

TALKING TO FARMERS ABOUT MARKET OPPORTUNITIES IN A LOW-CARBON ECONOMY
August 3, 2007 (AFT CAE)

The Iowa Listening Session

On July 18, 2007, American Farmland Trust (AFT), Natural Resources Defense Council (NRDC) and Farm Foundation held a listening session with 27 Iowa farmers to talk about their potential role in helping the United States evolve into a low carbon economy. The Iowa Farm Bureau Federation (IFBF) hosted the meeting in West Des Moines with Dr. Kitty Smith, Administrator of the U.S. Department of Agriculture's Economic Research Service, facilitating. IFBF started working with Chicago Climate Exchange in 2003 to collect carbon credits from farmers and recently formed a new company, AgraGate, to continue these efforts.

Background

The emission of carbon dioxide and other heat-trapping gases within the United States and across the globe have already or will soon go from being voluntarily managed to being regulated by national and international laws. United States power companies participating in the Northeast's Regional Greenhouse Gas Initiative, industries regulated under California's Global Warming Solutions Act and countries participating in the Kyoto Protocol are already under a mandatory program. The U.S. Supreme Court recently ruled carbon dioxide a pollutant under the Clean Air Act and instructed EPA to regulate them accordingly. And Congress is considering bills to control greenhouse gas emissions (GHG), most of which are multi-sector and include provisions for a national limit, long-term declines and the development of a carbon trading system for the lowest cost reductions. The economic incentives for farmers and landowners will increase as a low-carbon economy puts a market value on land-management practices that store carbon, reduce GHG emissions and/or displace emissions. Such practices include:

- Producing crops that can be converted to biofuels to displace high carbon fossil fuels;
- Providing sites for wind turbines and photovoltaic arrays that generate large amounts of clean power;
- Turning waste into power through biomass combustion and methane bio-digestion;
- Using more power-efficient production practices and purchasing power-saving equipment for farm operations; and
- Employing specific land and production management practices, including:
 - Sequestering carbon in soils (such as no-till farming);
 - Sequestering carbon in biomass (cultivation of new forests, vegetative buffers, grasslands or delays in harvesting forests);
 - Reducing methane emissions through changes in the practices used to process and dispose of manure; and
 - Reducing emissions of methane and nitrous oxide through changes in farming practices.

All of the above present enormous opportunities for American agriculture. In the July 18th Iowa listening session, we focused on the last bullet point: *Employing specific land and production management practices to reduce GHG emissions.*

The Buyers¹

In 2006, the global voluntary carbon market purchased 23.7 million tons of carbon dioxide equivalent to about \$91 million, with private companies the largest buyers (by volume). Contrary to expectations, they were not driven by the expectation of future regulations. According to buyers surveyed, their main motivations for purchasing carbon offsets were corporate social responsibility and “walking the talk” in terms of environmental stewardship. Overall, three types of projects dominated the voluntary carbon market: forestry sequestration (36 percent); renewable energy (33 percent) and industrial gases (30 percent). Land and production management practices to reduce GHG emissions fell in a modest 3 percent “other” category. Buyers in the voluntary market sought carbon offset programs with a range of attributes, among them additionality (the demonstrable ability to reduce emissions beyond levels that would otherwise have occurred), general environmental benefits, price, independent verification, transparent accounting and reporting procedures.

Hearing from Potential Sellers in Iowa

Farm organizations, commodity groups and producers working with AFT identified potential workshop participants—opinion leaders within the Iowa farm community who were either participating in the voluntary carbon market or skeptics not yet engaged. Of the 50 or so farmers invited, 27 attended and shared their opinions. Of these, a majority engaged in significant on-farm conservation and farmed more than the state average-sized farm of 360 acres. Seventy-five percent of the participants grew corn and soybeans, 15 percent also grew hay, about 25 percent raised cattle, 20 percent raised other livestock (sheep, poultry or hogs) and 10 percent were involved in organic production of some kind. A mix of crops and/or livestock was the norm.

At the end of the session, when questioned about private markets for ecosystem services, the farmers and ranchers told us they were “*grudgingly engaged*” and “*grudgingly enthusiastic*” about selling carbon offsets and other ecosystem services. One producer concluded, “*Agriculture will be in a carbon constrained world – this is one way we can share costs and spread societal benefits. Agriculture is a system and it is involved.*” But another pointed out that the ability of our land use management practices to sequester carbon pales in comparison to carbon that could be sequestered by tropical rain forests and the biggest value to U.S. agriculture is likely to be on the energy side (wind, solar, biomass and methane-capture). The challenge going forward, summarized by another producer, is to keep it simple, easy to understand, transparent, easy to spot across the fence and workable for rural America.

¹ Hamilton, Katherine, Ricardo Bayon, Guy Turner and Douglas Higgins. 2007. *State of the Voluntary Carbon Market 2007: Picking Up Steam*. The Katoomba Group’s Ecosystem Marketplace.

In response to the carbon market, we heard:

Factors Influencing Market Participation

- Conceptually, it may help to consider carbon a “commodity” like any other crop – to be traded and sold.
- Market participation by farmers is likely to be a function of:
 - Trust in the buyer (and the technical assistance provider);
 - Simplicity;
 - Whether conservation tillage, pastures, newly planted trees, etc. work at your location;
 - Consistency in reward structure; and
 - Relative net returns – “a standard business model applies.”
- Price uncertainty currently constrains participation in voluntary markets.
- Some producers felt that carbon would need to be at \$10 to \$20/acre with minimal paperwork for them to be involved. Marginal and rolling lands were most likely to be enrolled.
- Other producers felt that if carbon trading takes off, values could be huge.
- Early verification of project success will be required for more people to join in the project. Failure by even a single farmer would be a huge disincentive for new participants.
- Private markets are favored over government-run markets. Government’s role should be confined to oversight.
- Farmers’ pride in their conservation ethic affects their openness to alternative programs/market developments.
- A global market for carbon would make producers more confident that they are facing a level playing field.
- Ownership of the land is an issue (land tenure)—almost 60 percent of the farmland in Iowa and other Midwestern states is leased, not owned and landowners and leasing arrangements may determine what “commodities” are sold and how long contracts can be maintained.
- Landowners may respond positively to the fact that their land can benefit from practices that improve soil quality over time.
- Landowners will need to ensure that renters are implementing the practices to remain in this program. Poor land management would jeopardize continued participation in the program.

Contracts and Standards

- Contracts should be simple and limited to a page.
- Contracts should be five to 10 years (shorter for corn, soybean, longer for pastures, trees).
- Contract terms should allow an “out” for unforeseen circumstances.
- Establish high standards with built in flexibility. For example, the amount of carbon sequestered should be averaged over five years. This would allow time for corrective actions by the farmer if low crop yields one year reduce the amount of carbon in the soil.
- Farmers need to participate in program design.

- A common set of standards is necessary.

Measurements

- Use university and research test plots to estimate carbon sequestration instead of the sampling of every farm involved in the project.
- Establish attainable expectations for amount of carbon that will be sequestered by this program and make the program accessible to farmers at all levels no matter the amount of acres involved.

Technical Assistance and Verification

- Iowa producers prefer private technical service providers.
- Spot checks of practices are okay; producers expect their practices to be monitored. However, producers favor establishing a long-term average since some years are better than others for the amount of carbon that can be sequestered through conservation tillage practices.

Growing Other Crops

- Most farmers seemed very open to switching crops (from corn and soybeans) or adding a third crop providing there are financial or nutrient management advantages.
- New crops (like switch grass) have a learning curve and might require additional resources like equipment, management time, etc.

Unresolved Concerns

- Farmers struggle with the issues of “fairness” versus additionality and feel strongly that early adopters of conservation tillage and other carbon-sequestering practices should be able to sell carbon offsets. At the same time, they recognize that companies want to pay for new practices to increase the amount of carbon sequestered.
- Farmers also struggle with the idea that they may be “enablers,” letting polluting companies “off the hook” by selling their less-expensive ability to protect the environment.
- Some farmers feel that agriculture has become a “scapegoat” over ethanol production as it competes for corn and drives food prices up. They want to avoid a similar potential in the carbon market if land use practices reduce crop yields.
- The presumed capitalization of payments for sequestered carbon into land values most likely will adversely impact rents.
- Some producers are worried that agriculture will eventually be regulated.
- Producers worried that the current crop insurance system may impede ecosystem services markets by sending the wrong signals.
- If sequestering carbon becomes an unfunded mandate, these costs will be passed on to consumers.

At the end of the session, our “*grudgingly engaged*” participants unanimously supported our efforts to listen and engage agriculture in discussions about these markets. Or, as one participant succinctly put it “*Farm policy [specifically, carbon sequestration policy] should be made by people who have held an ear of corn in their hands and not by people who have only held corn in a can.*” All agreed that agriculture needs to be at the table and that ecosystem services will likely be added in the near future to the long list of commodities already produced by U.S. agriculture