



The Growing Climate Solutions Act of 2022

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overview

- the Growing Climate Solutions Act will try to help farmers participate more effectively in voluntary carbon markets by (1) establishing a website for carbon market consultants to allow producers to find a consultant working in their area and (2) by providing educational materials to help producers better how understand carbon markets and carbon consultants operate
- Act may influence other ongoing programs scrutinizing ag carbon emissions, such as UN global carbon market and SEC corporate GHG emission reporting.

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carbon markets

- **regulatory** carbon markets: certified carbon credits can be used to **reduce regulated carbon emissions**
 - credit certification process is highly regulated, costly
 - what EU, California, RGGI carbon markets are
 - carbon reductions are permanent not temporary
 - costs & prices higher than voluntary markets
- **voluntary** carbon markets: credits not eligible for use as offsets to regulated carbon/greenhouse gas emissions
 - no standard, independent measurement & verification protocols
 - carbon reductions are only temporary, not permanent
 - prices are lower than in regulatory carbon markets
 - “feel good” voluntary carbon credit purchases to “reduce your carbon footprint” – environmental PR

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current ag carbon market

- some farmers are selling carbon credits for annual increases in “new” carbon sequestration to businesses & individuals seeking to reduce their carbon footprint
 - corporate purchases driven by meeting corporate sustainability goals
- this voluntary carbon market is very unclear. Don’t know prices, practices, buyers, sellers, measurement & verification. Carbon credit sales are private contracts, no public markets, no price disclosure requirements.
- In an attempt to help producers better understand the ag carbon credit market, the Congress passed & President Biden signed the Growing Climate Solutions Act in Dec 2022.

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ag carbon market challenges

- 1. expensive to accurately **measure & verify** ag carbon storage
 - independent measurement & verification an expensive part of the carbon credit project process
- 2. **additionality**: must be additional carbon storage from a “new” or “additional” practice
 - usually can’t get paid for what you have been doing already
- 3. **permanence**: carbon must remain stored for say 40 years or more.
 - so land can’t be plowed up after contract has ended & carbon released into atmosphere

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Act’s major purposes

- establish USDA carbon market program to list carbon consultants working with ag producers & private forest landowners (“producers”)
- **USDA carbon market program objectives**: (1) facilitate producers **participating** in voluntary carbon markets
- (2) facilitate providing technical assistance to help producers overcome **barriers to entry** in carbon markets
- (3) ensure that producers receive a **fair revenue distribution** from ag carbon credit sales, and
- (4) help producers **understand** how carbon markets work and what carbon consultants do

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timeline

- Sep 2023: USDA-EPA carbon market study
- Oct 2023: Secretary decides whether or not to establish USDA carbon markets program
- Dec 2023: program oversight council established
- Jan 2024: USDA final protocols (standards) list for ag carbon consultants
- March 2024: council ag carbon market study
- Oct 2024: USDA publishes web list of self-certified technical ag carbon consultants

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USDA-EPA carbon markets study

- Look at how voluntary carbon markets operated over the past four years, including supply of & demand for ag carbon credits.
- Project supply & demand for ag carbon credits for the next four years.
- Identify complications associated with measuring and verifying long term carbon sequestration & other ag practices.
- Identify how to reduce barriers to entry to ag carbon markets for producers.

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carbon markets study, con't

- Evaluate potential USDA role for improving carbon reduction measurement & verification technologies.
- Examine the extent to which existing carbon markets adequately consider unique challenges facing ag producers regarding carbon credit verification, additionality, permanence & reporting, given **regional variations** & different ag business arrangements.
- Analyze whether current carbon markets have sufficient flexibility to deal with disrupting those ag practices generating carbon credits due to unavoidable events including production challenges & natural disasters.
- This study will go a long way in identifying problems producers have participating in existing carbon markets & how to improve those markets to benefit producers.

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advisory committee

- USDA advisory committee to oversee operation of the USDA program to list self-certified **technical assistance providers & third-party verifiers** (ag carbon consultants).
- A majority of the advisory committee members must be farmers, ranchers or private forest landowners.
- Other committee members would represent carbon market verification experts, carbon market participants [buyers & sellers?] & land grant universities.
- advisory committee prepares its own evaluation of ag carbon markets & improvements needed to make them more producer friendly

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ag carbon consultants

- **technical assistance providers:** help producers participate in carbon markets:
 - how to increase soil carbon storage
 - how to generate carbon credits (1 metric ton stored carbon = 1 carbon credit)
 - how to verify carbon sequestration
 - how to participate in carbon markets
- **3d party verifiers:** measure & verify soil sequestration etc.
- independent verifiers an important step towards more rigorous ag carbon credit measurement & verification system

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potential credit-generating practices

- **land/soil carbon sequestration;** reforestation; forest management; preventing conversion of forests, grasslands & wetlands; wetland & grassland restoration; grassland management; NRCS conservation practices
- **emission reductions** from fuel changes or use reductions; on-farm energy generation; energy feedstock production; fertilizer or nutrient use emission reductions
- **livestock emission reductions** from feed changes and/or additives; pasture management practices.
- other practices proposed by USDA & approved by advisory committee

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widely accepted protocols

- USDA publishes list of protocols used by technical assistance providers & 3d party verifiers:
 - calculations
 - sampling methodologies
 - voluntary environmental credit accounting principles
 - methods to account for verification, monitoring, measurement and reporting; and
 - methods to account for additionality, permanence, leakage, and where appropriate, avoidance of double counting;
- as well as protocols for advising regarding carbon saving agricultural practices

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listing

- major change from Senate Bill 1251: Yellow Pages model, not Better Business Bureau
- tech service providers & 3d party verifiers **self-certify** their listing by (1) region & (2) what protocols & practices they are **proficient** in
- USDA monitors whether listed entities provide accurate cost & revenue estimates & are in fact proficient
- can be removed from list if submit inaccurate or fraudulent info to get listed. All contacted producers must be notified of removal. Likely that producer complaints will lead to USDA followup
- ideally USDA website will have list of relevant providers & producer information about carbon credits

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producer protections

- to the maximum extent feasible, listed providers & verifiers
 - would have to act in good faith
 - provide realistic estimates of costs & revenues
 - ensure that producers received a “fair distribution” of carbon credit revenues
- these consumer protection requirements would be a significant advantage for dealing with a listed provider & verifier

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bigger picture

- United Nations working to have an international carbon market (years away but a start)
 - would include measurement, verification, permanence etc. standards that would have to be met to sell in the UN carbon market
- US Securities & Exchange Commission proposing to (1) tighten up corporate “carbon friendly” claims & (2) require corporations to report supply chain GHG emissions, including “scope 3” emissions (including crops & livestock production)
 - ag groups opposing scope 3 emissions reporting requirement
- medium & longer term trend towards more rigorous evaluation of ag carbon credits in carbon markets

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other options

- USDA and private conservation groups currently provide some cost share assistance for soil conservation & carbon reduction practices, new and old
- USDA climate smart ag program encouraging "climate friendly" food product supply chains -- ??
- some food companies & some ag suppliers developing their own "climate friendly" programs & incentives
- clear that climate impact of ag production will be facing increasing scrutiny down the road. Not necessarily regulation but scrutiny for sure.

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questions? 😊

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Thank you! 😊

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