

Navigating Carbon Markets:

A guide for Florida ranchers and landowners

Many Florida ranchers have been approached by organizations that buy and sell carbon (or greenhouse gas) credits. Despite their increasing popularity and great potential, carbon markets are still in development and remain a “Wild West”.

What is a carbon market?

A **carbon market** is a trading system where credits for carbon stored in soil, water, air, or animals are sold and bought.

A **carbon credit** is like a permit that allows the buyer (usually commercial entities like manufacturers or corporations) to emit one metric ton of carbon dioxide, which will be **offset** by the seller (in this case, you, the rancher) through either:

1. **Avoided emissions**, which means that the seller reduces the amount of carbon their operation emits, for example through cattle feed additives that reduce methane, or;
2. **Increased sequestration**, which involves trapping carbon in plants or the soil, for example through restoration of tree cover in deforested areas.

This, in theory, reduces the buyer’s **carbon footprint**, or the total amount of carbon in the atmosphere that they are responsible for.

The goal of carbon markets is to reduce greenhouse gases (like carbon dioxide or methane) in the atmosphere. The organizations who might be approaching you about carbon markets serve as middlemen between buyers and sellers.

Carbon and ranches

Florida ranchers are some of the original conservationists in our state, managing wide tracts of land since the 1500s and protecting them from development.

Compared to developed areas, grazing lands are important for reducing carbon in the atmosphere and for protecting biodiversity. In fact, agriculture and forestry are the economic sectors with the greatest potential to remove carbon from the air and store it in plants and the soil.

Ranchers will usually sign on for a contract period, which can range from 20-30 years or longer, with the option to renew. During that period, the rancher implements certain practices to reduce emissions or to remove carbon from the atmosphere, store it in soil, plants, or livestock, and protect that stored carbon. These activities must usually be **over and beyond** what the rancher is already doing (see section on “**additionality**” below).

Currently, carbon market payments are often not enough to cover the cost of implementing additional sustainable practices, but they can sometimes be stacked with government conservation programs, such as [easements](#).

Although some carbon markets encourage ranchers to use carbon storage techniques, like those listed below, in cultivated (“improved”) pastures, there is still scientific uncertainty about how well these techniques actually work to store carbon:

1. **Grazing management**, such as using rotational stocking and changing stocking rate, which may improve vegetation condition and soil carbon
2. **Fertilizer addition**, which can produce additional biomass
3. **Forage diversification**, because adding a diversity of plants can increase carbon sequestration and improve forage quality.

What makes a credible, high-quality carbon market?

Additionality:

Additionality means that payments result in **new** avoided emissions or carbon sequestration, **beyond what would have already occurred without the payment**. Were you already doing, or would you have done without payment, what you’re being offered money for? If so, there’s little benefit to global greenhouse gas reduction, buyers shouldn’t claim they’ve taken action to mitigate their emissions, and the credits are of questionable quality.

Permanence:

For carbon credits to benefit the climate, they need to involve **long-term reductions** in emissions or carbon sequestration. To have a meaningful impact, greenhouse gases need to be stored for the long term. Contract lengths of less than 10 years are virtually meaningless, and ideally contracts should span at least several decades. While longer contracts are almost certainly always better, there is no agreed upon standard for the number of years that equates to “permanent” emission reductions. Moreover, intentional or not, returning contracted carbon to the atmosphere undoes progress towards offsetting emissions. Wildfires or reversion of ranching practices to pre-contract activities can release stored carbon.

Stocks vs. Sequestration:

Stocks are the carbon already held in soil, vegetation, animals, or other parts of the ecosystem. Stocks should only be paid for once, and only if the implementation of the carbon market avoids losing the stock. Where there is no threat that stocks will be lost without the carbon market, there is no credit to be sold.

Sequestration, on the other hand, is the carbon added to the stock over time (like in the form of the growth of new trees). Sequestration credits can be sold annually.

- Are you being paid every year for what you sequester? If so, you should be sequestering new carbon every year. However, some ecosystems are carbon-saturated, and should only be eligible for sale of avoided emissions.

Leakage

Leakage is when credited reductions in greenhouse gas emissions are countered by an increase of emissions elsewhere. This undermines emission reduction efforts. For example, if a rancher is paid to store carbon in one pasture, leakage would take place if it led to intensified carbon-emitting practices in another part of the property instead. Credible carbon sales lead to total reductions in greenhouse gas emissions. Therefore, ranchers should do their best to ensure that selling carbon credits for part of their property does not deliberately or inadvertently result in added emissions elsewhere in their operation.

Why should you care if a Carbon market is credible?

Ethics:

Like all of the other products you're proud to sell, it's important to have confidence in the quality and legitimacy of your carbon credits.

Longevity and predictability:

If you sign on for a carbon market that is not credible, the market may collapse, leaving you without that income. The price paid to sellers in some early carbon markets around the world crashed as reputational risks emerged.

What to ask if you're approached by carbon market representatives

- How long are the contracts?
- Would I be paid every year even if I don't sequester new carbon?
- Is there an up-front fee to have my land assessed for carbon storage potential?
- What do I need to do over and above what I'm already doing now, and for how long, to qualify for selling carbon credits?
- How will my carbon credits be quantified, monitored, and verified?
- Could the value of my carbon credits change (either decrease or increase) over the course of the contract, as carbon markets go up and down?
- Who will determine whether I get paid or not in case carbon markets change?
- What happens if some of my stored carbon is released, for example by a wildfire?
- What's an example of an agricultural operation in Florida that has been a success story under your program? Can you send me references that I can contact?

Bottom Line

Agricultural carbon markets are new and changing quickly. The rules aren't clear yet, causing confusion. As the markets grow, agricultural carbon credits should become more reliable, improving credit quality, buyer trust, and global benefits. Also, more companies might want to cut emissions in the future, which could raise prices as demand grows. For now, we recommend **using caution** before signing a contract!