



A Farmer's Carbon Market

As the government considers a mandatory carbon offset system, farmers may be able to profit from carbon credits.

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Courtesy Stock.XCHNG

No-till farmers and landowners with trees can take advantage of carbon-offset credits.

As the United States puts more of its energy into green practices, trading carbon credits from farmland may play a particularly important role in the lives of farmers.

When carbon is emitted into the atmosphere by vehicles or other means, it can be absorbed and stored by trees and other plants and might eventually wind up in the soil as organic matter. No-till fields store carbon in the soil in the form of organic matter, which can be sold by farmers, providing them with an additional source of income.

"Carbon credits are currently a voluntarily method used by organizations that want to offset their carbon emissions," says Lenny Farlee, a forestry specialist at the Purdue Extension. "But it also creates an opportunity for farmers that may have no-till fields or landowners who replant forest trees."

Carbon-offset credits are sold through the Chicago Climate Exchange, which operates like a stock exchange. Carbon is typically offset by agriculture methane capture, no-till farming, grasslands and planting trees.

The CCX will accept a minimum of 100 tons of carbon at a time. Most farmers or landowners sell credits through an aggregator, comparable to a stock broker, who will combine multiple landowners' credits together.

"An aggregator will lump several accounts together until it reaches 100 tons or more and sell the carbon to the CCX," Farlee says. "This is really the easiest solution for farmers and landowners because some people do not own enough land to sell 100 tons of carbon, and the aggregator can handle most of the administrative work associated with selling the credits."

Carbon from grasslands and no-till farming is sold to the CCX at a fixed rate per acre. Carbon from trees is sold at a fixed rate based on tree species, age of the plant and the region where it's located.

"Two years ago, the market for carbon offsets was [as high as] \$7.50 a ton, but because of the economy and uncertainty about the future structure of carbon markets, it is 10 cents a ton today," Farlee says.

As the voluntary program becomes more popular, the federal government is debating whether to make reduction of carbon emissions a mandatory system.

"There have been legislative proposals in place for about a year," Farlee says. "Part of the debate is over making the carbon emissions reduction system a carbon tax or a market-based offset and reduction system or whether to have a mandatory reduction system at all."

Under a carbon tax, emitters might be charged based on carbon emission rates above an established threshold. If an offset market system is used, the entities emitting carbon could be allowed to buy and sell carbon offset credits based on their carbon emission reductions and offset credits to meet a required total emissions target.

"Europe has installed a mandatory carbon reduction and offset system, and the price per ton of carbon offset credits has been between \$20 and \$35 a ton," Farlee says. "It is hard to predict what the future will bring here in the United States in terms of legislation related to reduction of greenhouse gas emissions."

Farlee advises farmers and landowners to wait until the proposal is finalized before they sell their carbon because the market is depressed at this time.