AGROLOGY

ADVANCING SUPPLY-CHAIN SUSTAINABILITY:
GROUND-TRUTH MMRV AND ECOSYSTEM MEASUREMENT

The agricultural supply chain faces growing threats from climate extremes, soil degradation, market instability, as well as rising labor and input costs. To stay ahead, leading CPG and retail companies must align their supply chains with environmental sustainability, not only by furthering the adoption of established sustainable and regenerative agriculture practices, but also by directly advancing research to discover more sustainable farming methods.

Standards for carbon accounting and sustainable agriculture research are lagging, unsettled, and incomplete: creating uncertainty, fragmentation and risk in sustainability programs. Agrology empowers food and agriculture companies to pursue their own research, prove their environmental impacts, and support farmers in their supply chain. Agrology provides real-time, ground-truth data on ecosystem health, soil health, carbon sequestration, and GHG emissions. This empowers brands to demonstrate measurable and auditable sustainability outcomes while enabling farmers to research, refine, and quantify agricultural practices.

THE AGROLOGY PLATFORM:

- Measures ground-truth GHG flux, nano-climate conditions, and soil conditions with rugged, low-profile and automated sensors, installed in the soil and crop canopy.
- Integrates multiple data inputs from local weather stations and publicly available agricultural datasets to generate insights specific for a farm, block, or acre.
- Applies machine learning models for sensor fusion: turning gathered data into results, insights, and guidance.
- API, mobile, and web applications for data alerts, analysis, and reporting.

> "Agrology provides vital metrics for understanding in-field carbon dynamics. By providing continuous, in-situ data on the carbon cycle and microclimate, Agrology provides growers with a revolutionary tool to manage and increase carbon accumulation in their soils. We are excited to see this technology advance and help our clients reduce uncertainty and improve their carbon farming."
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> **- DR. FRANCOIS VISSER, CEO OF CARBON FRIENDLY**

AGROLOGY GROUND-TRUTH METRICS:

- Real-time, continuous Carbon and Nitrous Oxide Flux data
- Scientific-grade measurement of GHG emissions with ground-truth sensors (not modeling or estimates)
- Soil CO_2 respiration, a key indicator of microbial activity and soil health
- Net Ecosystem Exchange (NEE) of CO_2, a well-proven carbon sequestration metric that measures carbon flows
- Ecosystem health measurement with real-time water holding and infiltration, localized cooling, air quality, soil temperature, and more

LEARN MORE

Using Agrology, CPGs and retailers understand emissions reductions and increased carbon sequestration - not with models, practice-based estimates, or remote sensing, but with ground-truth data that is directly pulled from in and around the soil.