Chasing Carbon - Agriculture's Options

NATIONAL CORN GROWERS ASSOCIATION

Carbon Intensity is causing a lot of buzz within commodity markets. While it still involves carbon, it's important for farmers to not confuse Carbon Intensity (CI) scores with the carbon programs that have risen to prominence in the last decade. For farmers, a CI score quantifies the carbon footprint an operation accumulates while producing and delivering a crop to an end market. The CI score is often linked to renewable fuel production and some ethanol plants may use the farmers' score to qualify for tax credits set to roll out in January 2025.*

What is the difference between Carbon Market Programs and Carbon Intensity (CI)* Scores?

From the purpose of the company to the logistics of payment, there are a several differences between Carbon Market Programs and CI Scores. Here's a high-level view of the differences from the farmers' point of view:

Carbon Programs

- Designed by companies to monetize carbon from farms for those looking to purchase carbon credits.
- Reimburses farmers for practices that help to capturing carbon on farms.
- Carbon reductions are then sold to companies looking to offset their carbon emissions to reduce their footprint.
- Typically requires new practices to be implemented on-farm (convert to no-till from conventional tillage).
- The program is linked to the acre.
- Limited availability.
- Most require a multi-year contract.

Carbon Intensity (CI) Scores

- May be linked to a tax credit developed through the Department of Energy and IRS and set to measure the carbon intensity of an entire renewable energy supply chain.
- It's anticipated that some Ethanol, Biodiesel, Renewable Diesel and Sustainable Aviation Fuel plants will pay farmers directly for lower CI scores.
- May also be recognized by feed mills or other companies in the supply chain.
- Farmers get credit for existing and new practices on their farm, every year.
- This score is attached to the grain itself.
- Nationally recognized score.

*This information is provided as general guidance based on market knowledge as of August 2024. Information and additional detail subject to change based on a specific market, ethanol plant, or tax credit program.

What are the details of each?

There are quite a few differences between carbon programs and CI scores, we recommend looking over individual contracts. However, here are some key things to note:

Carbon Programs

- Multi-year contracts with required acreage enrollment.
- Verified through the company running the program.
- Linked to farming practices, not the grain itself.
- Farmers market grain as they would any other bushel.
- New practices are required to participate in most programs (e.g. convert to no-till from conventional tillage).
- Farming practices vary by program including: cover crops, no-till, strip till, crop rotation, grazing.

Carbon Intensity (CI) Scores

- Evaluated every year, for every field entered.
- Linked to the bushels from every entered and verified field.
- Verified by an approved third-party which may include: certified crop advisor (CCA) or technical service provider.
- May be negotiated and sold in coordination with participating renewable fuel plants, feed mills or other companies sourcing corn as an ingredient.
- Farming practices evaluated: input use, tillage practices, fertilizer use, crop rotations.
- Existing practices qualify in the score calculation.

What is the added revenue potential for each?

There isn't an easy answer to the revenue question as it varies heavily per agreement. Farmers should understand their commitments and recognize, in most situations, a carbon reducing asset (CI score or Carbon Program) can only be counted on each acre once per contract term.

Here are some things to consider when calculating your revenue potential:

Carbon Programs

- Payout can be flat or based on carbon credit trading.
- New practices required for participation may require additional equipment purchases
- There shouldn't be any added delivery costs.
- Farmer may have additional verification costs through soil testing or outlined protocols.

Carbon Intensity (CI) Scores

- Payout is negotiated between the plant and the farmer on a per bushel basis.
- New practices may require additional equipment.
- Additional delivery costs could come into play based on relative location to a participating biofuel plant.
- Farmer may have costs associated with initial scoring and verification.
- Farmer may be a liable party and bear the financial burden in an audit.