



# Carbon Offsets for the Oklahoma Landowner

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## Introduction

The state of Oklahoma is making it easier for landowners to get compensation for reducing their greenhouse gas output. In 2008, the state began a program that facilitates the creation and trading of "carbon offsets" that will generate income for some Oklahoma landowners. Currently, the profit potential from these offsets is small, but real; and the offsets come with strings attached. Landowners will need to be careful when signing carbon offset contracts. However, despite the pitfalls, carbon offsets are one additional income source landowners should consider. This fact sheet provides background information on carbon offsets and the new state program.

## What is a Carbon Offset?

A carbon offset is an emissions credit (also known as a "carbon credit") earned by eligible projects that sequester, destroy or displace greenhouse gas (GHG) emissions. An offset represents a reduction in the amount of Carbon Dioxide (CO<sub>2</sub>) that is released into the atmosphere. Any activity that releases carbon (e.g., burning fossil fuels) increases the amount of greenhouse gases in the atmosphere. Likewise, some activities reduce CO<sub>2</sub> emissions. Carbon can be "sequestered," or stored, in vegetation, soil, and underground. For example, trees draw CO<sub>2</sub> from the air and store carbon in their trunks, roots, and soil. Increasing the number of trees on your property should cause a reduction in atmospheric CO<sub>2</sub>. Similarly, grasslands and soils under no-till agriculture store more carbon than degraded lands or soils under conventional tillage. Carbon can also be stored deep underground in geologic formations.

## Why is this Important?

Growing international concern about climate change has led companies across the U.S. to reduce or offset their greenhouse gas emissions. One popular way to reduce emissions is by purchasing carbon offsets. Like many other commodities, offsets can be traded on an exchange – the Chicago Climate Exchange (CCX) in the U.S. The offsets are traded only in large bundles (more than 10,000 metric tons per year), so "aggregators" bundle together the offsets from numerous landowners to sell them through CCX. In special cases, companies will also buy carbon offsets directly from aggregators rather than from the CCX.

## How Do I Create an Offset to Sell?

In Oklahoma, certain agricultural and forest management practices remove carbon from the atmosphere and store it in vegetation and soil organic matter. By changing agricultural production practices (e.g., no-till) or planting trees and other more permanent vegetation, landowners are creating carbon offsets. The easiest way a landowner can get paid for their offsets is to contract with an aggregator to sell them. Carbon contracts are agreements between landowners and aggregators. They typically do the following:

- Specify what specific actions the landowner will take to reduce carbon emissions;
- Give the aggregator rights to the carbon sequestered or CO<sub>2</sub> emissions reduced by the landowner;
- Determine how the aggregator and landowner will split the revenue from carbon offset sales. The split is usually 90 percent to the landowner, 10 percent to the aggregator; and
- Indicate how long the landowner must maintain the contracted changes. Contracts usually run for five to seven years, but they can be much longer. For example, Ducks Unlimited has entered into 99-year-long agreements in North Dakota that require permanent habitat restoration in exchange for carbon offset payments.

According to the CCX, only one CCX approved aggregator – Farmers Union – currently operates in Oklahoma. They have an informative website ([www.carboncredit.ndfu.org](http://www.carboncredit.ndfu.org)), even including a payment calculator for no-till, rangeland, and seeded grass (e.g., [www.carboncredit.ndfu.org/4dlink/4dcgi/carbonestimator/NoTill](http://www.carboncredit.ndfu.org/4dlink/4dcgi/carbonestimator/NoTill)). Aggregators operating in neighboring states include Agragate ([www.agragate.com](http://www.agragate.com)), Delta Carbon ([www.deltacarbon.org](http://www.deltacarbon.org)), and the Iowa Farm Bureau ([www.iowafarmbureau.com](http://www.iowafarmbureau.com)). Some aggregators offer different contract length and payment options to the landowner. For example, the Oklahoma Carbon Initiative (OCI) will function as the aggregator arm of the Oklahoma Association of Conservation Districts (OACD). They offer flexible contract lengths and will work with landowners to achieve carbon offset sales for some practices not eligible for CCX trading.

For the offsets to have value to purchasers, "verifiers" make sure that the offsets are actually tied to reductions in CO<sub>2</sub>. All CCX projects are verified each year. Most of these are "desk audits" that ask landowners to confirm that they are fulfilling contract terms, but about 10 percent of projects are randomly selected for more exhaustive in-field verifica-

tion. When offsets are sold directly to companies rather than through the CCX, other verification rules may apply.

## Limits to Chicago Climate Exchange Eligibility

The CCX only accepts offsets related to certain carbon sequestration methods, mostly from agriculture. These are conservation farming (e.g., no-till or low-till practices) on lands not previously using these methods, seeded grass with up to one cutting per year allowed, tree plantings, native rangeland protection or restoration (only available to Western Oklahoma), and anaerobic methane digesters. See the Farmers Union ([www.carboncredit.ndfu.org/](http://www.carboncredit.ndfu.org/)) or CCX ([www.chicagoclimatex.com/content.jsf?id=781](http://www.chicagoclimatex.com/content.jsf?id=781)) for more information. Because the CCX only allows trading of offsets generated by very specific types of practices, some companies are willing to buy offsets directly from aggregators rather than through the CCX. In 2008, the Oklahoma Carbon Initiative developed a program to sell agricultural carbon offsets directly to companies who want to offset their emissions.

## The Oklahoma Carbon Sequestration Certification Program

In July 2008, the Oklahoma Conservation Commission (OCC) initiated the Carbon Sequestration Certification Program to help landowners take advantage of carbon market opportunities. Under the voluntary program:

- The OCC will certify aggregators and verifiers operating in Oklahoma, meaning they have the appropriate insurance, experience, and can provide other assurances that help protect landowners selling offsets.
- The OCC will verify carbon offsets certified by the program.
- To participate in the program, landowners will need to contract with a state approved aggregator.
- The OCC will issue certificates of "State Approved Carbon Offset" for offsets that pass verification under the program.

The program will not be widely available throughout Oklahoma until 2009, but a pilot program began in 2008 in the North Canadian River Watershed involving portions of Dewey, Blaine, and Canadian Counties. Eligible landowners in this area are contracting with OACD to receive payments for their carbon offsets. The offsets are being purchased by Western Farmers Electric Cooperative, a partner in the pilot program, for \$3.50 per metric ton. This amounts to \$100,000 in total.

## What Do Carbon Offsets Mean for Oklahoma Farmers and Ranchers?

Landowners may be able to receive carbon offset payments if they are willing to or are already following a land management or conservation plan that reduces CO<sub>2</sub> emissions, and are willing to contract with an aggregator. The amount landowners receive for their offsets will depend on market

**Table 1. Expected Carbon Offset Revenues for Oklahoma Landowners.**

|                                       | Revenue per acre per year |                       |                       |
|---------------------------------------|---------------------------|-----------------------|-----------------------|
|                                       | Carbon offsets per acre   | \$7.00 per metric ton | \$3.40 per metric ton |
| No-till                               | 0.40                      | \$2.80                | \$1.36                |
| Seeded grasses (except SW Okla.)      | 1.00                      | \$7.00                | \$3.40                |
| Seeded grasses (SW Okla.)             | 0.40                      | \$2.80                | \$1.36                |
| Trees                                 | 2.25                      | \$15.75               | \$7.65                |
| Protecting native rangeland (W Okla.) | 0.20                      | \$1.40                | \$0.68                |
| Restoring native rangeland (W Okla.)  | 0.52                      | \$3.64                | \$1.40                |

prices. Table 1 shows expected revenues at the 2008 peak CCX price (\$7.00 per metric ton) and September 2, 2008 price (\$3.40 per metric ton). Prices for carbon offsets depend on demand and supply. Prices may rise in the future as large cities make agreements to significantly reduce their GHG output. For example, in 2007, Tulsa became the 500<sup>th</sup> such city to sign the U.S. Mayors Climate Protection Agreement. Also, federal legislation may require power plants to offset a large portion of the greenhouse gases that they emit.

Landowners who are interested in learning more about the state program should contact their local county Extension office or the Oklahoma Conservation Commission (phone: 405-522-4739).

## Summary

Carbon offsets are a potential income source for Oklahoma landowners who take steps to reduce their impact on global climate change. Offsets can be sold to aggregators, who collect the offsets from several landowners before selling them on the Chicago Climate Exchange or directly to interested companies. However, to sell offsets, landowners must sign a legally-binding contract with an aggregator that changes or limits the way their land can be used. This is a serious concern for some landowners. Offsets also have a limited scope – they are only available for eligible land management practices. Despite the limitations, some landowners may find that carbon offsets are a welcome additional income source.

### Helpful websites:

Oklahoma Conservation Commission, [www.ok.gov/okcc/CarbonProgram/](http://www.ok.gov/okcc/CarbonProgram/)

National Farmers Union, [www.carboncredit.ndfu.org](http://www.carboncredit.ndfu.org)

Agragate, [www.agragate.com](http://www.agragate.com)

Delta Carbon, [www.deltacarbon.org](http://www.deltacarbon.org)

Iowa Farm Bureau, <http://www.iowafarmbureau.com/special/carbon/default.aspx>

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