WHAT ARE CARBON CREDITS?

Since plants use carbon dioxide (CO_2) during the photosynthetic process, it is obvious that they are sequestering carbon from the atmosphere. However, when these plants die, they begin to decay and their sequestered carbon is released back into the air. Thus, farming that involves the growing of crops is considered a major source of carbon emissions. That is why there is increased interest in promoting farming practices that sequester carbon in the soil so that it is not released back into the air.

Carbon farming is a term used to describe carbon as a crop similar to other crops that farmers produce. Thus, agricultural practices that increase carbon sequestration in the soil are being promoted so that a farm's carbon sequestration can be turned into cash from the sale of carbon credits.

A soil carbon credit is a certificate that represents one metric ton of CO_2 equivalent that is either not emitted into the atmosphere or is removed from the atmosphere as the result of a carbon reduction practice. Carbon credits are a form of exchange that are used to offset CO_2 emissions under "Cap and Trade" guidelines. Simply stated, entities responsible for emitting CO_2 must reduce their emissions (cap) or pay others such as farmers who are removing CO_2 from the air (trade).

Carbon markets consist of a supply that is created by entities who develop projects or adopt practices that will reduce or avoid carbon emissions. These projects and/or practices are certified by an independent third party that validates the methodology that is used or the practices that are adopted. Financial value comes about when carbon credits are sold to entities that use them to offset their carbon emissions. Buyers purchase the certified credits in order to claim them toward a climate target. Carbon prices, like those of other commodities, are subject to market forces.

The carbon market creates a new revenue source for farmers. Entities can buy carbon credits from farmers (usually through a broker) for about $15-20/ton of carbon to offset their own emissions. This provides farmers a financial incentive to transition to conservation farming practices such as planting cover crops, converting to no-till or reduced tillage, and/or using more diversified crop rotations that will sequester more carbon in the soil. Thus, the conservation practices that generate carbon credits can provide revenue to farmers that is in addition to the potential financial gains from increased crop yields, lowered production costs, and improved soil health that arise from the adoption of those conservation practices.

The soy checkoff supported the compilation of the USB Carbon Toolbox to help farmers explore the carbon market topic. The subjects covered in this resource are "Introduction to Carbon", "Agricultural Carbon Market Programs", "Farming Practices", "Public Resources", and "Legal Considerations". Of particular interest to farmers who are interested in exploring carbon market opportunities are the sections on "Introduction to Carbon", "Agricultural Carbon Market Programs", and "Farming Practices". This toolbox resource is likely the most up-to-date source for information about the carbon market and how it works, and also likely will be updated as new information and programs become available. Carboncredits.com has produced an article titled "What are Carbon Credits in Agriculture?" that is also an excellent source of information about the carbon credit topic.

Producers who have already adopted conservation farming practices that may qualify for carbon credit payments are encouraged to explore this new revenue opportunity. Those producers who are not using conservation farming practices but may in the future are encouraged to explore how their transitioning to conservation production methods may qualify them for the additional revenue provided by the carbon market.

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