

## Comment to Climate Action Reserve and Verra staff on the assessment of additionality for agricultural land management projects

Thank you for taking the time to consider this comment. Both of your organizations have put in important work for the development of innovative methodologies for connecting agricultural land management (ALM) activities with the carbon markets at scale. The National Academy of Sciences 2018 report supports us in the belief that restoration of agricultural soil carbon could simultaneously help resolve three global problems – food security, biodiversity, and climate change. When carbon is restored to agricultural soils by building soil organic matter, it generally makes the soils more fertile, better at retaining water and fertilizer, and more resilient to climate change. Thus, if done correctly, the restoration of soil carbon would result in a quadruple win: increased food production per acre, better livelihoods for farmers and their families, less pressure to convert remaining forests to agriculture, and a substantial carbon sink.

During these development processes you have both come to the rational conclusion that traditional approaches to assessing additionality for carbon offsets, such as assessment of financial feasibility and practice-based assessments of activity penetration – or common practice – are not appropriate for ALM projects in their current forms. Both registries are proposing novel approaches that break out of the traditional mold applied by the carbon market, yet also maintain a rigorous, investable standard for additionality.

This letter is intended as a show of support for your new approaches to assessing additionality in agricultural carbon projects.

Because they are new and different, novel approaches may cause confusion and criticism from carbon market stakeholders, with some voicing strong opposition to these new policies. That is understandable, and public review and comment is crucial for credibility and market confidence. This letter is intended as a demonstration of support for the new approaches being proposed, and to provide an independent perspective on additionality in ALM projects, and why new approaches are needed.

### Why not rely on a financial additionality test?

Research has demonstrated that increasing long-term financial returns of preferred practices is insufficient to change farmer behavior (Howley, Buckley, O'Donoghue, & Ryan, 2014). Growers do not act purely in pursuit of long-term profit maximization, even if that is how it appears. Growers also consider factors such as maximizing social value, adhering to in-group norms and values, and simplifying the decision-making process through heuristics.

Barriers faced by farmers that are ignored through simple financial additionality screens include:

1. **Widespread adoption of new ALM practices will require group collaboration to reach a critical mass of market demand for proper equipment, crop inputs, and services.** This market demand is needed to signal to farm equipment manufacturers and local equipment providers to commit resources to produce and service new equipment; other input providers to shift to meet demand for inputs unique to new agronomic practices (ranging from physical crop inputs to information and consultation services); local, group, and institutional knowledge to incorporate new information and overcome outdated heuristics; and commodity markets to develop infrastructure to offload commodities with unique, marketable characteristics.
2. **Farmers experience long delays between decisions and outcomes, preventing them from receiving immediate feedback to reshape future decisions.** Making economically correct decisions requires strong understanding of the short and long-term economic impacts of various decisions. Long delays between decisions and outcomes dilutes the connection between the two for the farmer.
3. **Farmers experience significantly more uncontrollable factors, particularly market prices for their products and weather patterns, that impact their overall productivity and profitability.** These heightened uncertainties lead growers to prioritize risk mitigation over long-term profit maximization. New practice changes are viewed as inherently risky, mostly due to lack of sufficient information for farmers.
4. **Farmers face systemic and structural barriers to widespread adoption of significant practice changes.** These barriers include lack of education on specific practice changes (both in universities as well as through generational knowledge transfer), lack of agronomic support through common channels (e.g., seed and

equipment dealers, government agencies, university extension), and availability and proximity to markets which value crops produced with more sustainable methods.

These unique factors can slow or halt the adoption of new agricultural practices, ones beneficial to the planet through the reduction of GHG emissions and increases in soil carbon levels. Project financing from the sale of GHG credits is intended to address barriers related to practice change, primarily risk reduction, and should be communicated as such to farmers. Additionally, project financing is often coupled with other values designed to address barriers such as access to information and guidance to not only have success with new practices, but also to have confidence in implementation; this is a vital factor for encouraging behavior change.

Rather than a subjective assessment of simple farm economics, the proposed methodologies rely on demonstration of widespread risk aversion and other barriers to change in the agricultural sector. Appendix A of the Reserve's Soil Enrichment Protocol (SEP) v1.0 includes an assessment of behavior in the agricultural sector that covers the list of barriers above in greater detail.

### **Why not conduct activity penetration assessments for each individual practice?**

The typical approach to assessing common practice for carbon project methodologies is to consider any activity with an estimated or measured penetration level above 5% to be considered "common." This traditional approach has been suggested by at least one public comment to the Reserve's SEP v1.0. Assessing the penetration of individual ALM practices against a threshold of 5% is inappropriate for the following reasons:

1. **ALM projects are driving toward multiple practices, so a single practice assessment is not relevant.** Over a project lifetime, ALM projects will only have a financially compelling GHG benefit if the farmer adopts multiple practices. However, it's completely unreasonable to ask a farmer to adopt multiple practices in order to gain entry to the program. Sustainable ALM is a journey, and (as discussed above) farmers are risk averse, so practices are necessarily adopted one at a time. Although some individual practices may be adopted at rates greater than 5% in certain regions, it is exceedingly rare to find such high penetration of farmers adopting multiple practices simultaneously.
2. **Practices will not be static at the field level.** Sustainable ALM is a journey involving experimentation and continuous assessment of performance that must be tailored to the individual field and farmer. This means the farmer may try practices and abandon them later in favor of an alternative that works better for their farm. Thus, the focus should be on the act of *behavior change and GHG performance*, which are both incentivized by the proposed methodologies. Successful implementation will involve experimentation and stacking of practices.
3. **Whether a practice is "common" must be defined differently for agriculture.** A single practice with a 5% penetration rate is essentially a radical experiment in the eyes of the farmers. The 5% threshold for additionality may have been useful or appropriate in the context of renewable energy technologies, or industrial emission sources, but it is neither useful nor appropriate for ALM projects. As discussed above, farmers are often skeptical of practice changes until they are adopted very widely. While it is true that multiple practice adoption is rare, single practice adoption must be eligible to get those farmers in the door. The focus on crediting for performance ensures that the incentives are aligned for farmers to move to multiple practice adoption as quickly as possible to maximize carbon revenues.
4. **Different practices would need to be assessed at different scopes.** The relevant sphere of influence will be different for different practice changes depending on crop type, political boundaries, access to technology, water availability, soil type, geography, etc. For ALM projects – which involve multiple practice changes, crops, and geographies, grouped together into one project – any assessment conducted on individual practices would be impossible to standardize across the project. Any such assessment should cover the entire project region, focusing on overall practice change, rather than individual practices.
5. **Agricultural practice changes are not "one size fits all."** The actual nature of the practice change will vary not only between crops and regions, but also between farmers and time periods. The complexity of the changes and the diversity of practices makes it difficult to draw direct comparisons and clear assessments of what is "common" practice.

**Conclusion**

I, as well as the undersigned stakeholders, strongly support the work of the Climate Action Reserve and Verra to develop new approaches to assessing additionality for ALM projects. The opportunity to positively impact the climate is massive but will only become reality if we are able to take a global approach. We urge you to avoid reverting back to traditional approaches which are neither appropriate nor effective for ALM projects. We urgently need incentives to overcome cultural and economic barriers to change, and climate finance can provide this incentive. This feeds into the need for a sensible, pragmatic approach to additionality for new science-based soil organic carbon methodologies. **Successful ALM methodologies should define eligibility in relation to adoption of practice changes generally, and quantify crediting based on performance (in the form of GHG benefits). The practice changes are needed to get into the program, but the farmers must actually reduce their GHG emissions and/or increase their carbon sequestration in order to benefit from the project.**

Sincerely,

**Ken Newcombe**  
C-Quest Capital

**Deane Belfield**  
Regenerative Australian Farmers

**Mark Bradford**  
Yale University

**Karen Haugen-Kozyra**  
Viresco Solutions

**Louisa Kiely**  
Carbon Farmers of Australia

**Paul Luu**  
4 per 1000 Initiative

**Sean McMahon**  
Iowa Agriculture Water Alliance

**Steve Pacala**  
Princeton University

**Keith Paustian**  
Colorado State University

**Sean Penrith**  
Gordian Knot Strategies

**Diego Saez-Gil**  
Pachama  
**Tom Stoddard**  
NativeEnergy

**Nathan Truitt**  
American Forest Foundation

**Moritz von Unger**  
Silvestrum

**Matthew Warnken**  
AgriProve

**Raphael Wood**  
Market Advisory Group

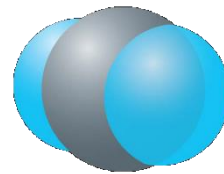
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