Our Carbon Credit Ratings Framework For Regenerative Agriculture Projects

Incentivizing investment in real climate action

Sylvera

Introduction

Sylvera carbon credit ratings are the most reliable and trustworthy in the market.

Sylvera has developed a rigorous bottom-up approach in order to produce the most accurate ratings and analyses for carbon projects in the VCMs.

What sets Sylvera apart

- **Project-type-specific frameworks:** We build rigorous frameworks and production systems for every project category to accurately test project design, carbon accounting, and climate impact claims.

  Sylvera's frameworks are peer-reviewed by a committee of experts and carbon market stakeholders – including project developers & registries – to ensure scientific consensus. We have published this document so buyers understand how we developed our unique, nuanced framework, and we have included some examples of exactly what we test and how we do it. Read our white paper for more information.

- **Unparalleled depth & accuracy:** We extract, clean, and organize data from project design documentation (PDD) and every monitoring report. Then we meticulously build carbon, strength of baseline and financial additionality models from the ground up to validate emissions reductions or removals claims and evaluate project economics.

  Our project assessments are the most comprehensive in the market, providing granular analysis of core project characteristics, insightful data visualizations, and interactive maps.

- **Independent Data Validation:** Our expert analysts leverage advanced machine learning (ML) technology, verified, independent data, and proprietary field data to test the accuracy of credit issuances and claims.

  The comparison of independent data specific to each project against the data reported in the project's documentation is the cornerstone of high quality due diligence. For example, we use market-leading geospatial ML models when rating nature-based solutions.

Key terms and concepts

Key terminology and concepts	
Regenerative agriculture (Regen Ag)	A system of farming principles and practices that seeks to rehabilitate and enhance the entire ecosystem of the farm by placing a heavy premium on soil health with attention also to water management, fertility management, and more.
Soil organic carbon (SOC)	A component of soil organic matter (complex material derived from the decay of plant and animal material) that is composed of carbon-based compounds.
Cover crops	Crops that are planted primarily during the off-season to manage soil erosion, soil fertility, soil quality, water, weeds, pests, diseases, biodiversity, and wildlife.
Crop rotations	The practice of growing different types of crops in the same area in sequenced seasons. It is done so that the soil nutrients used by one type of crop are replaced when the new crop is planted.
Improved residue management	Managing crop residues left in the field after harvest to improve soil health and productivity.
Tillage	The agricultural preparation of soil by mechanical agitation of various types, such as digging, stirring, and overturning.
No-till	An agricultural technique that involves growing crops without disturbing the soil through tillage. It's a key strategy for soil health and carbon capture.
Carbon credit	A tradable unit representing one metric ton of carbon dioxide (CO2), or an equivalent amount of another greenhouse gas (GHG), avoided or removed from Earth's atmosphere.
Over-crediting risk	This refers to the risk that the project has issued credits in excess of what is justifiable against the business as usual scenario.
Project emissions	Emissions associated with ongoing operations of the carbon credit project.
Vintage	This refers to the year, or timeframe, associated with an issued carbon credit.
Voluntary carbon market (VCM)	A marketplace for buying and selling carbon offsets, which are generated by projects that reduce or sequester greenhouse gas emissions voluntarily.

The state of Regen Ag

The challenge

Regenerative agriculture (Regen Ag) is an essential set of management tools to help decouple agricultural productivity from the degradation of soils and landscapes. Since Regen Ag also increases soil carbon, this approach offers vast potential for carbon sequestration. Global cropland soils have the capacity to sequester upwards of 1.85 billion tonnes of carbon (or roughly 6.79 billion tonnes of CO2) annually (source), which represents roughly 4000% of the current global carbon market.

Regen Ag developers and registries are nascent and ultimately have yet to face the same scrutiny as other sectors of the market. For Regen Ag projects there is a notable deficiency of data available around key project performance parameters. The rush to procure Regen Ag credits is understandable, but without transparency and deep due diligence the credits represent a material risk in your carbon credit portfolio.

Current data disclosure only allows for Sylvera to produce provisional ratings. This white paper clarifies our provisional rating approach, highlights key components of the rating framework, and emphasizes the need for higher data transparency standards for a complete rating.

Sylvera is actively working with stakeholders in this space to share data on projects in hopes of catalyzing scale and quality for the Regen Ag market.

The solution

To overcome the challenge of data transparency and scale the regenerative agricultural offset market, the following data points are needed to ensure trust in Regen Ag credits:

1. **Spatial Data for Project Areas:** The precise geographical location of each participating farm field is a fundamental requirement for data transparency in these projects. This data allows the market to verify the authenticity of offset claims. Developers who offer spatial files that accurately represent the field-level project areas increase their credibility.

2. **Activity Data:** Detailed records of project activities occurring in each participating farm field are essential for evaluating their impact on soil carbon levels. Credible developers offer spatial files for each field, accompanied by comprehensive activity data specific to that field.

3. **Participant Demographics:** Providing characteristics of the participants involved in the project is crucial for evaluating project additionality and co-benefits.

4. **Soil Modelling:** Most projects utilise soil models to predict soil carbon dynamics throughout the project duration. The reliability of these models significantly depends on their calibration. Hence, the market's confidence in the dependability of carbon offsets hinges on thorough reports on model calibration.

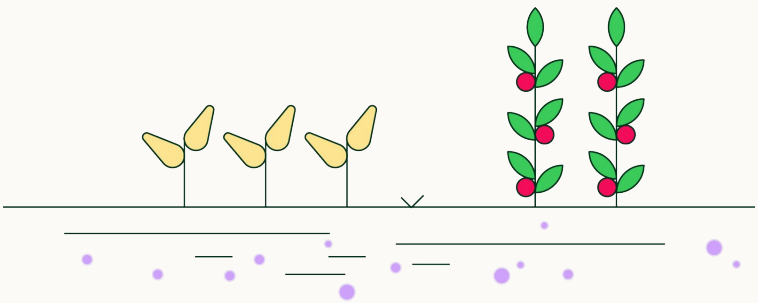
What is a Regen Ag project?

Conventional agricultural systems often follow an extractive approach, draining the soil's organic matter (and therefore its carbon) through practices such as tilling and fallowing. Dependence on synthetic fertilizers and monocultural production also contribute to the gradual reduction of soil carbon. On the contrary, regenerative agricultural systems enrich soil nutrients and carbon, reversing the depletion process.

Regen Ag management encompasses any practice that enhances soil's physical, chemical, and biological health. These practices include:

- Implementing cover crops to maintain soil organic carbon (SOC) by promoting year-round soil biological activity.
- Practising crop rotations to boost soil biodiversity and carbon retention.
- Advancing residue management, which contributes an additional source of carbon for soil sequestration.
- Promoting no-till or reduced-tillage techniques, which minimise carbon-depleting mechanical disturbance of soils.

In the Voluntary Carbon Market (VCM), regenerative agriculture projects aim to maximize soil carbon sequestration and retention on agricultural lands. This is achieved by implementing a range of management techniques, like those mentioned above, by the participating farmers. These projects generate removal credits, although the benefits of Regen Ag span beyond carbon sequestration.



Added Benefits of Regenerative Agriculture

Enhanced Soil Health
Regen Ag practices improve the soil structure, increase the organic matter content, and enhance soil fertility, thereby creating robust soil ecosystems.

Increased Biodiversity
Regen Ag practices promote biodiversity both above and below the soil surface by fostering a wide variety of plants, insects, and microbial life.

Water Conservation
Healthy soils resulting from Regen Ag have greater water-holding capacity, which improves the farm's resilience to drought and reduces the need for irrigation.

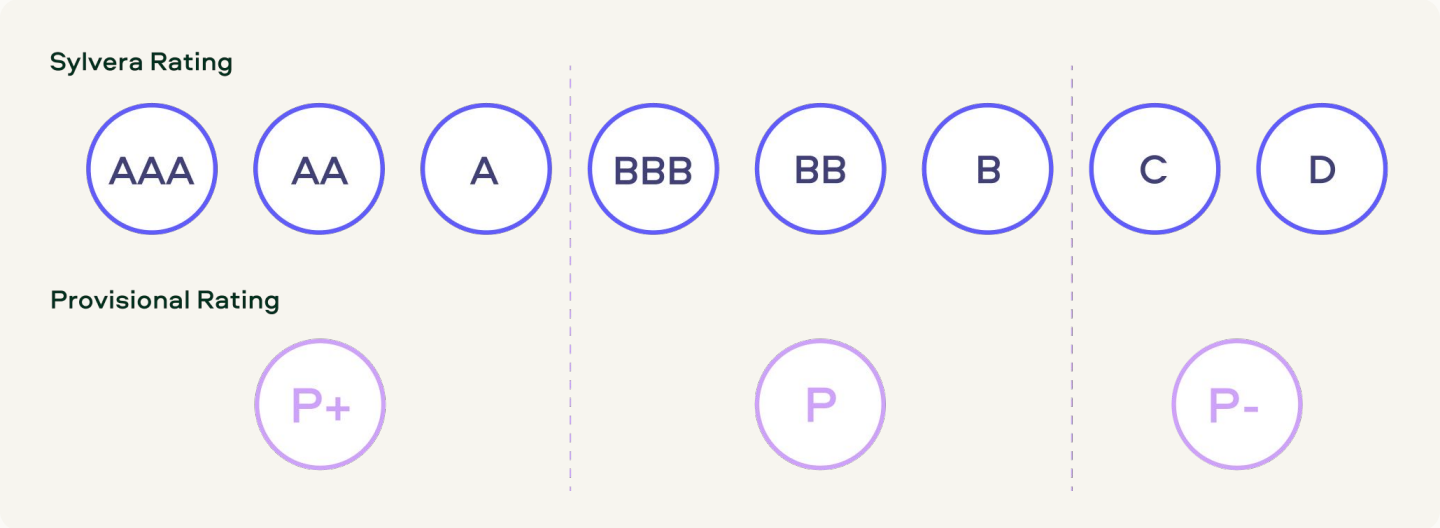
Reduced Agrochemical and Fossil Fuel Dependency
By relying on functional ecosystems for nutrient provision and pest control, Regen Ag practices reduce dependence on synthetic fertilisers, pesticides, and fuel for machinery.

Reduced Erosion
By keeping the soil covered and undisturbed, methods such as cover cropping and no-till farming can significantly decrease soil erosion to prevent topsoil loss.

Increased Crop Resilience
By developing diverse ecosystems and improving soil health, Regen Ag helps increase crop resilience against pests, pathogens, and climate change.

What we look for in high quality Regen Ag projects

Provisional ratings



When key data required to fully evaluate a project is missing or is incorrect, Sylvera does not issue a complete Sylvera rating. **Regen Ag projects currently lack some information to provide a full rating.**

Instead, Sylvera has developed a provisional ratings framework to provide an assessment of the carbon credits based on the best information available to date. When new data is issued and if it satisfies all our criteria for rigorous analysis, Sylvera will reassess the project and issue a complete Sylvera rating.

The provisional Sylvera rating is still based on a combination of three core scoring pillars:
carbon, additionality and permanence.

To arrive at our provisional rating, we first integrate Carbon score and Additionality in an intermediate Impact score, which then is integrated with Permanence resulting in our top level rating.
Provisional ratings will have different scoring matrices to fully-rated projects.

Sylvera rating scale

Sylvera issues a Complete Rating when we have access to all the key data (ranging from earth observation data to monitoring reports provided by project developers and restries) required to rigorously assess a project according to our proprietary, bottom-up framework.

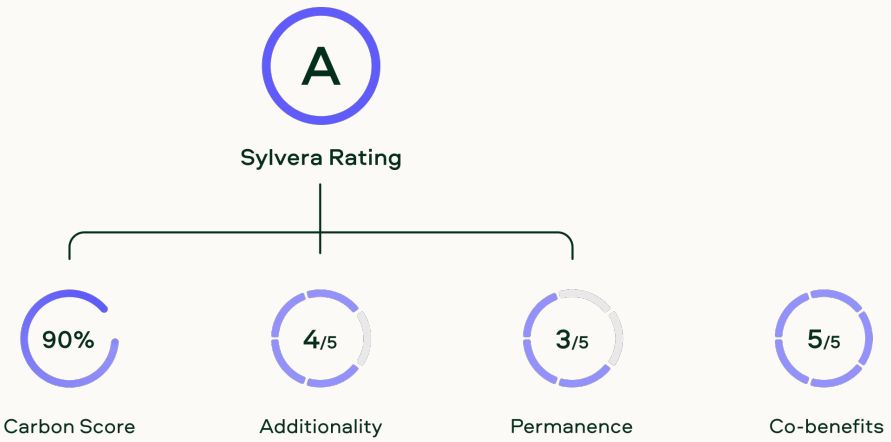
Each project we rate receives a discrete letter rating (AAA-D) with sub-scores for carbon, additionality, permanence and co-benefits, in addition to an in-depth report.

A reminder of our scoring pillars

Our top level Sylvera Ratings span from AAA-D and reflect whether each credit associated with the project is likely to remove 1 metric ton of CO_2e emissions.

This rating is derived from a combination of scores that assess the **carbon** performance, **additionality** and **permanence** of the project. The scores in these three core pillars are combined in a series of matrices to ensure that underperformance in one key area does not get overshadowed by high performance in others.

Co-benefits are also assessed but they do not feed into the Sylvera Rating, as they do not have a direct bearing on the climate impact of carbon credits. Including them in the Sylvera Rating could lead to a high co-benefits score obscuring poor performance on carbon removal. Aspects of the project relating to co-benefits that could materially impact the project's ability to deliver it's stated climate benefit are, however, reflected in the Sylvera Rating.



Carbon score

Sylvera's carbon score verifies whether the project has delivered on its carbon claims by comparing permanence adjustment factors to Sylvera's calculated factor using third-party data.

Additionality score

Sylvera's additionality score assesses the likelihood the project activities would have been implemented in absence of the carbon revenues. It also quantifies the likelihood and extent the project is over-issuing credits due to an underestimation of life cycle emissions or the overestimating the stability of the Improved Cookstoves stemming from its chemical composition.

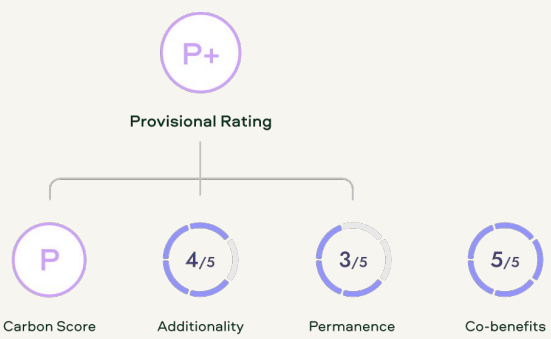
Permanence score

Sylvera's permanence score assesses whether the carbon removed by the project is likely to stay sequestered based on natural risks (fire, drought etc.) and anthropogenic risks.

Co-benefits score

Sylvera's co-benefits score assesses the scope and relative impact of project activities on local biodiversity and communities - which are linked to UN Sustainable Development Goals (SDGs).

Given the **inherent uncertainty in carbon accounting**, it is not possible to produce full ratings for Regen Ag credits.While the carbon score is assigned a neutral score, the other pillars are assessed in a similar manner to other project types, on a scale from 1 to 5.



Carbon score

What is it?

Sylvera's carbon score verifies whether a project is accurately reporting on the carbon removals achieved by the activity. If multiple vintages have been permitted, the carbon score is a vintage-weighted average score.

Note: *The carbon score must be considered alongside the additionality score, which considers the overcrediting risk, to understand the climate impact of the project.*

Why does it matter?

Accurate carbon accounting underpins the validity of a project's issuance and material under or over reporting of emissions will impact the number of credits that have been issued. If Sylvera-detected project activity extents are significantly lower than the project's reported figures, reported carbon removal amounts are likely inaccurate and there is a higher risk of overissuance.

How do we calculate the carbon score?

A future rating will compare Sylvera-estimated removals to project-reported removals in order to calculate a carbon score. However, given the lack of data required to quantitatively analyze project carbon credits, this version of the Regen Ag framework will apply a provisional carbon rating instead.

Once developers meet our minimum data disclosure requirements for a carbon rating, Sylvera will compare estimates of activities (Eg. no-till) to project-reported activities in the project area. Since carbon removals are proportional to the extent of project activities, this approach will allow us to infer the validity of project-reported removals. This will be accomplished by applying machine learning models to satellite imagery of the project area to estimate the extent of project activities. A project will achieve a high carbon score if Sylvera-estimated activities align with project-reported activities, and a low score if discrepancies are detected or if data is insufficient.

This approach relies on spatial data that accurately identifies the specific locations of participating fields and the activities conducted within each field. Until this data is available, all projects will receive a neutral provisional carbon score to reflect our uncertainties regarding project-reported removals.

$$\text{Carbon Score} = \frac{\text{Sylvera Audited Removals}}{\text{Verified Removals}} = \frac{\text{ML-Detected Project Activities}}{\text{Project-reported Activities}}$$

	Improved Residue Management	No-Till	Cover Crops	Crop Rotations	Carbon Score Calculation
Definition	**Area under improved residue management in project area (ha)**	**Area under no-till in project area (ha)**	**Area under cover crops in project area (ha)**	**Area under crops rotations in project area (ha)**	**Total**
Source	Sylvera Verified	Sylvera Verified	Sylvera Verified	Sylvera Verified	Total
Sylvera	256	0	260	208	724
Reported	260	0	260	210	730
				Carbon score	**99.2%**

**Please note that the list of activities presented in this table is not exhaustive. The actual framework evaluates a considerably more extensive range of activities.*

Additionality score

What is it?

Sylvera's additionality score assesses whether (1) the projects' activities would only have taken place as a result of the carbon project revenue and (2) the project has sold too many credits due to invalid baseline assumptions, overlooked leakage, or issues with soil sampling or modelling.

Why does it matter?

Additionality underpins the validity of credits issued by a project. If the project is not additional, then one credit purchased does not equate to 1 metric ton of carbon avoided and therefore yields no climate benefit above the business as usual (BAU) scenario.

Assessing the additionality of carbon credits is essential to understand their climate impact. The degree of additionality of a project depends on the carbon price required to make it economic. A project would score high in additionality if Sylvera's financial analysis proves the need for carbon finance to make the project economic. Conversely, a project would score low in additionality if the revenues from Regen Ag are enough alone to make the project economically viable.

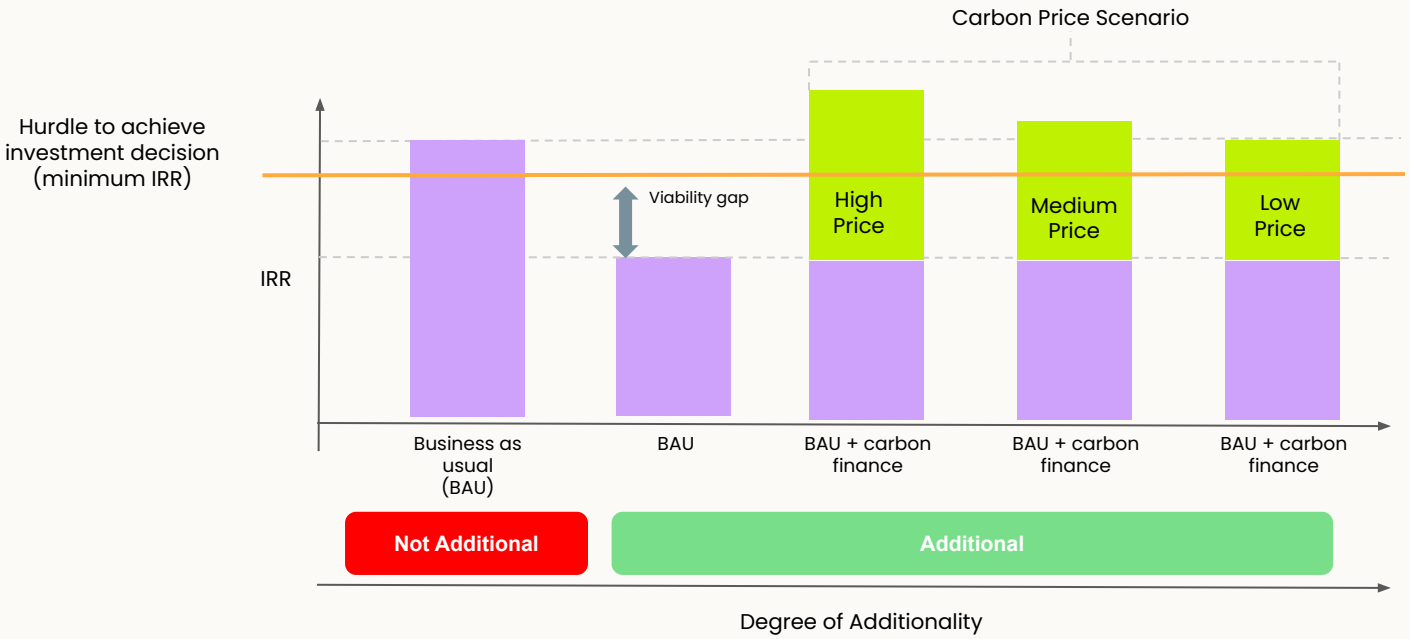
While additionality of activities is challenging the BAU scenario, over-crediting risk is challenging the quantification of that scenario and factors that contribute to the crediting, such as leakage. Our assessment of over-crediting risk is broken down into three elements: strength of baseline, leakage, and soil sampling and modeling.

Additionality of activities	**Financial additionality:** When financial information is disclosed in project documentation, we compare revenue, costs, and economic KPIs from the reported information to Sylvera's proprietary economic model. We ensure revenue and costs are in line with market figures to validate revenue wasn't understated and costs weren't overstated in the reported figures, so as to make the BAU economics appear subeconomic.
	Policy & regulatory barriers: If subsidies or capital is provided by the government for farmers to adopt Regen Ag practices, then the project may have diminished additionality if these subsidies caused the business as usual scenario to be economic.
	Common Practice: We assess both the project area's activities with respect to a relevant proxy and the historic activities in the project area, focusing particularly on investigating whether farmers were likely to adopt Regen Ag activities regardless of monetary incentives from the VCM.
Over-crediting risk	**Strength of baseline:** We compare the baseline provided by the project to third party data to assess the validity of project-calculated baseline emissions to determine whether a project's issuance is reasonably estimated.
	Leakage: If the project does not appropriately account for potential leakage, as a result of activity shifting or market leakage, then this will lead to inflated issuance.
	Soil Sampling Strategy and Soil Modelling: We evaluate the project's soil carbon sampling strategy for adequacy in capturing soil carbon variability across the project area, considering sample density, frequency, and stratification. The soil model (if applied) is scrutinized based on its sensitivity and scientific reputation. We also evaluate the effectiveness of the model calibration procedure adopted by the project proponents.

Spotlight on additionality

How does Sylvera assess financial additionality?

A project is financially additional if the carbon credit revenue bridges the economic viability gap, meaning that the removals provided by the Regen Ag project would have not otherwise been realized without carbon financing. Sylvera's proprietary economic model assesses the business as usual (BAU) economics, or the project without carbon revenues, and the project's economic scenario, (in other words, the project with the carbon revenues). We independently assess the project economics within our own proprietary financial models. We test the reasonableness of the modelling assumptions with independent country-level cost and price models.



Regen Ag management is less reliant on expensive inputs, while premiums for sustainably produced foods can lead to higher revenue. As a result, regenerative farms can be more profitable than their conventional counterparts. Therefore, in many cases, financial additionality of Regen Ag projects is difficult to demonstrate. Projects must provide evidence that the financial barriers to adopting Regen Ag management are prohibitively high, and that carbon credit revenues help participants surpass this hurdle even at low carbon credit prices.

Furthermore, high-quality projects should illustrate regulatory surplus associated with their activities. For instance, a project demonstrating an absence of local policies and funding mechanisms supportive of Regen Ag would achieve a higher score than one neglecting to consider pertinent policies or funding avenues.

Financial additionality	**Lack of Financial Barriers:** If there is clear evidence demonstrating a lack of financial barriers to adoption of Regen Ag management, then additionality is lower.
	Revenue Comparison: If carbon finance contributes a negligible amount to the project scenario profitability, then additionality is lower.
	Investment Analysis If profits are higher under BAU scenario than baseline scenario, the project is not likely to be financially additional.

Spotlight on additionality Continued

Common Practice

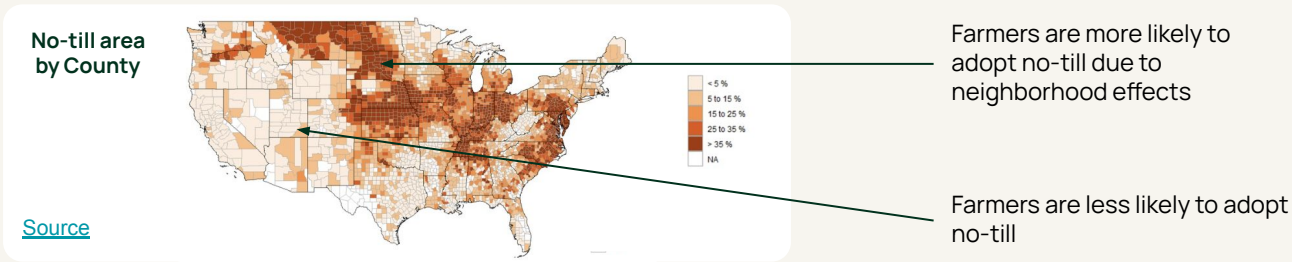
In order to establish additionality, all Regen Ag projects must prove that regional adoption rates of Regen Ag management are below a certain protocol-approved threshold. Adoption rates are often assessed at the provincial or national level, an approach that overlooks an important phenomenon highlighted in literature on the adoption of agricultural technologies: adoption rates can be significantly swayed by hyperlocal trends.

For instance, despite the *national* adoption rate being less than 20%, a farmer is much more likely to adopt Regen Ag management, regardless of the VCM, if 90% of farmers in their *municipality* have adopted Regen Ag management. High quality projects will assess adoption rates on as granular a scale as possible to account for this neighbourhood effect when establishing baselines.

Additionally, projects must consider VCM-independent factors that boost Regen Ag adoption according to the literature, such as:

- **Slope of project area:** Heavy machinery is difficult to use on steep slopes. Farmers on highly sloped lands are more likely to adopt Regen Ag management, which has a lower reliance on heavy machinery.
- **Baseline soil quality:** Low soil quality incentivises farmers to adopt soil enhancing management strategies such as Regen Ag. Poor soil quality therefore reduces additionality.
- **Farmer perception of benefits of Regen Ag:** If farmers understand the benefits of Regen Ag, additionality will be lower. This could be proxied by local education metrics or the presence of local extension services dedicated to Regen Ag.

Agricultural neighbourhood effect

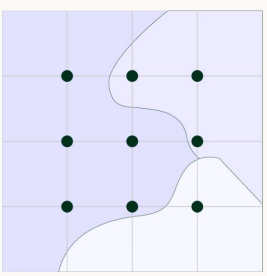


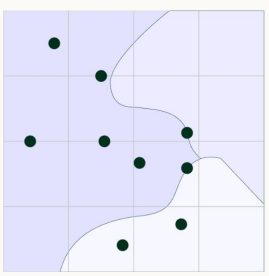
Soil Sampling Strategy and Soil Modeling (OCR)

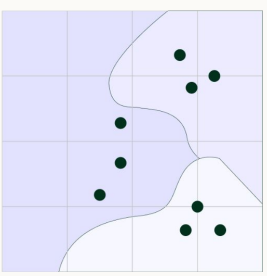
Considering the heterogeneity of soils, it is crucial for projects to implement thorough sampling strategies to decrease uncertainty in SOC estimates. This involves regular sampling from densely distributed, fixed locations over time. The stratification of the sample area, which takes into account variations in soil types across the project area, is especially vital. This ensures that the samples better represent the entire project area. Over-crediting risk is higher when projects neglect to incorporate any of these aspects of effective sampling.

Most projects use models that simulate soil carbon dynamics over time. According to existing literature, model accuracy heavily relies on site-specific calibration. Thus, we will assign higher OCR ratings to projects that provide evidence of thorough and effective model calibration processes, substantiated by dedicated calibration documentation.

Soil sample stratification


Systematic Samples


Simple Random Samples


Stratified Random Samples

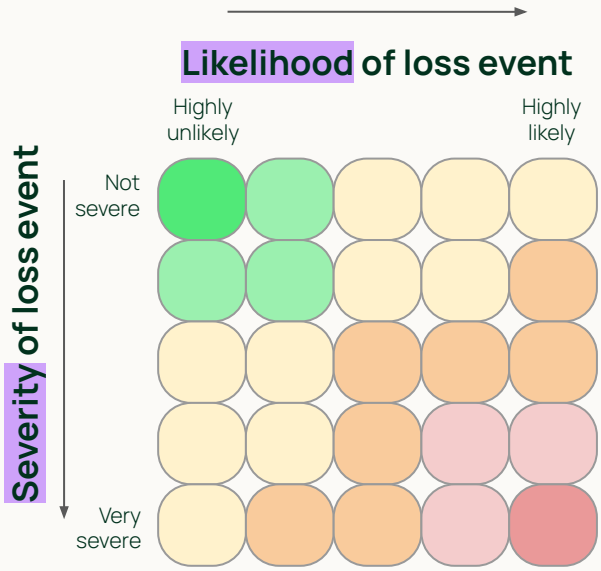
Permanence score

What is it?

Permanence refers to the risk that the sequestered carbon will later be reversed and released back into the atmosphere. Our permanence score uses a risk matrix approach for the major risks to soil carbon stability. The final score is calculated considering the additive and maximum risks present in the project. The input of climatic variables, record of past events, project specific conditions and mitigative activities are used to inform the risk scoring. Permanence is conceptualised as a scale that distinguishes the relative degree of non-permanence (or reversal) risk between projects.

The permanence risk of Regen Ag projects is based on risks to SOC stability resulting from pests, fires, droughts, and anthropogenic disturbances. Regen Ag projects should account for any likely carbon release in their calculation of removal credits and contribution to permanence risk buffer pools. Natural disturbances pose a risk to the permanence of SOC, a common concern across many nature-based projects. Therefore, the adopted strategy is to quantify the severity and likelihood of natural risk factors based on the surrounding climate and land use. Regen Ag projects are somewhat unique in that permanence depends on the behaviour of the land manager. For example, should a farmer opt to cease no-till management and resume regular tillage, this would result in SOC loss, presenting a permanence risk. To capture the nuances of management decisions and their probabilities, this framework relies on detailed demographic data on project participants.

The likelihood of pests, fires, and droughts largely depends on the geographic characteristics of the project area, such as mean annual rainfall, which is linked to pest, fire, and drought likelihood. The severity of these risks can be attenuated by project activities. For example, a project that incorporates structural diversity to address the root driver of pest risks - lack of biodiversity - will achieve a better permanence score than a project that merely attempts to manage the symptoms via pesticide use. These risks will be estimated using proprietary climate models combined with project documentation.

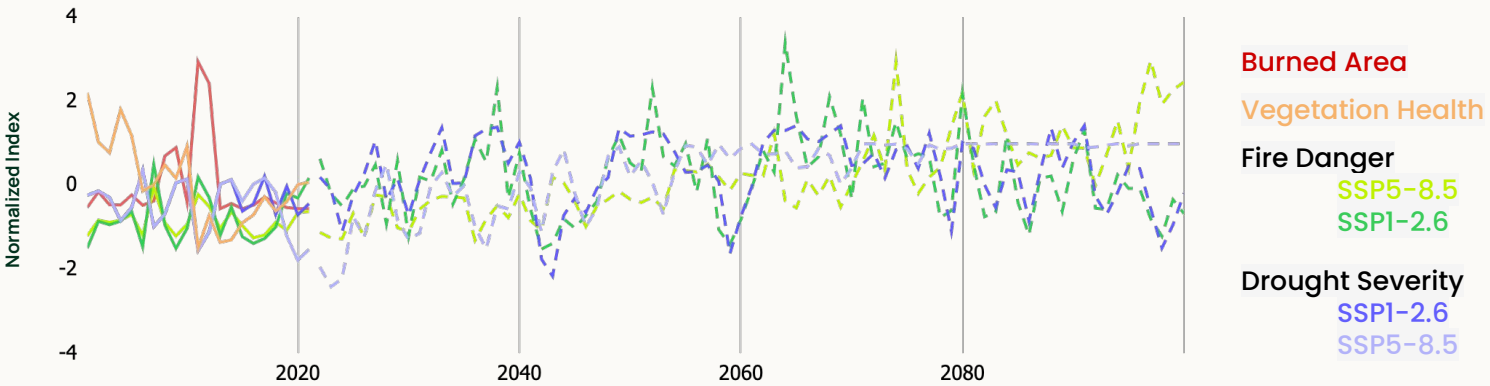


Although factors such as geopolitical risks can be estimated using current data availability, anthropogenic permanence risk ratings are more complex and therefore require a higher standard of data disclosure regarding project participants. For example, there is a lack of information on land tenure and participant age, which are both required to assess the risk of land ownership change.

Permanence score Continued

What data do we use in the permanence score?

The permanence score leverages a range of observational and modelled data, meaning we are able to assess historically and into the future under different IPCC emissions pathways. The analysis utilizes cutting-edge scientific standards and remote sensing in conjunction with local project conditions and any mitigative activities in place.



Note: the data displayed is real but the underlying index data has been manipulated for the sake of visualization, not interpretation.

Co-benefits rating

What is it?

Sylvera's co-benefits rating examines whether the project is implementing activities to support local biodiversity and communities, as well as the scale and likely impact of these activities.

How do we assess the co-benefits of Regen Ag credits?

Sylvera measures the impact that Regen Ag project activities have on biodiversity. We leverage data provided by project developers, IUCN data, and IBA'T data.

When assessing community impact, we utilize data disclosed by project developers and the Sustainable Development Goals (SDG) framework to triangulate a project's community impact.

An example of a Regen Ag project's contribution to biodiversity and community:

Improving food security by increasing farm resilience

Improve soil fertility

Enhancing water conservation

Promoting agricultural best-practice

BIODIVERSITY

THREATS

We assess whether the project is located in a conservation area. There are no threats associated with the adoption of Regen Ag projects on existing agricultural lands.

BIODIVERSITY PROTECTION

We assess the extent to which the project has contributed to biodiversity loss or conservation. Regen Ag projects can contribute to biodiversity conservation by incorporating practices such as:

- **Cover Crops:** They provide a habitat and sustenance for various species, thereby promoting biodiversity.
- **Crop Rotation:** This practice supports a variety of life forms by alternating crops and improving soil health.
- **No-till**: Avoiding soil disturbance maintains habitat for soil organisms, preserving biodiversity beneath the surface.

COMMUNITIES

SUSTAINABLE DEVELOPMENT GOALS

We independently identify which UN SDGs the project is contributing towards by assessing the activities implemented by the project.

IMPACT

We determine the relative impact of activities on local communities by scaling the SDG impact against country-level performance, the size of the population affected, and the carbon removals achieved by the project.

Interpreting provisional ratings

Positive

The project has a very low risk of over crediting. The project activities implemented were a direct result of the revenue derived from the carbon project There is no major permanence risk.

Neutral

There is potential risk of over crediting. The projects activities implemented may be a direct result of the carbon revenues. In addition, the project has a moderate-low permanence risk.

Negative

The project has a high likelihood of severe over crediting and/or the activities implemented to increase carbon stock would have occurred in the absence of carbon revenues. Alternatively, despite having a low risk of overcrediting and additionality of activities, the project has a severe permanence risk.

Interpreting additionality score & over-crediting risk

Indicates very high confidence that a project is additional and unlikely to over-credit.

Example: The project has a very low risk of over crediting. There is a significant difference in activities between the “business as usual (BAU)” and the “with project” scenario. The project activities implemented were a direct result of the revenue derived from the carbon project.

Indicates high confidence that the project is additional and unlikely to over-credit.

Indicates the project is likely additional and unlikely to over-credit.

Example: There is potential risk of over crediting. There is a difference in activities between the “business as usual (BAU)” and the “with project” scenario. The projects activities implemented may be a direct result of the carbon revenues.

Indicates uncertainty about the project's additionality claim and over-crediting risk.

Indicates we found a serious red flag questioning the project's claims of additionality and over-crediting risk

Example: The project has a high likelihood of severe over crediting and/or the activities implemented to increase carbon stock would have occurred in the absence of carbon revenues.

Interpreting the permanence score

Indicates very high permanence and low risk, the project carbon credits are very likely to remain valid long-term.

Example: Across all pillars of loss, likelihood and severity of carbon stock loss are low. The project also implements effective mitigation activities.

Indicates high permanence, the project carbon credits are likely to remain valid long-term.

Indicates moderate permanence, the project carbon credits may remain valid long-term.

Example: No pillar of loss is above 'Moderate' risk.

Indicates low permanence, the project carbon credits are unlikely to remain valid long-term.

Indicates very low permanence and high risk, the project carbon credits are highly unlikely to remain valid long-term.

Example: At least one pillar of loss component has scored as 'Extreme' or more than four components have scored as 'High' risk.

Interpreting the co-benefits rating

Indicates exceptional progression of targeted SDGs, as well as extraordinary protection or increase in biodiversity.

Example: The project implements a broad range of SDG activities with extensive reach in the community, and has strong biodiversity benefits.

Indicates strong progression of targeted SDGs, as well as mitigates biodiversity risk.

Indicates average progression of targeted SDGs, as well as adequate activities benefitting biodiversity.

Example: The project implements SDG activities with moderate reach in the community and takes acceptable action to reduce pressures on biodiversity.

Indicates narrow progression of targeted SDGs, or low species richness and limited activities to benefit biodiversity.

Indicates very limited progression of targeted SDGs, as well as deficient activities to benefit biodiversity.

Example: The project implements limited SDG activities with limited reach in the community, while not taking meaningful action to benefit biodiversity.

Key takeaways

Regen Ag in the VCM

Regenerative agriculture enhances soil carbon sequestration, playing a crucial role in the Voluntary Carbon Market (VCM). Farmers and land managers implementing these practices can generate carbon credits, representing sequestered CO2, which they can sell in the VCM. This allows organizations to offset their emissions while financially incentivizing sustainable farming. However, projects must meet standards ensuring additionality, permanence, and credit integrity.

Call for Data Transparency

To enhance data transparency and scale the regenerative agriculture offset market with credibility, Sylvera urges developers to improve data disclosure in the following areas:

- Spatial Data: Precise locations of participating farm fields are needed to verify offset claims.
- Activity Data: Detailed records of activities on each farm field are necessary for evaluating impacts on soil carbon.
- Participant Demographics: Information on project participants is crucial to assess additionality and co-benefits.
- Soil Modelling: Dependable and calibrated soil models, documented extensively, are vital for predicting soil carbon dynamics while being mindful of uncertainties.

Call for Higher Standards for Sampling and Modelling

To enhance confidence in Regen Ag projects, Sylvera urges developers to improve standards for sampling in the following areas:

- Regional Adoption Rate: Adoption rate sampling should take place at as granular a scale as possible to create baselines that are reflective of land manager behaviour at the project area scale.
- Soil Sampling: Sampling should occur as often as feasible at stratified and densely distributed fixed locations over time.
- Soil Model Calibration: Any models used for simulating soil carbon dynamics should be calibrated to the biophysical conditions of the project area.

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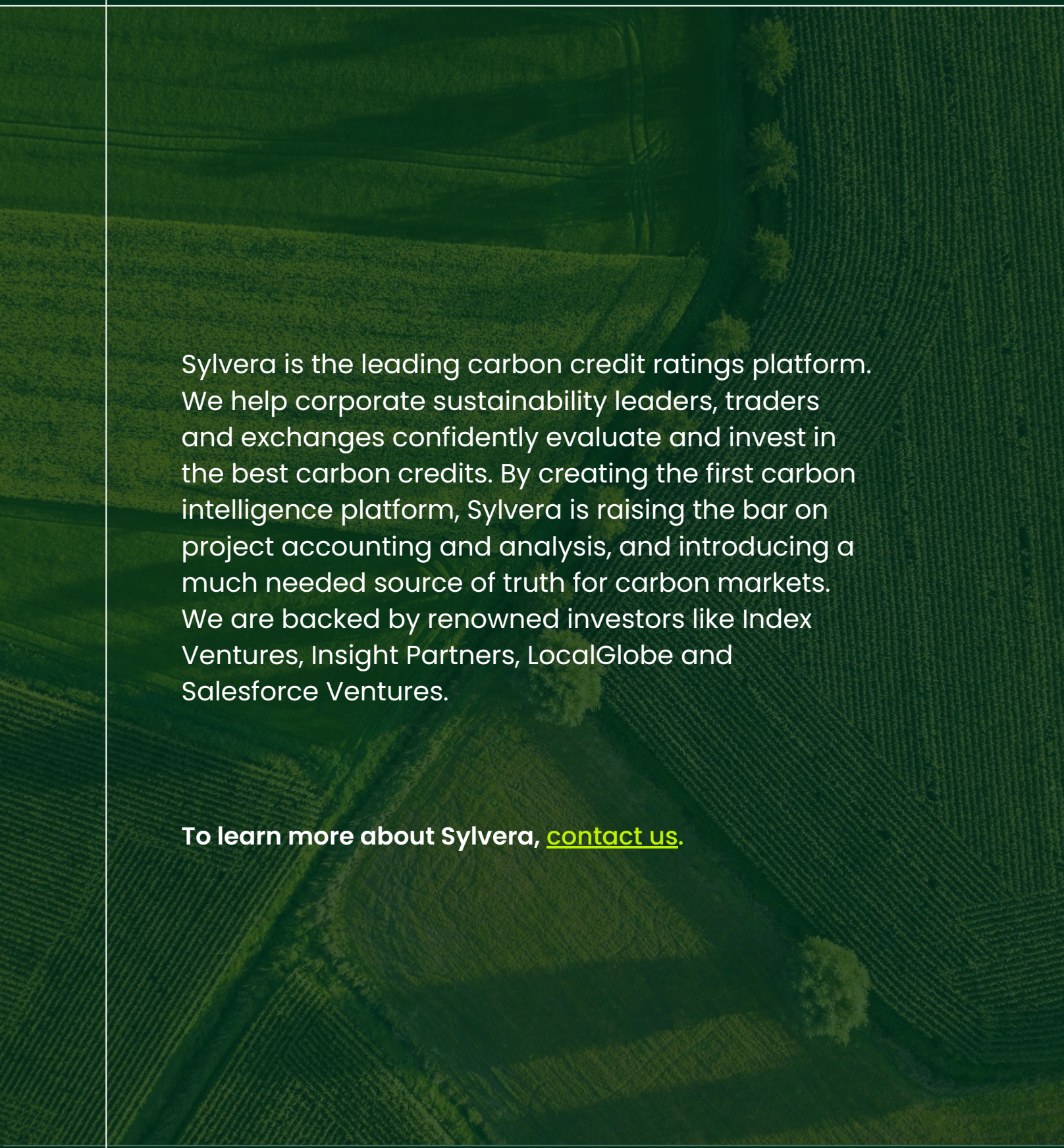

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