

SOIL CARBON 101

*DETERMINING IF SOIL CARBON STORAGE
MARKETS ARE RIGHT FOR YOU*

PUBLISHED MARCH 2022 IN PARTNERSHIP WITH:



WHY CARBON?

The United States is losing agricultural lands at an unsustainable rate. Our greatest hope for protecting these landscapes is responsible land stewardship by farmers and ranchers.

Farmers and ranchers implement land management strategies that may improve soil health, strengthen plant communities that sequester soil carbon, improve water quality and quantity, increase biodiversity, and more. Companies are paying landowners for these services in exchange for credits that demonstrate the companies' role in offsetting their carbon emissions, protecting ecosystems and supporting a healthy climate. Today, the most prevalent credits relate to soil carbon, with multiple entities offering payments per metric ton of carbon sequestered.

GETTING STARTED

The commitment of your carbon or other ecosystem service requires careful consideration and the right partner-purchaser. Because contracts may extend for many years and may impact your agricultural operations, selecting a partner-purchaser requires the same level of consideration as acquiring or leasing new acreage. It is recommended that you consult an attorney with experience with carbon contracts before entering such agreements.

How do you select the right company to partner with? This guide provides useful questions to assist landowners in identifying partners and contract terms that best align with their personal and operational goals.

COMMITMENT

Consider the length and scope of the soil carbon storage contract. Landowners must determine if these obligations fit their operation.

- Am I being asked to work toward storing a specific quantity of carbon?
- Am I being asked to implement new practices or protocols to participate in the program?
- How long is my commitment?
- Do obligations extend beyond the final payment?
- If soil carbon storage levels are met in advance of the contractual date, can the contract be ended early?
- If I exceed contracted storage levels, will I be paid for additional tons of carbon sequestered?

COMPENSATION

One of the greatest challenges facing carbon markets today is pricing. This is due in part to the relatively new nature of these carbon markets and lack of understanding of the demand for and value of carbon in the industry. Landowners should consider how markets will price carbon and how this pricing may compare to future price discoveries.

- Are you being compensated for implementation of practices or for actual carbon sequestered?
- How is the carbon being priced? Is the price based on metric tons of carbon sequestered or on net CO₂ equivalents calculated?
- Will your payment vary based on market value, or is it a fixed price at signing?
- Are there penalties or other costs to you if measured/estimated carbon is less than any advanced payments?
- How could weather or other environmental conditions (e.g., drought, flood, wildfire) impact carbon sequestration and any associated payments?

COSTS

Landowners should weigh compensation from soil carbon storage against all potential costs.

- Will the marketplace pay my legal fees incurred while negotiating our contract and any related restrictions?
- Am I responsible for costs of implementing new practices?
- Who is responsible for verification and measurement costs?
- If the contract is terminated early, will prior advances, bonuses and payments be subject to repayment?
- If the contract is terminated early, will landowner expenses associated with conservation practices be reimbursed?

MEASUREMENT AND VERIFICATION

An important element of the contract is how carbon storage will be quantified. This factor may contribute to what entities will purchase credits from the market. Science-based, reputable protocols will attract more buyers, providing added certainty to landowners for payments down the road.

- How and when will carbon be measured?
- Who will conduct measurement and verification?
- What processes are in place to audit or appeal measurement and verification?
- Who owns any data collected?
- Will I be notified before someone from the partner-purchaser visits my property?

RESTRICTIONS

Some carbon markets may specify prohibited practices or restrict your ability to participate in government or other programs. Landowners should carefully review any restrictions to ensure that they will not have a negative impact on current or future operations on the property.

- Can I sell or lease land enrolled in an active carbon contract? As a lessee, am I eligible to participate?
- Does this contract potentially interfere with oil and gas and/or wind-energy leases or production rights?
- Can I stack either private or government payments from conservation or cost-share programs?
- Are any land management practices restricted (e.g., mechanical brush control, spraying, prescribed burning, etc.)?
- Are other ecosystem services beyond carbon sequestration (e.g., water quality or quantity, biodiversity, etc.) covered by the agreement?
- Am I able to use my property for purposes outside of production agriculture (e.g., agritourism, hunting), and if yes, may these uses continue throughout the contract?

LEGAL CONSIDERATIONS

Like any written contract, carbon contracts will generally dictate how the parties will handle disputes and allocate liability.

- Indemnification provisions have the potential to shift liability and costs from one party to another. Are indemnification provisions mutual? Are you adequately protected, or do the provisions require you to cover the liability of the partner-purchaser?
- Could you be held liable for unintended environmental issues associated with spraying, applying fertilizer or nutrient runoff?
- Will partner-purchaser parties visiting the ranch carry liability insurance?
- If any legal disputes arise, in what jurisdiction will the suit be filed?

ON THE HORIZON

Soil carbon is one ecosystem service derived from working lands, but there are many more. Landowners may see new markets that leverage water, biodiversity, and other ecosystem services as consumer values emerge. Just like carbon storage markets, landowners must weigh the commitments, costs, restrictions, and other factors to determine how these markets align with their individual operation.

