence.

PIPELINE (2023). We believe the development of energy infrastructure, including pipelines, is in the national interest to assure adequate energy supplies provided measures are in place to assure pipeline safety and protect our natural resources. We believe the state should enact legislation to require a state permit process for energy pipeline routes to assure the interests of Nebraska are considered in pipeline routing decisions. Such a process should be timely, science-based, assure pipeline safety, protect landowner rights, and meet legal requirements to avoid litigation. We support development of carbon infrastructure and pipelines. We believe the Public Service Commission and county zoning commissions should have oversight of carbon pipeline construction and reclamation within their jurisdictions.

SUSTAINABLE AVIATION FUEL (2025). We support Sustainable Aviation Fuel (SAF) production in Nebraska. We support using domestically produced feedstocks in SAF production with preference given to Nebraska produced feedstocks. We support expanding the list of acceptable conservation practices for feedstocks to be eligible for use in biofuels and/or SAF production. We oppose mandating specific conservation practices or bundling specific conservation practices for feedstocks to be eligible for use in SAF production.

TAX REFORM/RELIEF (2025). We believe any increase in state tax revenues resulting from a carbon injection pipeline in Nebraska should be used as property tax relief.

AGRICULTURE DATA (2026). We believe that an agricultural producer retains all rights, title, and interest in and to any agricultural data originating on the farm.

FEDERAL POLICY:

503/Climate Change. We support market-based incentives, such as carbon credit trading, over government mandates. The USDA should serve as the lead governing agency for researching,

measuring, monitoring, reporting, verifying, and setting “carbon credit” standards for agriculture, including determining the carbon intensity scores.

535/Eminent Domain. We oppose using eminent domain to secure carbon storage space.

536/Proprietary Data, Precision Agriculture and Ag-Tech. Third-party verification must be conducted by entities with specific knowledge and expertise in the agricultural industry. Farmers and ranchers must own and obtain their data being examined. We support ensuring proprietary data is stored in a manner that protects it from Freedom of Information Act (FOIA) requests.

404/Renewable Fuels. We support structuring farmer participation under the 45Z framework using a “Book and Claim accounting framework” to ensure farmers can generate value from lower-carbon practices without requiring the physical delivery of grain to a specific biofuel facility.

237/National Conservation and Environmental Policy. We oppose federal, state, or local programs that incentivize corporate or non-producer entities to fund the conversion of agricultural land to non-agricultural uses solely for the purpose of generating carbon or sustainability credits.

Questions

- Recognizing that the highly lucrative Section 45Z clean fuel production tax credit is paid directly to the processing facility, should Nebraska Farm Bureau (NEFB) support legislative or regulatory requirements mandating that a specific, guaranteed percentage of the credit’s financial value be passed directly to the farmer providing the feedstock?
- As participation in federal compliance markets requires invasive third-party audits to the international ISO 14065 standard, what specific state-level protections should NEFB advocate for regarding the ownership, storage, breach liability and deletion rights of proprietary farm data?
- Does our current policy adequately protect producers from being forced to adopt unfeasible agronomic practices by corporate buyers, or should we strengthen our stance against the mandatory “bundling” of conservation practices to ensure farmers retain ultimate operational flexibility?
- Should NEFB establish standard baseline protections or guidelines for long-term private carbon contracts to insulate members from predatory data-sharing agreements or financial penalties for weather-related non-compliance?