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IndigoAg

APPLICATION FOR STRIPE 2020 NEGATIVE EMISSIONS PURCHASE

Section 1: Project Info and Core Approach

1. Project name

Indigo Agriculture Soil Enrichment Credits

2. Project description. ***Max 10 words***

Soil carbon sequestration through regenerative farming practices at scale

3. Please describe your negative emissions solution in detail, making sure to cover the following points:
   a) Provide a technical explanation of the project, including demonstrations of success so far (preferably including data), and future development plans. Try to be as specific as possible: all relevant site locations (e.g. geographic regions), scale, timeline, etc. Feel free to include figures/diagrams if helpful. Be sure to discuss your key assumptions and constraints.
   b) If your primary role is to enable other underlying project(s) (e.g. you are a project coordinator or monitoring service), describe both the core underlying technology/approach with project-specific details (site locations, scale, timeline, etc.), and describe the function provided by your company/organization with respect to the underlying technology/approach.
   c) Please include or link to supplemental data and relevant references.

Max 1,500 words *(feel free to include figures)*

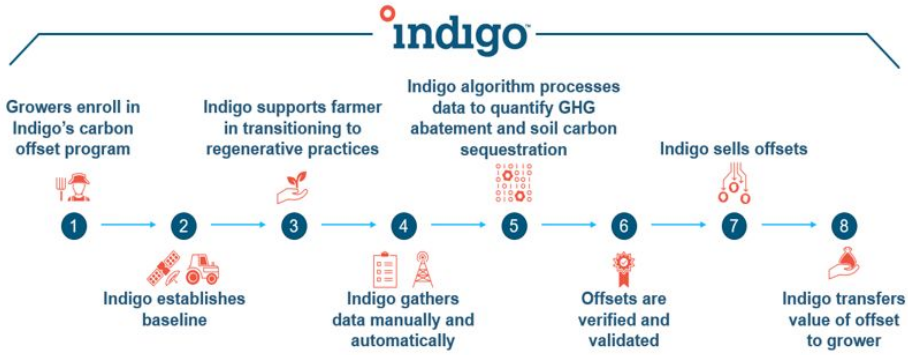
The Terraton Initiative supported by Indigo Carbon seeks to unlock the potential of agriculture, one of the most scalable, immediate, and affordable opportunities to address climate change today by supporting farmers to adopt regenerative practices to remove carbon dioxide from the atmosphere and use it to enrich our agricultural soils.

Photosynthesis, carried out by plants and harnessing the energy of the sun, captures carbon for us naturally. Plants pull carbon dioxide out of the atmosphere and store it in the soil through their roots, and when their biomass is returned to the soil, form soil organic carbon compounds. We can leverage this natural process in agriculture to fight climate change. Specific farming techniques, known as “regenerative growing practices,” have been used by a small percentage of farmers for decades. These techniques increase carbon capture in croplands and drive annual increases in soil carbon. In addition, the increases in soil carbon lead to greater farm resilience (e.g., to drought), water retention, and access to nutrients. Together, these benefits result in higher quality, more nutrient-dense crops being grown more reliably – and more sustainably.

Since many of these processes are contrary to what we know as modern or industrial farming practices, making this shift can be difficult without support. Indigo partners with farmers and supports them in adopting beneficial,

regenerative agricultural practices that draw down carbon dioxide from the atmosphere by increasing the rate of photosynthesis and decreasing the rate of release, such as adding cover crops, reducing tillage, diversifying crop rotations, reduction in changing synthetic fertilizer application to reduce nitrogen usage and waste, and/or integrating the grazing of livestock in cropland no till agricultural. Indigo gathers data manually and automatically to establish each grower's baseline, against which improvements in soil carbon are measured at the end of each growing year.

Indigo is developing soil carbon crediting methodologies in partnership with The Climate Action Reserve and Verra, two of the world's leading carbon registries. These independent entities will ensure that Indigo's methodologies meet the high standards for issuing carbon credits, such as project-driven changes (known as the "additionality" requirement), permanence, and realness (adequate data, evidence, and model accuracy to demonstrate real changes in soil carbon levels). The soil enrichment credits Indigo generates will be issued by these registries, indicating they have verified not only the methodology, but Indigo and its growers' compliance with that methodology. Those validated, verified, once issued, will be sold to organizations, individuals, or governments seeking to purchase credits that represent demonstratable impacts to reductions in atmospheric carbon dioxide and other greenhouse gases. With Indigo's unique modeling + sampling approach, we will keep operating costs low on a per-credit basis, while keeping credit value high by virtue of our high integrity credits, resulting in maximum value being flowed back to the farmer.



Since the launch of the Terraton Initiative in June 2019, Indigo has contracted with millions of acres of farmland to participate in the Carbon program, demonstrating the potential for rapid scale of this carbon drawdown solution. In this first year, we will work with farmers across 21 US States in the US. Powered by partners like Stripe, we will expand to farms across North America, Europe, and Latin America where Indigo already has a presence (Brazil, Argentina).

The Science of Soil Carbon Capture

The ability of regenerative farming practices to increase organic carbon levels in agricultural soils has been well documented across systems that include rotating crops (I, II), cover cropping (III), integrating crop residue (IV), reducing tillage (V), and integrating livestock (VI, VII, VIII), among others.

Indigo began its direct research efforts investigating soil carbon levels in agricultural soils two years ago. We have since collected over 42,000 soil samples from across the U.S., documenting many regenerative growers who have rebuilt their soil organic carbon levels to above 3%, including those in our Indigo Research Partners program, a collection of industry-leading farmers who participate in agricultural technology research and development alongside Indigo.

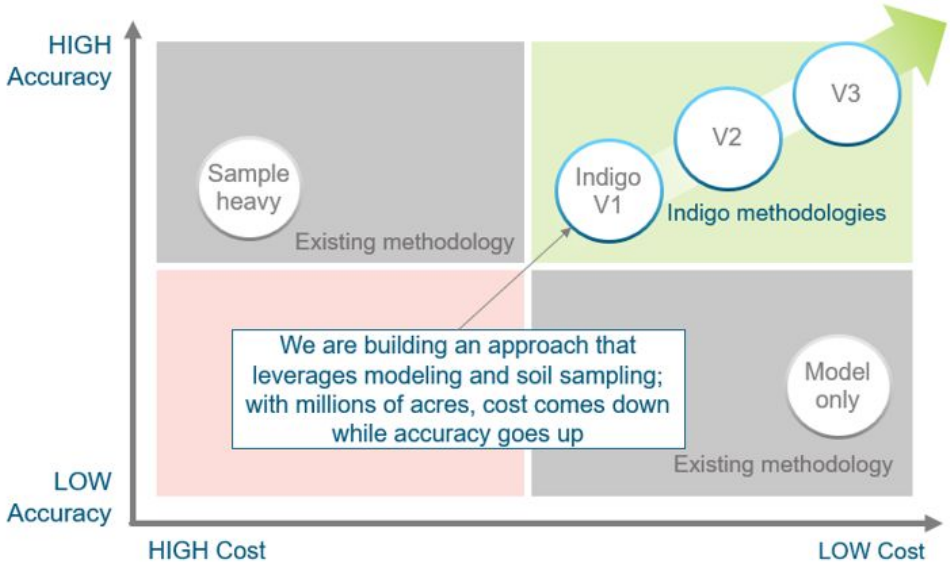
Within that sample, regenerative growers from Oklahoma displayed soil organic carbon as high as 4%, with over 18% of the total regenerative soil samples collected from the state demonstrating greater than 3% soil organic carbon. Similarly, in Alabama, regenerative growers saw soil organic carbon levels as high as 4%, with over 16% of the total samples collected from the state demonstrating greater than 3% soil organic carbon. One of our grower partners in Minnesota saw soil organic carbon levels reach as high as 6% across 500 regenerative acres, while another in Ohio saw a field with a little over 6%, and an average of 4% soil organic carbon across his whole farm. And this is not just in the U.S. – one grower partner in Ontario, Canada saw soil organic carbon levels of 5.5%

across his farm. Through our research and an expansive grower data set, we have been able to identify increases in soil organic carbon levels within a window of 20 years of regenerative practice implementation.

Soil carbon is time-intensive and costly to measure, which is why no effective, scalable, and affordable market solution to reward soil carbon capture has existed to date. Indigo is leveraging the full scope of its data collection and analytics assets as well as its R&D capabilities to measure the impact of regenerative practices on soil carbon at scale and at cost. Three different approaches are used to measure soil carbon levels. First, we sample the soil itself. Second, we collect data directly from the growers, and the equipment that they use, to model the carbon levels within their soil, using existing soil carbon models. And third, we use remote-sensing technologies, such as satellite imagery analytics, to assess how farm management practices have changed over time.

Indigo's proprietary tools and our grower portal make it easier for growers to register their fields and submit management information.

Indigo's field staff will then perform direct measurements to improve soil carbon modeling and give a measured view of carbon stock changes. The combination of large-scale soil sampling and model calibration ensures the soil carbon model predicts actual soil carbon levels, even as accuracy increases and unit costs decreases with scale (more information in measurement section below).



Finally, a key component of our program is verification and compliance with the frameworks established by the most credible external third parties. In the case of enabling carbon payments, carbon registries, including Verra, Climate Action Reserve, Gold Standard, and others exist to perform this function and ensure carbon credits adhere to rigorous standards for additionality, boundary setting, data collection, quantification, and ultimately certification as a tradeable carbon asset.

Specifically, we are working with the Climate Action Reserve (CAR) and Verra. CAR has brought together an expert working group from across not-for-profits, academia, and industry on developing a new soil enrichment credit protocol that 'will provide guidance on how to quantify, monitor, report, and verify agricultural practices that enhance carbon storage in soils.'

The working group meetings are public and can be linked to from the CAR Soil Enrichment Protocol page.

Similarly, we will soon enter the final phase and public review process for our methodology with Verra registry. We are equally excited to be participating in their rigorous and transparent methodology development process that we expect to conclude in summer 2020.

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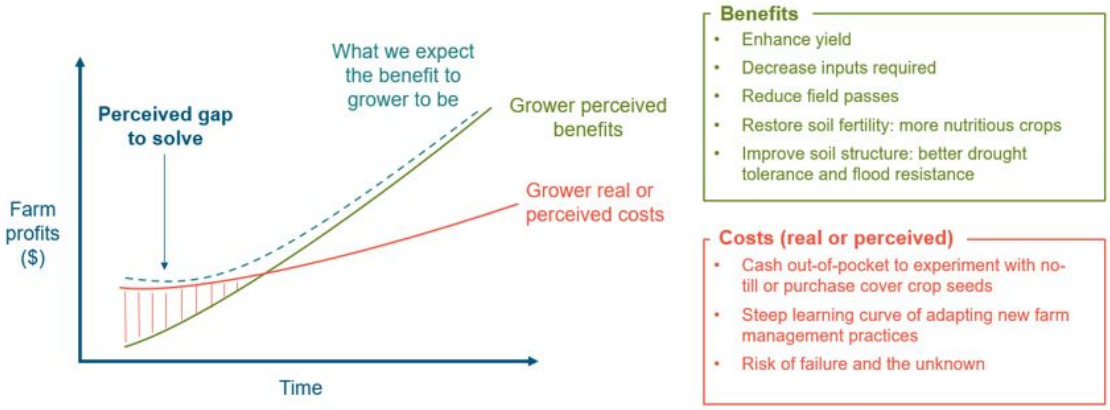
Farmer Economics and Enabling Behavioral Change

If agricultural soils can be a massive carbon sink, why hasn't it happened at scale yet? As mentioned, there has been an absence of market-making technologies (e.g., data collection, monitoring, measurement). Successful programs are unable to scale because previous methodologies have been inflexible and costly (necessitating a cost-credibility tradeoff). Finally, farmers lack the financial incentives to adopt regenerative practices that require behavior changes and often up-front costs.



To help farmers realize the benefits of regenerative farming practices and to assist in minimizing disruption from new practice adoption, Indigo provides education and agronomic support through Indigo Fields, a digital platform, coupled with onsite agronomy support, to help growers transition towards regenerative practices. As the efficacy of different regenerative practices becomes more documented and verified, we will provide more targeted recommendations on which practices to undertake with the highest predicted carbon and crop yield.

Establishing a price of $15-$20 per ton of carbon dioxide would be transformative for a farmer's economics, and is significantly cheaper than most carbon removal options available today and does not require the land be taken out of production (a potential opportunity cost of other carbon removal strategies).

High quality, traceable credits are a key enabler of supporting the price for Terraton Soil Enrichment Credits. The ability for companies to connect their brands to the outcomes at the farm level, around local communities, is a differentiator to the quality and impact of these credits. By bringing together growers and buyers, Indigo aims to create a marketplace for Soil Agricultural Credits that can match the size of the Climate Change challenge with a

solution that is scalable, affordable, and immediate.

We are proud of our progress to date but are just at the beginning of this journey. A negative emissions purchase from Stripe would help launch this program and provide a critical signal of support to other potential buyers and our grower partners.

Citations

I. Sainju, U., A. Lenssen, T. Caesar-Thonthat, J. Waddel. 2006. Carbon Sequestration in Dryland Soils and Plant Residue as Influenced by Tillage and Crop Rotation. Journal of Environmental Quality 35.4:1341-1347

II. Hubbard, R.K., T.C. Strickland, S. Phatak. 2013. Effects of cover crop systems on soil physical properties and carbon/nitrogen relationships in the coastal plain of southeastern USA. Soil & Tillage Research 126:276-283

III. Sainju, U.M., B.P. Singh, and W.F. Whitehead. Long-term effects of tillage, cover crops, and nitrogen fertilization on organic carbon and nitrogen concentrations in sandy loam soils in Georgia, USA. 2002. Soil and Tillage Research 63: 167-179.

IV. Chalise, K.S., S. Singh, B.R. Wegner, S. Kumar, J. D. Perez-Gutierrez, et al. 2018.Cover Crops and Returning Residue Impact on Soil Organic Carbon, Bulk Density, Penetration Resistance, Water Retention, Infiltration, and Soybean Yield. Agronomy Journal111: 99-108.

V. Varvel, G.E., and W.W. Wilhelm. 2010.Long-term soil organic carbon as affected by tillage and cropping systems. Soil Science Society of America Journal 74(3): 915-921.

VI. McSherry, M.E., and M.E. Ritchie. 2013., Effects of grazing on grassland soil carbon: a global review.Global Change Biology 19(5): 1347-1357.

VII. Teague, W.R., S. L. Dowhower, S.A. Baker, N. Haile, P.B. DeLaune, et al. 2011.Grazing management impacts on vegetation, soil biota and soil chemical, physical and hydrological properties in tall grass prairie.Agriculture, Ecosystems & Environment 141(3-4): 310-322.

VIII. Chaplot, V., P. Dlamini, and P. Chivenge. 2016. Potential of grassland rehabilitation through high density-short duration grazing to sequester atmospheric carbon. Geoderma 271: 10-17.

Section 2: 2020 Net-Negative Sequestration Volume

See Stripe Purchase Criteria 1: The project has volume available for purchase in 2020.

4. Based on the above, please estimate the **total net-negative sequestration volume** of your project (and/or the underlying technology) in 2020, in tons of CO2. (Note: We're looking for the net negative amount sequestered here, net lifecycle emissions. In Section 3; you'll discuss your lifecycle and why this number is what it is).

100,000-1,000,000 tons

5. Please estimate how many of those tons are still available for purchase in 2020 (i.e. how many tons not yet committed). This may or may not be the same as the number above.

There are tons available. Early customers like Stripe are critical in jump-starting this program.

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6. (Optional) Provide any other detail or explanation on the above numbers if it'd be helpful. ***Max 100 words.***

Volume range projections for 2020 are driven by three factors 1) number of acres participating 2) number of farmers adopting new practices 3) Sequestration per acre driven by practices adopted as well as crop type, soil type, and other environmental factors such as weather conditions. We expect and encourage farmers to adopt regenerative practices as a phased approach, integrating cover crops, transitioning to no-till practices, etc., over time and based on their individual farming strategy, improving soil carbon sequestered per acre as they go.

An early public signal of support from Stripe as enabled by this process, would be an influential signal to other buyers as well as our farmer partners adopting regenerative practices.

Section 3: Life Cycle Analysis

See Stripe Purchase Criteria 2: The project has a carbon negative complete lifecycle (including energy use, etc).

7. Provide a life cycle analysis of your negative emissions solution demonstrating its carbon negativity, as complete as possible given limited space, and making sure to cover the following points:

a) Include a flow sheet diagram of direct ingoing and outgoing flows (GHG, energy, materials, etc) that bear on the LCA.
b) Please be explicit about the boundary conditions of your LCA, and implications of those boundaries on your life cycle. Let us know why the conditions you've set are appropriate to analyze your project.
c) Make sure to identify assumptions, limitations, constraints, or factors that relate to ingoing and outgoing flows, citing values and sources (for example: land and resource scarcity, limitations on a required chemical, energy requirements). Also identify key sources of uncertainty in determining these values.
d) If your solution results in non-CO2 GHG emissions, please be sure to separately specify that (e.g. in units of GWP 20 or 100 years, ideally both).
e) For solutions that rely on modular components (for example: incoming energy flows or outgoing CO2 streams), feel free to cite values associated with those interfaces instead of fully explaining those components. For these values, please identify the upstream and downstream life cycle emissions of the component.
f) Explain how you would approach a more comprehensive LCA by citing references and underlying data needed for the analysis.

Max 1,000 words *(feel free to include figures or link to an external PDF)*

A project's Life Cycle Analysis (LCA) is a useful tool in understanding project GHG emissions at an entity level - individual farm, product, or factory. In order to ensure full carbon impact of a soil carbon project, and ensure full accounting of the project's net GHG impact, we have spent significant time in our methodology development processes defining the geographic boundary setting process for our projects and ensuring all significant GHG sources are included.

The special extent of the project boundary in our protocol must encompass all lands subject to implementation of proposed regenerative agricultural practice/s. Soil organic carbon is the pool of carbon included in the project boundary and measured when we are setting the baseline and calculating project impact. Given these are agricultural fields, other carbon pools such as above or below ground woody biomass, deadwood, or litter are not included as they are not subject to significant change.

Selected Carbon Pools in the Baseline and With Project Scenario *(From Verra draft methodology)*

Source	Included?	Justification/Explanation
Aboveground woody biomass	No	Per applicability conditions of this methodology, the project activity is not expected to decrease carbon stocks in woody perennials

Aboveground non-woody biomass	No	Carbon pool does not have to be included, because it is not subject to significant changes or potential changes are transient in nature, per VCS 4.0
Belowground biomass	No	Carbon pool is optional for ALM project methodologies and may be excluded from the project boundary per VCS 4.0
Dead wood	No	Carbon pool does not have to be included, because it is not subject to significant changes or potential changes are transient in nature, per VCS 4.0
Litter	No	Carbon pool does not have to be included, because it is not subject to significant changes or potential changes are transient in nature, per VCS 4.0
Soil organic carbon	Yes	Major carbon pool affected by project activity that is expected to increase in the with-project scenario.
Wood products	No	Carbon pool is optional for ALM project methodologies and may be excluded from the project boundary per VCS 4.0

The net GHG project emissions, leakage sources, and/or increases or decreases in carbon stocks included in the project boundary in the baseline and with project scenario are listed in the table below.

GHG Sources Included In or Excluded From the Project Boundary in the Baseline and With Project Scenario

Source	Gas	Included	Justification/Explanation
Soil organic carbon	CO_2	Yes	Quantified as stock change in the pool, rather than an emissions source.
Fossil fuel	CO_2	Yes	The sources of fossil fuel emissions are vehicles (mobile sources, such as trucks, tractors, etc.) and mechanical equipment required by the ALM activity.
Soil methanogenesis	CH_4	Yes	
Enteric fermentation	CH_4	Yes	If livestock grazing occurs in the project or baseline scenario, CH_4 emissions from enteric fermentation shall be included in the project boundary.
Manure deposition	CH_4	Yes	If livestock grazing occurs in the project or baseline scenario, CH_4 and N_2O emissions from manure shall be included in the project boundary.
	N_2O	Yes	
Use of fertilizers	N_2O	Yes	If in the baseline scenario the project area would have been subject to nitrogen fertilization, or If nitrogen fertilization is greater in with project scenario relative to the baseline scenario, N2O emissions from nitrogen fertilizers must be included in the project boundary.

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Use of nitrogen fixing species	N_2O	Yes	If nitrogen fixing species are planted in the project, N_2O emissions from nitrogen fixing species must be included in the project boundary.
Biomass burning	CH_4	Yes	
	N_2O	Yes	

Any fuel usage on farms quantified using the CDM fossil fuel combustion tool for calculating fossil fuel leakage from project activities developed by the Clean Development Mechanism and includes direct sources of emissions include vehicles and mechanical equipment owned by project participants and estimates from non-captive vehicles.

8. Based on the above, for your project, what is the ratio of emissions produced as any part of your project life cycle to CO2 removal from the atmosphere? For true negative emissions solutions, we'd expect this ratio to be less than 1.

Net soil carbon sequestration will be assessed based on the boundaries and sources described above.

Section 4: Permanence and Durability

See Stripe Purchase Criteria 3: The project provides durable, long-term storage of carbon.

9. Provide an upper and lower bound on the likely durability / permanence of sequestered carbon provided by your project, in years:

100

10. Please provide a justification for your estimates, and describe sources of uncertainty related to: the form of storage, effects of environmental or climatic variability, difficulty in monitoring or quantification, etc. Specifically, discuss the risks to permanence for your project, the estimated severity/frequency of those risks (e.g. 10% of the acres of forest in this forest type are burned by fire over a 100 year period), and the time-horizon of permanence given those risks.

Max 500 words

The validity of the GHG emission offsets produced by Indigo and our farmer partners and credited by either the Climate Action Reserve or Verified Carbon Standard soil enrichment protocols requires establishing a 100-year permanence term for the carbon sequestered. Ongoing monitoring and the use of a buffer pool are required to ensure the permanence of the carbon offsets generated.

Indigo will monitor by remote sensing technologies where activities like tilling and/or land use changes can be identified through Indigo's Atlas platform. Unavoidable reversals such as fire or volcano are considered extremely low given the focus on agricultural land but will be monitored as well. To protect against temporary reversals at the field-level or farm-level, Indigo will issue only *net* credits each year, indicating that any credits linked to a farm with a temporary reversal will be replaced by a newly generated credit from a different field in that farm, or even a

different farm, and no incremental credit will be sold until the original farmer meets again the previous high-water mark of soil carbon content. Indigo carbon payments to farmers for sequestered carbon will vest over a ten-year period and stack on each payment. The result is a powerful incentive for farmers to both continue to improve their regenerative practices and become more and more effective at 'farming carbon,' as well as to maintain their soil stock and payments that stack over time and build the value of their land. Indigo's portfolio approach offers protection to the grower as well in the event of a short term reversal: while any unvested payments are paused, there is no clawback for previously disbursed payments, as Indigo's objective is to support that grower in returning to a credit-generating state.

Per carbon registry requirements, Indigo will contribute a % of credits generated to a buffer pool . The registries maintain this to guard against potential reversals.

Section 5: Verification and Accounting

See Stripe Purchase Criteria 4: The project uses scientifically rigorous and transparent methods to verify that they're storing the carbon that they claim, over the period of time they claim to.

11. Provide detailed plans for how you will measure, report, and verify the negative emissions you are offering. Describe key sources of uncertainty associated with your monitoring, and how you plan to overcome them.
Max 500 words

Measurement:

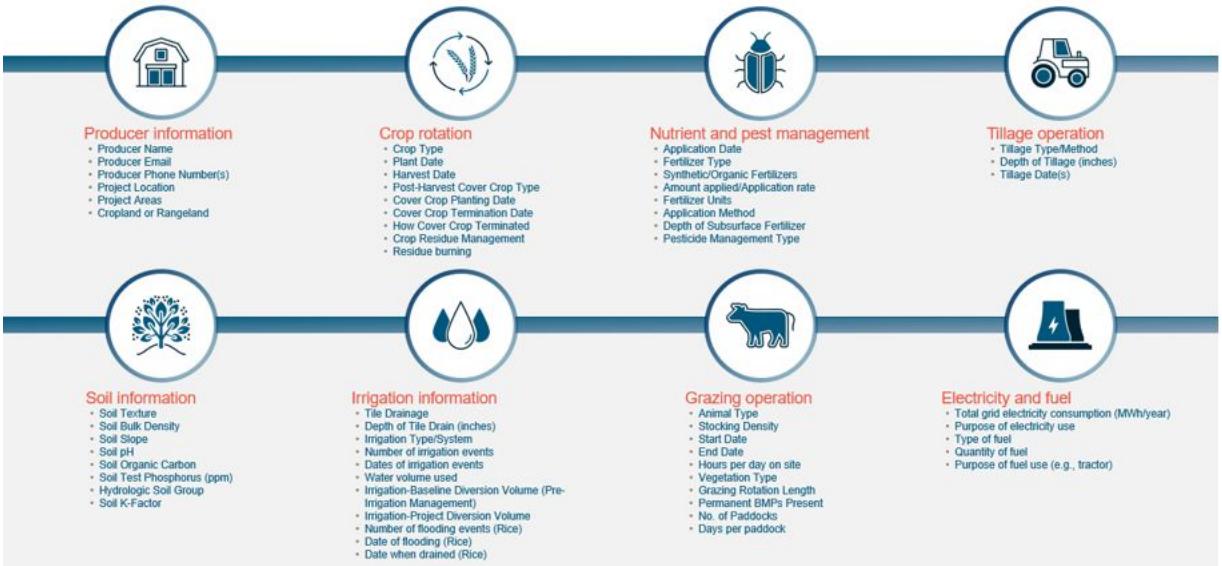
Indigo is making an unprecedented investment in soil sampling to build a data layer that combines year-over-year soil samples with practice and geospatial data to enable model training and improve the warehouse of data on the interaction between soil carbon and management practices, calculate carbon stock changes at greater depths, etc.

Carbon sequestration and abatement are calculated using a combination of direct soil measurements and peer-reviewed biogeochemical models. Credits are based on the net change in soil carbon and greenhouse gas emissions that occurred on a field relative to outcomes that would have occurred in absence of any practice changes.

Biogeochemical models simulate the impact of ecological drivers and soil factors on plant growth/decomposition. Indigo aggregates driver inputs including climate, soil type, crop type, and management practices (including harvest time, residue, amount of fertilizer, grazing, tillage). Soil environmental factors considered include temperature, moisture, Ph, Redox potential, and soil substrates.

Through Indigo's proprietary grower portal and field data collection tools, participants provide detailed management practice data. Indigo selects a statistically-significant set of the enrolled fields for baseline soil sampling (pH, bulk density, carbon concentration, and texture), to achieve the desired project uncertainties based on estimates of model structural uncertainty and sampling uncertainty.

Sample of data points we are collecting:



The model then estimates each of the sample field's net sequestration by simulating the biogeochemistry through equations that parameterize reactions in the soil for multiple carbon pools to quantify impact on carbon storage. Our statistical uncertainty goal is to achieve carbon stock changes across all enrolled project fields within 15% of mean with 95% confidence. Project scale is a key to reducing sampling, measurement, and model structural uncertainty. A stock index is a helpful analogy; the more stocks in the portfolio, the more certainty in the mean at the portfolio level. Per both methodologies, if uncertainty coefficient is above +/- 15%, we will reduce the number of credits issued to ensure a conservative view of our impact. Resampling soils at 5 year intervals or less will be used to true-up payments to growers for any error between modeled and measured sequestration.

Stripe's 2020 carbon purchase will be conservatively calculated and accurate at the portfolio level. Stripe's early demand for carbon sequestered sparks demand that will enable this program to scale quickly and provides soil carbon sequestration measurement that has never before been possible.

Verification and audit:

Indigo will work with recognized carbon registries and follow their reporting procedures to ensure 3rd party verification of carbon sequestered.

Verification bodies must follow the standard carbon registry detailed verification program manuals (example) ensuring the risk of error is assessed and addressed. Verification activities include:

- **Site visit of Fields:** A minimum of 5 percent of emission reductions for the project must be visited.
- **Risk assessment verification:** Ensure the project Monitoring Plan is sufficiently rigorous to support protocol requirements and proper operation of the project.
- **Recalculation of carbon credit issuances:** Output of recalculations must match original calcs to within 1% to meet materiality threshold.

12. Explain your precise claim to ownership of the negative emissions that you are offering. In particular, explain your ownership claim: 1) in cases in which your solution indirectly enables the direct negative emissions technology and 2) when, based on the LCA above, your solution relies on an additional upstream or downstream activity before resulting in negative emissions. Please address the notion of "double counting" if applicable to your project, and how you'll prevent it.

Max 200 words

Registries have clear ownership requirements for their carbon projects:

Indigo as the project developer contracts with growers – the authorized agent - that have the ability and legal right to affect change on the land and can transfer carbon rights to Indigo in exchange for payment for measured impact. Our program ensures that the credit (and vesting payments) reside with the person 'doing the work' on the land.

In event of new growers taking over a field where credits are vesting and agree to assume and adhere to the carbon contract terms, all unvested payments transfer to the new grower, ensuring incentives are in place to continue practices.

Program methodology and technology eliminates any and all risk of duplication:

- Each field of origin is digitally verified and monitored with geolocation and satellite imagery, ensuring precise attribution.
- All Indigo credit issuances, transfers, and retirements are given a unique identifier and made public.

Registry tracking systems (APX, MarkIt) allows registries and buyers to track offset generation and retirement. For example, Verra requires coordinates of each project to be entered during a verification period. Verra checks in APX and MarkIt if there is a project within 5 km of the project. If another project exists, Verra will confirm the uniqueness of projects by contacting the respective 3rd party verifier.

Section 6: Potential Risks

This section aims to capture Stripe Purchase Criteria 5: The project is globally responsible, considering possible risks and negative externalities.

13. Describe any risks or externalities, any uncertainties associated with them, and how you plan to mitigate them. Consider economic externalities, regulatory constraints, environmental risk, social and political risk. For example: does your project rely on a banned or regulated chemical/process/product? What's the social attitude towards your project in the region(s) it's deployed, and what's the risk of negative public opinion or regulatory reaction?

Max 300 words

While “regenerative” growers tend to sing the praises of regenerative practices, it represents a departure from what is standard in American farming today and a drastic change in operations for the farmer. As a result, making this transition can be difficult without support. If growers are not confident enough in the existence of demand or the overall benefits of the new practices compared to the risks they may perceive, they may not adopt practices as quickly or on as much land as we expect will be required to begin drawing down atmospheric carbon at scale.

Indigo partners with farmers and assists in minimizing disruption from new practice adoption. Indigo offers tailored agronomy support, agronomic products and tools, and access to regenerative farming experts to help our growers make the best choices for their farm and make these decisions more boldly. As the efficacy of different regenerative practices becomes more documented and verified, we will provide more targeted recommendations on which practices to undertake with the greatest impact to overall farm profitability, including reducing the cost of inputs, increasing the expected carbon credit revenue stream, and generating a price premium for sustainably grown crops. Indigo works in partnership with growers to benefit both the farm and the environment.

We hope partners like Stripe and other buyers we are talking to will help demonstrate early that the demand for agriculture-based credits is strong and growing.

Section 7: Potential to Scale

This section aims to capture Stripe Purchase Criteria 6: The project has the potential to scale to high net-negative volume and low cost (subject to the other criteria).

14. Help us understand how the cost and net-negative volume of your solution will change over time. Note that we aren’t looking for perfect estimates. Instead, we’re trying to understand what the long-term potential is and what the general cost curve to get there looks like. (Note: by “cost” here we mean the amount Stripe or any other customer would pay for your solution):

	Today	In ~5 years	In ~20 years
Est. Cost per net-negative ton (in $)	$20 ($15 to farmer, $5 MRV)	Indigo will bring down the cost of MRV to less than $1/dollar/ton. In the future, farmers will set the price for which they will sell their soil carbon sequestration impact.	MRV: <$1 Farmer adoption: Market rate
Est. Net-negative volume (in tons of CO2)	100,000-1,000,000 T	1 GT / yr	10 GT / yr

15. What are the drivers of cost? Which aspects of your costs could come down over the next 5 years, and by how much? Do you think your eventual scale potential is limited by cost or by volume? Why? Refer to any relevant constraints from question #7, like land or materials scarcity, and specify the boundary conditions for which you consider those constraints.

Max 300 words

Indigo's development path will bring down the cost of soil carbon measurement and verification through operational improvements and efficiency achieved through continued scale, model recalibration, and technology development to enable in-field soil testing.

The other major driver of the price of a ton of soil carbon sequestration is the payment to the farmer. Scale and the farmer incentive are linked. As the world needs carbon drawdown (demand increase), more and more famers – enabled by Indigo's platform – can deliver that impact, potentially reaching huge volumes of cumulative carbon sequestration across the world's agricultural and pastureland.

Section 8: Only for projects with significant land usage

See Stripe's Purchase Criteria 2: The project has a net cooling effect on the climate (e.g. carbon negative complete life cycle, albedo impact, etc.) ***This section is only for projects with significant land usage requirements: Forest, Soil, and BECCS/Biochar/Biomass sequestration projects.***

16. Location: Please provide baseline information about the geographic location(s) of your project; and link shapefile(s) of project area(s).

Max 100 words

In 2020, Indigo is working with partner farmers across 21 states in the Mid-West and Southern United States. The land use will not change as "farming carbon" happens in concert with farming other crops. In this way, there is not a land use opportunity cost associated with the project; the farmers use the same land they would otherwise be farming on.

We also have plans to expand beyond the United States to Europe and parts of Latin America where Indigo has a presence (e.g., Brazil, Argentina).

Due to farmer privacy considerations, which are critical to Indigo, we cannot disclose the specific locations of the farms where we are working.

17. Land ownership: Please describe the current (and historical as relevant) land ownership and management for the area(s) provided in (16). If your project is not the landowner, describe your relationship to the landowner.

Max 150 words

As described above, Indigo as the project developer contracts with the authorizing entities on the land – the entity that is responsible for behavior change on field – for the right to generate carbon credits from measurement and actions on the land. In event of new growers taking over a field where credit payments have been earned and are vesting, all unvested payments transfer to the new grower, ensuring incentives are in place to continue practices.

After credits are verified, Indigo sells the soil enrichment credits to companies like Stripe, and then flows payment back to the farmer.

18. Land use: For forest projects, please provide details on forest composition as well as forest age and basal crop area/density. For soil projects, please provide details on land use and crop type (if agricultural), soil organic

carbon baselines, and regenerative methodology. For BECCS, biochar, or wooden building materials projects, please provide details on biomass crop type and methodology as applicable.

Max 500 words

Indigo is working on agricultural land in the United States and fields that raise major grain crops such as corn, wheat soybeans, and rice; minor grain crops such as sorghum, barley, rye, and oats; major field crops such as cotton, hay, alfalfa, and canola. Fruits, vegetables, orchards, and vineyards are not currently included in our program.

As described above, soil organic carbon baselines are set by grouping like fields into strata based on crop type, soil type, and management practice history provided by all farmers for all fields. Enrolled fields are split into strata with similar expected carbon sequestration. Indigo then selects a random subset of growers and their fields for sampling within each Strata to establish a baseline level of SOC and for soil sampling, which will later be used to ground-truth the model. When credits are calculated at the field level, we calculate both the baseline "no-action" scenario and the change to soil carbon based on changes in management practices. The soil samples are used to confirm those calculations are correct. For now, Indigo will measure soil organic carbon concentration through bulk density, and clay percentage through infrared spectroscopy, dry combustion (soil carbon concentration), and volumetric measurement (for one out of every five samples).

There are five categories of practices that are proven to develop soil carbon enriched soils, but that lack widespread adoption because their benefits are not well understood and require significant changes from conventional farming practices

1. Plant cover crops
2. Use no-till farming
3. Rotate crops
4. Reduce inputs
5. Incorporate livestock

A starting point for the literature on how these farming practices build soil carbon can be accessed in question 1.

19. Net effect on climate: Please discuss the non-CO2 impacts of your project that may not be covered in your LCA, such as your impact on albedo.

Max 150 words

Building carbon enriched soil at scale will help slow climate change. Doing so improves the resiliency of our agriculture system, the profitability of farmers, and the health of crops. For that reason, the benefits of soil enrichment credits include benefits to *adapting* to climate change in addition to climate protection

Regenerative practices that increase soil carbon lead to more biodiversity and help prevent negative impacts and risks of monocropping such as improving nutrient diversity and farm system resiliency.

Regenerative agriculture also improves water quality and enables more efficient water use. Soil with more carbon requires fewer synthetic inputs, reducing fertilizer runoff. Soil with higher levels of stored carbon improves water holding capacity, limiting the impact of droughts and floods on the field, and reducing the amount of water needed per pound/bushel of healthy food.

Finally, the payments for these credits will go directly to farmers and rural communities. Profit pressure on farmers in the US and around the world has been well documented, and a per-ton payment for soil sequestration will enable an additional revenue stream for the critical service provided. At Indigo we believe farmers are the heroes of the climate fight. With Stripe's support we can unlock this potential.

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Section 9: Other

20. What one thing would allow you to supercharge your project's progress? This could be anything (offtakes/guaranteed annual demand, policy, press, etc.).

Max 100 words

Guaranteed offtake from Stripe will signal to farmers there is a community of companies and people who will support them in investing (and taking the leap!) to adopt regenerative practices. Indigo, in partnership with Stripe, would celebrate this purchase with our grower partners. Additionally, an announcement from Stripe about the importance for companies looking to address carbon draw down to invest now, in the first year, in Indigo Carbon's program to enable further technology development and farmer sign ups, will be a huge value add to the program, and progress in addressing climate change and improving the resiliency of agriculture.

21. (Optional) Is there anything else we should know about your project?

Max 500 words

Thank you for the opportunity to apply and in advance for your thoughtful review. We anticipate both our Verra and Climate Action Reserve soil carbon methodologies to be posted for public comment this spring. The efforts will ensure that Indigo's project follows the rigorous guidelines for additionality, permanence, ownership, quantification and monitoring put forward by these registries and the review group.

They will also be a contribution to this space and enable other groups to develop their own agricultural soil enrichment projects and help us achieve the potential for agriculture to be a carbon sink. It is Indigo's goal to not only lead the fight against climate change, but to enable and empower others to join in as well.

If possible, we can add a link here when those documents are public. Regardless, they will be available on the registry websites and Indigo.com when available. At Indigo we foster a culture of learning and improvement. We welcome all comments and contributions to make our program stronger.

Section 10: Submission details

*This section **will not** be made public.*

22. Please insert below the name and title of the person submitting this application on behalf of your company (or, if you are submitting this application on your own behalf, your own details). By submitting this application, you confirm that you have read and accept the Project Overview (available HERE), as well as the further conditions set out below. As a reminder, all submitted applications will be made public upon Stripe's announcement. *Once you've read and completed this section, submit your application by March 20th by clicking the blue "Share" button in the upper right, and share the document with **nets-review-2020@stripe.com**.*

Name of company or person submitting this application

[redacted]

Name and title of person submitting this application (may be same as above)

[redacted]

Date on which application is submitted

stripe

[redacted]

We intend to make the selection process as informal as possible. However, we do expect that (a) the content of your application is, to the best of your knowledge, complete and correct; (b) you do not include any content in your application that breaches any third party's rights, or discloses any third party's confidential information; (c) you understand that we will publicly publish your application, in full, at the conclusion of the selection process. You also understand that Stripe is not obliged to explain how it decided to fund the projects that are ultimately funded, and - although extremely unlikely - it is possible that Stripe may decide to not proceed, or only partially proceed, with the negative emissions purchase project. Finally, if you are selected as a recipient for funding, Stripe will not be under any obligation to provide you with funding until such time as you and Stripe sign a formal written agreement containing the funding commitment.