

The Growing Climate Solutions Act of 2021: What it Could Mean for USDA, Farmers and Ranchers

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Aug. 4, 2021

CAP Series 21-0802

On June 24, the U.S. Senate adopted S. 1251, the Growing Climate Solutions Act of 2021. Co-sponsored by 54 senators, including Nebraska’s Sen. Deb Fischer, S. 1251 seeks to make it easier for farmers and ranchers to participate in voluntary carbon credit markets, and to get a fair share of the carbon credit revenue they generate. If adopted by the U.S. House of Representatives and signed by the president, S. 1251 would go a long way in facilitating effective producer participation in US carbon markets.

If S. 1251 becomes law, one of the first things the U.S. Agriculture Department would do is prepare, in cooperation with the U.S. Environmental Protection Agency, a thorough analysis of U.S. carbon markets. The study would:

1. Look at how voluntary carbon markets operated over the past four years, including supply of and demand for ag carbon credits.
2. Project supply and demand for ag carbon credits for the next four years.
3. Identify complications associated with measuring and verifying long term carbon sequestration and other activities that prevent, reduce or mitigate greenhouse gas (GHG) emissions in agriculture and forestry.
4. Identify complications for small, beginning and socially disadvantaged producers participating in carbon markets.
5. Evaluate the potential USDA role for improving carbon reduction measurement technologies.
6. Examine the extent to which existing carbon markets adequately consider unique challenges facing ag producers regarding carbon credit verification, additionality, permanence and reporting, given regional variations and different ag business arrangement.
7. Analyze whether current carbon markets have sufficient flexibility to deal with disrupting those agricultural practices generating carbon credits due to unavoidable events including production challenges and natural disasters.

This study will go a long way in identifying problems producers have participating in existing carbon markets and how to improve those markets to benefit producers.

While preparing the carbon market study, the USDA also would establish an advisory committee to

oversee operation of the USDA program to certify GHG technical assistance providers and third-party verifiers. 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 and land grant universities. The heavy representation of farmers, ranchers and private forest landowners suggests that the certification program is likely to have a farmer-friendly tilt.

One of the main action activities under S. 1251 is the USDA certification of GHG technical assistance providers and third-party verifiers. Certification is voluntary, and producers of ag or forest carbon credits are not required to work with only certified technical assistance providers or third-party verifiers. The definitions of “technical assistance provider” and “third party verifier” are quite broad, including basically anyone advising farmers and forest landowners how to increase soil sequestration, how to generate carbon credits, how to verify carbon credit generation (including GHG reductions) and how to participate in carbon credit markets. Currently, some or all of these activities are carried out by e.g., cooperative extension, private consultants and private companies soliciting producers to market carbon credits through their company. Certification would be voluntary, and I would not expect many cooperative extension programs to seek certification.

The act recognizes a wide range of activities as potentially generating carbon credits including:

1. Land or soil carbon sequestration.
2. Emissions reductions resulting from fuel choice or reduced fuel use.
3. Livestock emissions reductions, including emissions reductions achieved through (a) feeds, feed additives, and the use of byproducts as feed sources; or (b) manure management practices.
4. On-farm energy generation.
5. Energy feedstock production.
6. Fertilizer or nutrient use emissions reductions.
7. Reforestation.
8. Forest management, including improving harvesting practices and thinning diseased trees.
9. Preventing the conversion of forests, grasslands, and wetlands.
10. Restoring wetlands or grasslands.
11. Grassland management, including prescribed grazing.
12. Current practices associated with private land conservation programs administered by the USDA Secretary.
13. Other activities that the secretary, in consultation with the Advisory Council, determines to be appropriate.

Presumably in preparing carbon market protocols for measurement and verification, USDA will prepare protocols for all of these activities. While nothing in the act would make the USDA protocols mandatory in U.S. voluntary carbon markets, one would expect them to be very influential. In addition, the extent to which this wide range of agricultural activities have been used to generate carbon credits in the past would likely be analyzed in the USDA carbon market study.

Another USDA action which would greatly enhance carbon market transparency under the act is the creation of a USDA website where certified technical assistance providers and third-party verifiers would be listed. This electronic list would likely be the first stop for most producers wishing to participate in U.S. carbon markets. This would make it likely that many if not most ag carbon market consultants and companies would become certified if only to be included on the online USDA carbon market list.

The act has producer protection requirements that certified technical assistance providers and third-party verifiers would — “to the maximum extent feasible” — be required to follow. The providers and verifiers would be required to act in good faith, and to provide realistic estimates of costs and revenues relating to carbon saving activities and verification. Technical assistance providers would, in addition, be required to ensure — “to the maximum extent feasible” — that farmers and ranchers receive a fair distribution of revenues from the sale of ag carbon credits. In addition, the act does not authorize USDA to require a producer to participate in a transaction or project facilitated by a certified provider or verifier.

While S. 1251 has passed the Senate, the House of Representatives has yet to act on it. Politically, the bill has an uphill political journey in the House because many Democrats are convinced that the whole concept of carbon credits detracts from actually reducing carbon emissions in the energy, transportation and industrial sectors. Under this view, if carbon credits allow emitters of GHG pollution to continue those emissions, that dynamic postpones moving to a cleaner energy system. On the other hand, many environmental and conservation groups support S. 1251, so all is not lost. But likely opposition from some Democrats could slow its enactment.

S. 1251 does not authorize USDA or the federal government to regulate voluntary carbon markets, does not restrict who farmers or ranchers may work with when participating in carbon markets and does not require carbon markets to become more farmer friendly. Rather, the act would, if enacted into law:

1. Establish voluntary USDA carbon saving measurement and verification protocols.
2. Establish voluntary USDA certification requirements for entities (a) wishing to assist producers in participating in carbon markets and (b) providing measurement and verification of carbon savings.
3. Establish a USDA website listing certified technical assistance providers and third-party verifiers.
4. Establishing fair producer treatment requirements for certified technical assistance providers and third-party verifiers.

At a minimum, the act will provide much greater transparency for producers interested in participating in carbon markets. Through the regulation of certified providers and verifiers and promulgation of carbon saving protocols, the act additionally seeks to make the U.S. carbon markets fairer to producers and easier for producers to understand. If we are truly in an “all hands on deck” fight against global warming, we

need S. 1251 or something very much like it to encourage increased soil carbon storage as part of our effort to reach US net zero emissions by 2050.

Resources

There are several popular analyses of S. 1251 available, but none are in depth. Those wishing additional information on the Growing Climate Solutions Act will need to consult the actual text of S. 1251. Crespi & Tidgren (2021) do present a more detailed argument about why something like S. 1251 is needed to establish a vibrant ag carbon market.

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<https://agecon.unl.edu/ag-carbon-credits>

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<https://farm.unl.edu/policy-legal-finance/ag-carbon-offsets-and-carbon-bank/04022021-0956>

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<https://www.extension.iastate.edu/agdm/crops/pdf/a1-76.pdf>

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Cite this work:

Aiken, J.D. "The Growing Climate Solutions Act of 2021: What it Could Mean for USDA, Farmers and Ranchers" *CAP Series* 21-0802, Center for Agricultural Profitability, University of Nebraska-Lincoln, Aug. 4, 2021.