THE ACT
President Biden signed the Growing Climate Solutions Act (GCSA) into law on December 29, 2022. The bill was part of the larger Consolidated Appropriations Act of 2023. GCSA passed with bipartisan support.

WHAT’S IN THE BILL
Funding for a coordinated data infrastructure—a national ecosystem services monitoring network—could meet this need. Data is key for driving climate-smart decision making. With better data, producers and land managers can make more informed, far-reaching decisions to improve ecosystem services provided by agricultural land.

MORE GSCA HIGHLIGHTS
GCSA is uniquely positioned to assist farms with making decisions about engaging in carbon markets. GCSA provides resources to farmers by calling for the establishment of user-facing databases with information on carbon markets. Further, the bill:

- **Promotes voluntary participation** and the development of market-based approaches to reducing greenhouse gas (GHG) emissions;
- **Calls for creating an online portal**, housed by USDA, that connects farmers with experts to facilitate carbon market access and provides farmers with verified carbon market and qualified vendor information;
- **Supports developing standards** for measuring, monitoring, and verifying GHG reductions and carbon sequestration; and
- **Reiterates the importance** of collaboration and partnerships between federal, state, and local governments, universities, nonprofits, and the private sector.

NEW RESPONSIBILITIES FOR USDA
Should USDA move forward with the GHG Technical Assistance Provider and Third-Party Verifier Program, USDA will be responsible for:

- Publishing a list of protocols to ensure consistency, reliability, effectiveness, efficiency, and transparency.
  - The protocols refer to a systematic approach for generating agriculture or forestry credits, including carbon sequestration projects.
- They must also include information on calculations, sampling methodologies, accounting principles, and system for monitoring, measuring, reporting, and verification.
- Establishing a vendor registry that will house third-party vendor information.

THINKING GLOBALLY
Other early adopters of environmental markets include Canada and Australia. The **European Union (EU)** is a leader in carbon markets with the world’s first and largest carbon market. Brazil also has a government regulated carbon market program targeting GHG reductions. The U.S. may review these examples while developing its carbon market programs.

OPPORTUNITIES FOR CHANGE THROUGH GSCA
The GCSA outlines the benefits for farmers. Successful implementation requires the USDA to establish comprehensive databases that house information, qualified technical service providers, and market verifiers. Accessibility and usability will be key for successful GCSA outcomes.

**Verified information** includes:

- Calculations;
- Sampling methodologies;
- Voluntary environmental credit principles;
- Systems for monitoring, measuring, reporting, and verification; and
- Descriptions of widely accepted qualifications possessed by covered entities that provide technical assistance.
THREE SEPARATE DATABASES

For GCSA to be successful, USDA must establish comprehensive and user-friendly databases, including:

- A database serving as a resource library for the verified information listed above;
- A database for containing qualified service providers; and
- A market verifiers database which would establish the framework for accelerating market verifiers who are responsible for assessing and verifying carbon reduction and sequestration efforts.

Providing a trusted information source will help farmers feel more at ease with engaging in carbon markets. Further, allowing trusted sources such as public universities and scientists to contribute will help grow trust among farming communities.

LACK OF TRUST AND TRANSPARENCY CREATES HESITATION

Carbon markets provide a unique opportunity for farmers to further their sustainability efforts while compensating them for these efforts.

One of the primary challenges farmers are faced with is the lack of transparency, which leaves them uncertain who to trust and unsure which information is viable. Without transparency and viable information, farmers may be reluctant to participate in carbon markets.

DOCUMENTED UNCERTAINTY

Asymmetric information degrades markets. Data supports a correlation between the opacity of carbon markets and a lack of participation. While 90% of farmers are aware of carbon markets, only 3% are participating in them.

The sellers of carbon credits have more information than farmers do about the value and quality those credits, much like the seller of a used car. The seller knows if the car is a lemon. Since the buyer cannot corroborate the car’s quality, they pay less or avoid used cars. Services like Carfax fill this information gap by providing buyers with detailed information about the car’s condition.

BUILDING TRUST

While farmers are everyday people making everyday business decisions, farms are often family operated.

Many farmers don’t retire. Since their lives are so closely tied to their businesses, they are more risk-averse than most buyers. Trust is key for farmers to engage in carbon markets.

State and federal agencies have proven their ability to safeguard information and serve as a trusted source. For example, state and federal livestock traceability programs have been successful. These programs:

- Collect information from farmers through veterinary records;
- License veterinarians for credibility;
- Work alongside veterinarians to confirm correct data; and
- Allow farmers to feel comfortable by allowing them to use their veterinarian of choice.

This is just one example of how the government works with private industry to provide trusted services for farmers.

LEARNING FROM OTHERS

The U.S. Securities and Exchange Commission’s (SEC) mission is “to promote a market environment that is worthy of the public’s trust.” The SEC provides educational materials to help investors make smart, safe, and educated investment decisions. The SEC builds trust by:

- Providing consumer-facing educational content;
- Regulating investments; and
- Issuing white papers on economic and risk analysis.

The USDA has an opportunity to provide educational information for farmers interested in carbon markets. Parallels can be drawn between the SEC and how USDA may be able to provide resources to farmers regarding carbon markets.

WHAT’S ON THE HORIZON

The GCSA can achieve its desired outcomes. By increasing farmer confidence, participation in carbon markets will also increase and support on-farm environmental practices. Further, as farmers become more comfortable participating it will increase their revenue and attract more stakeholders and partnerships.