



WHAT'S THE BIG DEAL ABOUT ADDITIONALITY?

The key to value-based offset credits

Many members of Congress and those in the agricultural community recognize that agricultural practices can play a key role in climate change mitigation strategies. Not only can agriculture rapidly reduce our greenhouse gas (GHG) output, agricultural offsets can generate billions of dollars in revenue and lower the cost of compliance to regulated sectors.

But in order for offsets to be attractive to policymakers—and buyers in a cap and trade system—they will need to have value as greenhouse gas mitigation options. That means offsets must prove that they are increasing GHG reductions beyond what we are already doing if they are going to have value in the cap and trade marketplace.

That key concept is called **additionality**. This term refers to whether activities or offsets that result in GHG reductions or sequestration are being done in addition to what would have otherwise occurred (or **business as usual**, BAU). In a mandatory GHG carbon market, unregulated or uncapped entities, such as agriculture, would be able to sell offsets to regulated or capped entities, such as utilities. The reason that additionality is important is because it identifies projects that represent a real reduction in GHG emissions. It will be a key requirement for certifying offset credits to sell on the carbon market—and to make those offsets attractive to buyers of offsets.

To get a better understanding of how additionality could be applied on the farm, let's look at a possible case in point:

Let's assume a cap and trade bill has passed and a farmer is just starting conservation tillage on his operation in order to sell offsets on a carbon market. This farmer is clearly meeting additionality requirements and could ensure carbon reductions beyond business as usual.

However, his neighbor has used conservation tillage practices on his land for the last 30 years. That farmer's land is not likely to be storing many more greenhouse gases because the soil's carbon cycle has reached saturation. If this farmer were to sell his carbon to a utility so that utility would be able



to emit more GHGs than allowed otherwise, some would claim that the cap has been broken (or that more GHGs were emitted than allowed by law). The buyer would be emitting new carbon into the atmosphere in exchange for the carbon stored in the soils; however, the carbon was already in the ground and would be there regardless of the offset purchase or the buyer's activity. To give this carbon full offset value credit and allow a buyer's emissions to go into the atmosphere would mean that the transaction would result in a net gain in GHG emissions, more than allowed by the cap, because new or additional sequestration did not occur.

So, assuming that the marketplace and public policymakers do not wish to discriminate against **early actors** or "good actors" like the no-till farmer above, here are some other key concepts that might be paired with additionality in order to make greenhouse gas policy most effective:

- **Avoided emissions.** This type of policy would develop mechanisms where farmers may receive compensation for avoiding GHG emissions that would be generated by plowing up previously no-tilled fields or releasing methane into the air if they have methane capture systems.
- **Direct payments for conservation practices.** Under previous legislation, such as the Lieberman-Warner bill introduced in 2008, farmers would be able to tap funds for conservation friendly practices. This would allow producers who do not meet additionality requirements in an offset market to still capture value for greenhouse gas storage or mitigation on their farm.

Two differing views on determining additionality

Given that additionality is likely to be a key component of any climate policy—and the marketplace—it is important for agriculture to know the range of policy proposals.

One possible scenario is that additionality could be defined as only *activities that were undertaken with the specific intent* of reducing GHG emissions and done after a GHG cap was passed into law. Under this definition, anyone who undertook an action to reduce GHG emissions prior to the passage of climate legislation would not qualify to sell offsets since the activities were begun prior to the cap and "for other reasons" than climate mitigation. For obvious reasons, this approach to



defining additionality could exclude many existing projects and is not likely to be supported by agriculture.

Others have defined additionality as basically *anything that is not legally required*, even if reversible. This would provide maximum flexibility for the broader agriculture community to get as much activity certified as offsets as possible. However, this definition may not be accepted by those who care about the environmental integrity of offsets, including some legislators. Because offsets are exchanged as a “right to pollute,” companies buying offsets may also choose non-agricultural greenhouse gas mitigation strategies that have higher accountability for additionality for GHG reductions.

If we assume that we must maintain confidence in the integrity of offsets and promote a high price for carbon, we must also assume that it is critical for offsets to represent real, measurable reductions in GHG emissions if companies are going to buy them. So, what are other possibilities?

Other additionality options

Project-Specific Additionality

Many of the current systems in place have cobbled together a combination of factors to assess whether a project is additional as opposed to applying only the date of enactment as the deciding factor. Some systems, including the Kyoto Protocol, determine additionality on a **project-specific basis** with an all-or-nothing test. The system establishes whether a project is additional, and if it is, the system specifies a separate method for determining the baseline. The process examines if the action was voluntary or required by law, if the project was the first of its kind, and if the project would have occurred in the absence of offset revenues.

Performance Standards

Conducting additionality assessments on a project-by-project basis can be time-consuming and costly, and in some cases can make the offset investment impossible. In today’s voluntary market, **performance standards** are also used to account for additionality. Performance standards are a way of accounting for additionality as compared to a benchmark. For example, the performance



standard for electricity generation might be the average emissions rate of all electricity generators on the grid, and any kind of electricity generator whose emissions rate was lower would be deemed to be additional, regardless of whether it is business as usual.

Proportional Additionality

Creating and designing measurement plans and quantifying true land-based offsets is becoming the widely accepted practice and could be the new standard under a mandatory market. Processes such as “**proportional additionality**,” consider both the baseline and the additional carbon simultaneously. The concepts of this process are:

- Identify comparison lands that are similar to project lands in starting conditions;
- Anticipate land management practices that are likely to occur on the lands during the lifetime of the project;
- Set the project baseline as the emissions or *changes in carbon stocks* on the comparison lands that occur during the time frame of the project;
- Calculate the additionality as the proportional change in carbon stock on the project lands in comparison to the carbon stock that would have occurred anyway.

Proportional additionality would allow all participants to qualify for selling offsets no matter when they started the offset-generating practice. For example, methane digesters that are already in existence should be considered additional because the practice of using digesters as a percentage of the dairy industry as a whole is still very small. The way to include existing digesters is to apply a very small **discount** on all dairy/digester offset credits that corresponds to the amount of existing digesters in the industry. In this way, the system is accounting for “business as usual” but it is also including all those early actors who built digesters for their operations prior to the climate law.

In the end, there may be no one, perfect solution to the additionality puzzle. But, additionality policies should be designed to create significant opportunities for agriculture to engage in a wide range of climate practices—and meet the needs of a value-based offset market.



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