What is additionality?

Featuring Scott Gerlt

Chief Economist, American Soybean Association

DJ May:

Welcome to the Decode 6 podcast, where we take your questions about carbon and ecosystem services and match them to the experts with the answers. I'm your host, DJ May. And today we're talking about additionality in carbon markets. What is additionality? Why does it matter? And what does it mean for producers?

Luckily for us, Scott Gerlt is here with the answers. Scott is the chief economist of the American Soybean Association, where he provides policy analysis and monitors markets to guide strategic organizational decisions. He also spends a ton of time thinking about how these markets and economics will impact producers. So welcome, Scott.

Scott Gerlt:

Thanks for having me, DJ. I'm glad to be here today.

DJ May:

Yeah, we'll jump right in. I'm excited to have you. So first off, what is additionality?

Scott Gerlt:

Additionality. Additionality is a new practice adopted to help offset carbon. And I think whenever we have this conversation, it's important to talk about why additionality. So let's say, DJ, that you own a factory that has greenhouse gas emissions. It's emitting carbon. Now, if you're looking to reduce that, you have a couple ways you could do that. You could somehow increase your direct emissions yourself. Maybe install scrubbers in your power plant, or find some way to use less fossil fuel. That would reduce your emissions. Or you could have those offset. So instead of reducing the emissions yourself, you could have someone else essentially sequester carbon, reduce emissions themselves or sequester carbon into the soil so that the net effect is the same. And you might want to do that, go that second route because it may be cheaper than you could do it yourself.

And sometimes there's some pushback of, well, you're just buying your way out of reducing your own emissions. But the farmer in this case that may be selling offsets has a benefit. And since your costs are lower, it means there's less cost passed through to consumers. So there's a lot of advantages to doing these offsets, but they only work if the practice is additional. So if I'm selling you an offset credit as a farmer, if it's not a new practice, if it's something I was doing already, there's really no net reduction in emissions for everybody. So the practice really only works in these offset markets if it is new, if it is additional, otherwise there's no change. So as a farmer, I have to do something different than I was doing before so that there's less carbon in the atmosphere.

DJ May:

Okay. Okay. So essentially it's this ... I'm picturing a checkbook or something. Where for the business, they want to make sure they get as close to zero with their emissions as possible. This term comes up every time you talk about carbon markets? Why is this such a big deal?

Scott Gerlt:

Yeah. It's really a huge deal, for several reasons. One is it can be expensive for a farmer to implement some of these practices. In the example I was giving, I was assuming it costs me less as a farmer to implement the practices than you as a business to just reduce your own emissions. So the expense matters quite a bit. It's not free, because it has to be a new practice. There's going to be a cost. The other reason it matters is if I'm a farmer that's been doing practices that would qualify, I have to be able to add those.

And whenever we start talking about what it means for a farmer, typically there's two practices that get talked about quite a bit. It's cover crops and it's conservation tillage, such as no-till. If we look at no-till adoption in the country, there's a fairly high adoption rate ... no-till and minimum till. And so there's already a lot of farmers doing that, and so it gets hard to have additionality. The other issue is that farmers that have been doing great practices, conservation practices for a while, may not be eligible. So it gets a little bit into an issue of fairness and equity in this. How do you reward producers that are doing the right thing?

So additionality really gets to be one of the bigger points of conversation around this entire thing in agriculture, because it's one of the sticky points, to be honest. It doesn't have necessarily an easy answer because as we were talking about before, the businesses have to have it for their carbon offset markets. But it's a very sticky issue for producers, just to be able to add new practices that are cost effective without penalizing those that have been doing good practices for a while.

DJ May:

Yeah. Well, I think too ... just as you were talking. I pictured, over time as maybe more farmers adopt these practices that fit into reducing or sequestering carbon, I mean, you just slowly make that pool smaller of people who could participate. Is that something that comes up too?

Scott Gerlt:

Yeah, absolutely. That pool will become smaller through time if farmers start participating in these markets. And that's one of the things farmers really have to consider when we talk about this. The practices at this point for carbon offset markets have to be additional. So if you're going to start participating now, that means you really can't participate later. And there's a fairly fixed pool that we're working in. And once farmers jump in that pool, they're essentially out of the ... or unable to participate for future opportunities.

So, yeah. I mean, I'm sure there's practices we can continue in the future that will help sequester more carbon. But if you adopt no-till to participate or start implementing cover crops, those acres are essentially locked in. And you can't participate later, even if the markets are paying more money later. You're generally just in the program at that point.

DJ May:

And that seems like a huge thing to consider because these markets, the programs aren't just a year or two.

Scott Gerlt:

Correct. Correct. Yeah. So not to get deep into another term we could spend a whole podcast on, but the issue of what's called permanence. Going back to our example of you being the business and me being the farmer. You're looking to lower your emissions, so it needs to be like that emission never happened. And so if I sequester carbon for you and then go release it next year, it takes away that scenario of where that carbon never happened. So these companies are generally looking for long-term contracts. Ideally it would be permanent forever, but I think everyone realizes that that's unrealistic. How can you require someone to do something 100 years from now? I mean, we're not going to be alive, the people that are signing the contracts.

And so sometimes the contracts in other non-ag markets, they're doing 100-year contracts. For ag, it varies. Typically, 10 to 20 years. There are options to pull out sooner, but you aren't going to be getting your payments necessarily. So that's the other thing to think about, this with additionality. Yeah, it has to be new and you have to commit to doing it for a while.

DJ May:

Great. Yeah. Well, that's a fantastic overview. And I'm just curious if, say I'm not a business at this point. Maybe I'm a grower, and I'm looking at these markets. I guess, what advice would you give if this comes up?

Scott Gerlt:

Yeah. There's lots of things to consider. One is, can you implement the practices, the additional practices for the amount of money being offered? There's different estimates for what it costs to adopt cover crops, but sometimes just the seed itself can be upwards of $50 per acre. Right now, a lot of the carbon offset markets are paying more, like 10 to $20 an acre. So first question is, is it cost effective? And maybe you still would look to participate, even with those margins, because you're wanting to adopt cover crops for other reasons and this is a chance that you can help offset some of that cost. But you also need to think about, how long is the contract? What requirements, what restrictions would I have on the land? What data would I need to report? Because really this entire system is built on integrity of the system. It's not easy to measure carbon, so they're relying on a lot of paperwork.

So those are some of the things I would say to start with. But there are a long list of questions out there that producers should definitely consider. Because this is not a short term thing once you sign up, and it comes with a lot of restrictions. And you won't be able to participate later, as we were talking about, if you decide to participate now. So you really want to think through this and make sure that the programs are good fits.

DJ May:

Great. Well, thank you so much, Scott. I think that's a perfect summary of what to think about when additionality comes up.

Scott Gerlt:

Well, thanks for having me, DJ. I think this is a very fascinating topic. And there's a lot of opportunities, but a lot of things to consider in this space.

DJ May:

Oh, for sure. As with everything with markets, it seems like.

Scott Gerlt:

Absolutely.

DJ May:

If you want to dig a little deeper into this concept of additionality, check out the show notes. And if you have questions about carbon and ecosystem services, come visit us at decode6.org to learn more. We'll see you there.