stripe

Nori

APPLICATION FOR STRIPE 2020 NEGATIVE EMISSIONS PURCHASE

Section 1: Project Info and Core Approach

1. Project name

Nori

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

Accelerating carbon removal and supporting soil health across US croplands.

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)*

Nori is a software-based "carbon removal" market. Nori adopts methodologies for estimating and verifying how much heat-trapping gas a particular activity or project is drawing out of the atmosphere. When a project owner (the "Supplier") provides independent 3rd party verification that 1 incremental tonne of CO_2 has been withdrawn from the atmosphere, Nori issues one Nori Carbon Removal Tonne ("NRT"). If/when the Supplier sells an NRT to a Buyer, that Supplier signs a Carbon Retention Contract with Nori LLC that binds the Supplier to retain the recovered C in a natural or man-made terrestrial reservoir for a minimum of 10 years.

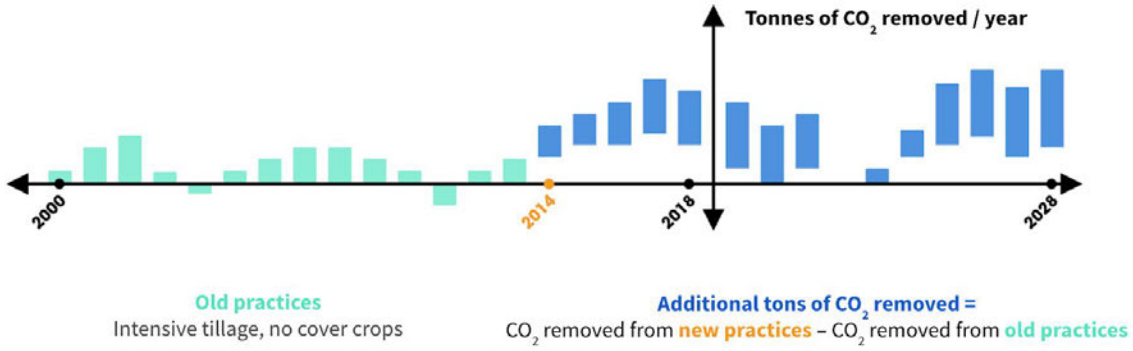
One NRT represents one tonne of CO_2 removed from the atmosphere and Nori's commitment to the Buyer that the recovered C will be retained in storage for at least 10 years. Nori maintains an insurance reserve to back-up the guarantee that the underlying environmental value of the NRT is always at least 1 TCO_2e removed and retained for at least 10 years.

Ultimately, Nori proposes to be industry sector, technology and location-agnostic, and to introduce carbon removal methodologies across sectors and all regions. **Nori's first carbon removal quantification and NRT issuance methodology--the Croplands Methodology--is focused on the carbon removal potential of US food, fiber and biofuel producers** (see Nori's How Nori Works program manual and US Croplands

Methodology).

Nori has designed the US croplands methodology to integrate with a US Department of Agriculture platform, COMET-Farm, that NRCS and US land grant university assistance offices use to estimate the Soil Organic Carbon (SOC) stock change associated with the adoption of select conservation practices. The Nori platform expands the uses of COMET-Farm, and makes it simple for Nori Suppliers (crop producers) to transfer data from other farm management software to Nori, where the data are then run through COMET-Farm. The minimum data reporting term for projects entering the Nori market during the current pilot phase is 14 years, and could be up to 30 years, depending on how the Supplier elects to manage their NRTs.

This methodology deploys a dynamic baseline that takes into account weather and climate variability, crop mix, and soil type, and estimates incremental SOC change that is directly attributable to the adoption of carbon farming practices. Below is a graph that illustrates the potential NRT issuance for *additional* carbon sequestration over a ten year period for a Supplier who adopted practice changes in 2014.



Nori intends to develop additional methodologies to expand to other activities/sectors, including but not limited to grasslands management, reforestation, afforestation, direct air capture, blue carbon, carbon mineralization, etc. Additionally, Nori plans to expand globally methodologies and suppliers to a global reach.

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).

As a marketplace, Nori hosts multiple projects, however the NRTs associated with this application to Stripe originate in the Harborview Farms Project, which is located in Maryland. Learn more about how Trey Hill is removing and retaining carbon at https://nori.com/supplier/1.

The **total volume of issued NRTs for this project was 14,011**, of which 8,010 have already been sold. **Nori has reserved 5,000 NRTs for Stripe**, and the remainder held in reserve for other buyers.

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.

5,000 tonnes

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

Nori is currently in the process of enrolling additional US Croplands projects. US Croplands Projects with the potential to generate 300,000 to 500,000 NRTs are currently in the Nori market supply pipeline. In general, US Croplands have the potential capacity to sequester between 400 and 700 million TCO_2e/year. The capacity of US Croplands soils to draw down and store incremental C recovered from the atmosphere does reach a saturation point, but at a 400 million TCO_2e/year drawdown rate, it would take US Croplands 40 to 50 years to reach croplands SOC stock saturation. (Data sources: (1) Food and Agriculture Organization, "Global Soil Organic Carbon Map", 2017, http://www fao org/documents/card/en/c/fb798a4c-ff06-4468-ad18-27787d1f3456/, and (2) US EPA, "US GHG Inventory (draft): 2020, https://www epa gov/sites/production/files/2020-02/documents/us-ghg-inventory-2020-main-text pdf)

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)*

The NRT represents1 TCO_2e of incremental SOC stock gain and a binding commitment to store the recovered C in the natural terrestrial environment for at least 10 years. The SOC stock gain estimate is not adjusted to reflect coincident reductions in GHG releases from the farm or fields. Nori does require suppliers to report any use of organic fertilizer that originates off farm, distance that fertilizer is transported and mode of transport, as well as changes in on-farm fuel and electricity use. We run these data through the COMET-Farm platform to track the GHG (N_2O, CH_4, CO2 and CO) impacts of the adopted practice changes. *This allows us to ensure that we are not inadvertently rewarding sequestration that is offset by GHG increases.* But we do not build credit for the estimated GHG reductions into the NRT quantification.

The following table illustrates the practice change impacts for a typical Nori US Croplands project, before accounting for reductions in diesel fuel demand.

Sample COMET-Farm output			
		Post-Practice Switch	
Source	**Baseline Emissions**	**Emissions**	**Change**
Field 1 (60 acres - corn, soybean)			
	tonnes CO2e, 10-year average (per year)		
C (tonnes CO_2-equivalent/year)	**(9.7)**	**(41.4)**	**(31.7)**
CO (tonnes CO_2-equivalent/year) (1)	-	-	-
CO_2 (tonnes CO_2-equivalent/year)(1)	-	-	-
N_2O (tonnes CO_2-equivalent/year) (1)	58.4	54.5	(3.9)
CH_4 (tonnes CO_2-equivalent/year) (1)	-	-	-
Total	**48.7**	**13.1**	**-35.6**

(1) This example accounts only for soil organic matter stock and greenhouse gas emission changes directly resulting from changes in soil management and cropping practices. They do not account for changes in fuel and energy use. When practice changes include shifting from intensive to reduce tillage, this typically results in significant reductions in diesel fuel use. So additional reductions in CO, CO_2, N_2O and CH_4 would appear in this table if we accounted for changes in fuel use.

The boundaries of a Nori project are the boundaries of the set of fields that comprise the project. An NRT represents 1 TCO2e drawn out of the atmosphere when the recovered C is stored in the top 30 centimeters of the soil that is within the field boundaries. For the 5,000 NRTs associated with this application, the relevant fields from Harborview Farms are: Johnston (58.2 NRTs), Kent Hills (1,778.4 and the very first field entered on the app), Kwest (1,132.4), Lynch Hill (268.4), Plummer 1-4 (91.3), Plummer 5 (82.3), Plummer 6 (81.7), Rath H5 (997.4), Rath H6/H7 (745.9), Rath H8/H9 (764.5). While images are included below, you can also view all fields at https://nori.com/supplier/1 .

Generally, when farmers switch from conventional to soil-health-building practices, they tend to decrease their synthetic fertilizer use (reducing N_2O losses to the atmosphere), water use in irrigation, residue burning, and CO_2 losses due to soil erosion, leading to an overall decrease in greenhouse gas emissions from these sources. Also, when they shift from intensive to minimum tillage, they typically consume much less diesel fuel.

While Nori does not embed credit for these likely coincident GHG reductions in the NRT, we do track the COMET-Farm estimates of GHG emissions impacts, to be certain that there is no net GHG increase associated with the family of Nori projects.

COMET-Farm documentation links: https://www.usda.gov/oce/climate_change/estimation.htm (see Ch. 3)

Please note, as well, that plants release water vapour from their leaves (called “transpiration”) and also the soil, Some of the water vapour released from the soil goes directly to the atmosphere (called “respiration”), while some of the moisture in the soil leaks into rivers, lakes and oceans, and is released to the atmosphere

from there (called “evaporation”). While water vapour is also a greenhouse gas, net water vapour releases are not typically accounted for in carbon offset market quantification methods. Generally, however, when US crop producers adopt regenerative practices, the result is that for any given crop production level, less bare soil is exposed to the air over the course of any given year. All other things being equal, this typically also results in the co-benefit of reduced soil evapo-respiration rates per acre of managed land.

We address sources of uncertainty in greater detail in our response to question 10, below.

Johnston

Tonnes issued	Tonnes sold
58.2	0.0

Kent Hills

Tonnes issued	Tonnes sold
1,778.4	0.0

Kwest

Tonnes issued	Tonnes sold
1,132.4	0.0

Lynch Hill

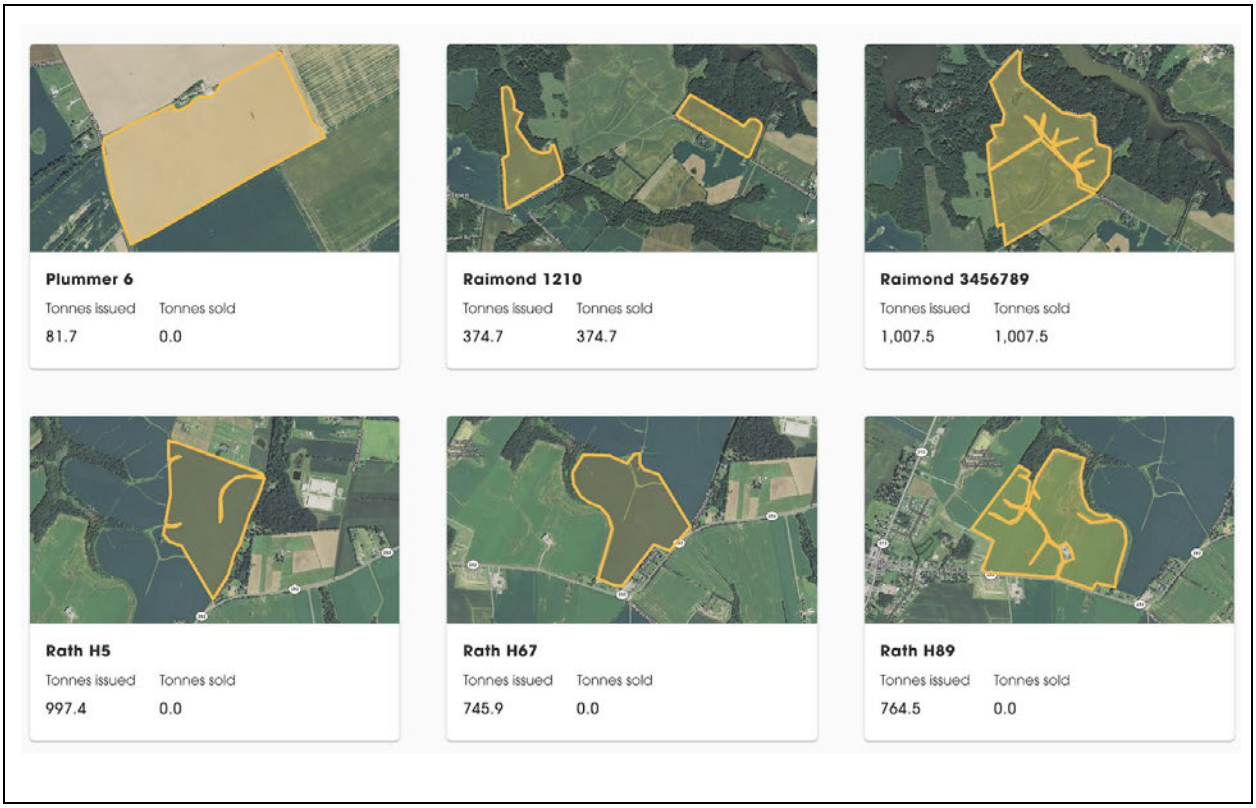
Tonnes issued	Tonnes sold
268.4	0.0

Plummer 1-4

Tonnes issued	Tonnes sold
176.1	84.8

Plummer 5

Tonnes issued	Tonnes sold
82.3	0.0



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.

As illustrated above, COMET-Farm generates a report with two columns: one is a baseline SOC stock change case, and the second estimates the SOC stock change associated with practice changes. (The estimates in the table represent the annual equivalent of a 10-year trend.) The NRT reflects 1TCO_2e of difference between the baseline and post-practice change scenarios.

In a typical field for Nori's first registered US croplands project, soil organic carbon stocks carbon removal increases by 325% (in CO_2-equivalents) while N_2O emissions decreased by roughly 6% to 7% between the baseline and post-practice change scenarios.

These sample estimates account only for SOC and GHG emission changes in the soil and cropping systems within the boundaries of the crop-producing fields, and do not include the additional GHG reductions associated with related changes in on-farm fuel use.

The ratio of GHG emission change relative to CO_2 removal can vary from project to project. *Nori can and will guarantee that this ratio will be less than 1 for all NRTs supplied to Stripe through the Nori market.*

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:

One NRT is equivalent to 1 tonne CO2 *removed* from the atmosphere and *retained* in a terrestrial reserve for *at least* ten years.

US crop producers must agree to a minimum 10-year project registration term. At the end of their first 10-year project registration term they will be encouraged, but not obliged, to re-enroll their fields in the Nori market. Whether or not the Suppliers re-enroll, Nori will publish their new SOC stock level, to reduce the risk that they might enroll in any carbon market with a lower SOC baseline.

Whenever a Nori Supplier sells an NRTor lot of NRTs, they sign a new contract 10-year Carbon Retention Contract. This second contract binds them to retain the recovered C underlying the NRT in their soil for at least 10 years. So when the Supplier sells an NRT that is issued in the last year of their 10-year Project Registration Contract term that means they are bound to continue to report data to Nori for an additional 10 years (the Carbon Retention Contract term).

In reality, most food and fiber producers are invested in improved soil health. Typically, within 7 to 12 years after starting the transition to regenerative practices, most producers are very unlikely to reverse practices and destroy their SOC stocks. Having said that, Nori's method reflects the view that parties that draw down and store incremental carbon for long periods should have a reasonable expectation that they will earn revenues for delivering that ecosystem service for the duration of that service.

Through our research, we have determined that most of the long-term covenants on land that have been prescribed in traditional carbon offset markets do not, in fact, establish that carbon stocks will be maintained. Nori does not intend to replicate this well-intended but false promise of "permanence". First, many covenants restrict the uses the land can be put to for 25 to 100 years. But it is rarely the case that these use restrictions actually translate into carbon stock retention. Further, even if the covenant does promise carbon stock retention, If there are no continuing revenue streams after a short initial term of offset credit sales, we have found that the very long term carbon stock retention commitments are rarely kept. That is mostly because continuing funding is required to manage and protect the land to retain carbon stocks.

Nori does not wish to perpetuate an illusion of permanence and hopes to communicate that long-term retention of terrestrial carbon stocks likely need to rely on the establishment of a market that generates long-term funding opportunities for the ecosystem service providers. That is why each NRT represents 1 incremental TCO_2e withdrawn from the atmosphere and an operator's commitment to retain the recovered C for 10 years.

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 COMET-Farm platform is undergoing a significant upgrade at this time. The upgrade will result in changes in uncertainty estimates. Nori is prepared to address resulting changes in uncertainty intervals, if/as necessary. We expect the uncertainty associated with the final audit estimate to be in the +/- 12% range.

The COMET-Farm platform, to date, has relied on the same models and land use carbon estimation methods that inform the official US GHG Inventory. The associated uncertainties of these estimates using the COMET-Farm Model, according to the US EPA, are +/~ 11% uncertainty interval, at the national scale. This compares, for example, to:

- +/- 55% uncertainty for annual above-ground forest biomass C stock estimates at the national scale;
- a +46% and -36% uncertainty range for ozone-depleting substance (ODS)-based GHG offset estimates. (There is a +/-35% is the uncertainty associated with the global warming potential for

each non-CO2 GHG, to which we add +10% and -1%, the uncertainties associated with ODS quantity estimates. Source: US EPA, US GHG Inventory (draft), 2020, pages 1-9 and 4-126)

According to the USDA, the uncertainty intervals associated with soil SOC stocks at the farm/field level of resolution are in the +/- 40% to +/- 46% range. So we acknowledge that uncertainty associated with year-to-year SOC stock change estimates at the field level are large. But they are comparable to the uncertainties associated with offset credits that originate in forest or ozone-depleting substance offset projects.

One acre of topsoil to the depth of 30 centimeters typically weighs roughly 1,680 tonnes (depending on soil density). So, while growing SOC stock at a rate of, say, 0.3 tonnes (equivalent to 1.2 TCO_2e removed) per year is very significant in climate change mitigation terms, this year-to-year change is statistically insignificant given the uncertainties associated with annual SOC stock estimates.

But uncertainties associated with field-level SOC stock and flux estimates shrink when looking at longer periods of time. We can have much greater confidence in an estimate of SOC stock change over 7 to 10 year periods than over annual estimates. We feel that we address the known uncertainties in the NRT quantification method that is described in the Nori Croplands Methodology. Nori NRTs represent the lesser of the COMET-Farm estimate of annual SOC stock change and the average SOC stock change estimate for the 10-year period ending in the NRT issuance year. We also rerun that backward-looking 10-year rolling average estimates over the Project term, and modify NRT issuance if this test suggests that Nori previously over-issued NRTs. Nori retires NRTs in the event that we discover any such over-issuance, thereby keeping our commitment to the Buyer that the underlying value of the NRTs you purchase is 1 TCO_2e removed from the atmosphere.

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

For extensive details on Nori's approach to estimating, tracking and verifying US crop producers' CO_2 drawdown claims is described, in detail, in the Nori Croplands Methodology.

In short, Nori requires the Supplier to hire an independent, qualified 3rd party (the "Verifier") to provide assurance that the information the Supplier supplied/supplies to Nori, is reasonable and replicable. The Supplier must select from Nori-approved or "white-listed" Verifiers. At this time, any verification entity that is approved and in good standing in any of the the 4 existing US offset credit registries--Verra, ACR, CAR and the CARB compliance offset system--is deemed to be a Nori white-listed Verifier.

The carbon removal claims underlying the NRTs that will be delivered to Stripe have been verified by Astor Global, a world-leading and ANSI-certified verification entity.

Nori Suppliers are required to submit operating data updates annually, for the 10-year Project Registration term, as well as for any outstanding Carbon Retention Contract terms. Suppliers are required to pay for 3rd party verification of their accumulated annual data submissions at least once every 3 years. A

comprehensive Project Audit is also executed within 120 days of the end of the initial 10-year Project Registration term. The Project Audit must be executed by a white-listed verifier who did not verify either the historical practice claims associated with the Supplier's Nori market enrollment application or the annual operating data updates.

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

In addition to verifying the operating data the US crop producers submit to Nori, the Nori Croplands Methodology requires the independent Verifier to: (1) identify and provide contact information for all persons or entities who have ownership interests in the fields that form a Nori Project, and (2) provide assurance that all of those with an ownership interest have assigned authority to register the Nori Project, sign the Nori Project Registration Contract and direct the disposition of NRTs, to the person identified as the Nori Primary Contact in the Supplier's market enrollment application and all subsequent interactions with Nori and the Nori app.

Nori Suppliers are required to consign their NRTs to Nori to facilitate an efficient NRT sales transaction. The Supplier remains the legal owner of the NRT until it is transferred into the Buyer's Nori account. The Supplier (not Nori) sets an NRT price floor for the consignment term. Nori, acting as NRT Consignee, currently charges the Buyer a 10% commission on the NRT sales price and transfers the guaranteed floor price, or more, to the Supplier upon completion of an NRT transfer.

In the Nori market, an NRT is "retired" immediately upon sale/transfer. In other words, the NRT is not available for resale. Also, Nori's Project Registration Contract prohibits suppliers from offering real interest in their carbon removal claims, directly or indirectly, for sale in any other market, if and as long as the NRTs representing those claims are offered for sale or sold in the Nori platform.

A Nori Supplier can offer real interest in their carbon removal claims in other markets only if: (1) they continue to comply with the operating data reporting and verification requirements of the Project Registration Contract for the full 10-year term, and (2) they elect to retire any related NRTs *without selling them* over the Nori platform. So suppliers do have the option of exiting Nori to go to other markets, but they cannot: (1) offer real interest in their carbon removal claims in Nori and alternative markets at the same time, (2) accept payment for an NRT and offer real interest in the carbon removal claim that underlie that NRT in another market, ever. The Supplier breaches the Project Registration Contract and Nori can sue for damages if the Supplier engages in either of these or any other form of double selling.

All NRT issuances, sales/transfers and retirements are registered on the irreversible blockchain. These procedures minimize the risk of double counting or double crediting carbon removal claims.

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

The primary reason Nori's first methodology is a croplands carbon removal standard is because there are numerous, substantial co-benefits associated with soil management and cropping practice changes that rebuild soil organic carbon stocks and few—if any—environmental or social risks. The primary risks associated with the adoption of regenerative crop production practices are financial, and largely born by the farm operator. Hence the need for a robust carbon removal marketplace that enables food and fiber producers to generate new revenues in exchange for taking on that financial risk.

Practices that result in increases in the organic matter concentration in topsoils, and related SOC stocks, almost always result in healthier, more productive croplands, more moisture retention, less water and nutrient runoff from farms into rivers/ lakes and oceans, reduced synthetic fertilizer use, and reduced soil erosion rates (especially during extreme weather events). US crop producers who adopt regenerative practices typically spend less on fossil fuels, but employ more labor, as a result of the shift. In a world in which the risk of warming is significant, the adoption of regenerative practices results in more resilient croplands.

Over time, the adoption of more regenerative practices also results in more productive and potentially more profitable croplands. But the transition from resource extractive to regenerative food and fiber production is gradual and requires the farmer to make significant up-front capital commitment. Realizing a payback period for those investments typically takes at least 7 and often more than 10 years, in the absence of a revenue stream for the carbon removal and retention services the crop producers are supplying.

Few, if any, US food and fiber producers have the financial capacity to wait 10 years to recover their capital and operating costs. It is also true that very few other GHG reduction, or CO_2 drawdown and C retention opportunities are associated with such a complete suite of environmental and social co-benefits, which co-benefits can reasonably be expected to be sustainable over many decades at CO_2 prices well below US$50/TCO$_2$e

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 $) (*)	$15	$35	$60
Est. Net-negative volume (in tons of CO2) (*)	500k-2M/year	10-50M/year	0.4B-0.7B/year

***** *These are the price per NRTs set by the Supplier, but there is an associated 10% transaction fee required by Nori on the sale of every NRT*

NOTE: *These estimates are based on the Nori US Croplands Methodology only. The scientific consensus is that our SOC stocks have the capacity to grow by 100% to 140%, where 100% assumes we are simply returning existing SOC stocks to where they were 300 years ago. According to the Food and Agriculture Organization, the global capacity of*

all soils--croplands, grasslands, wetlands, forests and urban landscape--to absorb CO_2 and store incremental C as a result of the adoption of new management practices, exceeds an absolute 2.5 trillion TCO2e (source: Food and Agriculture Organization, "Global Soil Organic Carbon Map", http://www.fao.org/global-soil-partnership/pillars-action/4-information-and-data-new/global-soil-organic-carbon-gsoc-map/en/). The potential to increase SOC stocks in all US soils ranks third in the world--after Russia and Canada. If we give ourselves 100 years to rebuild all available SOC stocks back where they were 300 years ago--quite doable with known management practices--that equates to just under 2 billion TCO_2e/year of CO2 drawdown potential, for each of the next 100 years, in the US alone.

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

The costs of shifting from conventional to regenerative agricultural practices include, but are not limited to, (1) significant up-front capital investments in equipment and (2) increased staffing costs.

Typically, when a US crop producer elects to shift from extractive to regenerative food, fiber, and biofuel production practices they must invest in new/different equipment. This includes everything from different mobile equipment used to see and harvest the fields, new irrigation systems, to high tech soil and crop monitoring devices. Even with very high tech monitoring technology, shifting to more regenerative practices typically means increased labor costs for the farm operator. They need both: (1) more staff, and (2) staff with access to more training.

The equipment changes typically mean that farm operators spend much less on diesel fuel. But fuel cost savings are usually almost all offset by payroll cost increases. Later in the transition, the practice shift typically leads to reduced spending on synthetic fertilizers, pesticides, and other soil treatments. But these cost savings are not typically realized early in the transition process, hence the long payback on the up-front capital investment.

The scale of the capital requirement depends on farm size. But transition is most difficult for those who farm less than 1,000 acres. Nori is working with agriculture service providers we call "Data Managers" to develop opportunities for small farm operators to share fixed data collection, retention and verification costs, to make the market more accessible to them.

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

For the Harborview Farms project, the details of fields with associated NRTs are outlined and publicly available at https://nori.com/supplier/1.

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More detailed shape files of the fields and boundaries for each field can be found here.

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

With regard to the specific project associated with this application, there are multiple owners of the land operated by Harborview Farms. Trey and his father and mother have controlling interest of Harborview Farms. Trey is the 4th generation of the Hill family to farm in Maryland. You can find more information about this here: https://www.harborviewfarms.net/who-we-are.

The Supplier, Trey Hill, owns, co-owns, and/or leases all of the fields that comprise the Nori Project from which the Stripe NRTs are sourced. Nori requires all Suppliers to disclose to Nori the names of all persons that have real interest in the fields that comprise the Project, and to secure an assignment of authority to register the fields as Nori Project(s) and control NRT dispositions. The independent Verifier must provide assurance that the ownership disclosure to Nori is accurate and complete.

Different parties have different requirements when it comes to terms of the assignment agreements, which they also may deem confidential Nori does not dictate assignment agreement language. We do supply a sample assignment agreement for the Supplier's information (https://go.nori.com/assignment-template).Nori relies on the Verifier to provide assurance that all parties with ownership interests have assigned the required authority to the Nori Primary Contact for the Project, or the "Supplier".

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

Trey Hill completed a 10-year transition from intensive to minimum tillage, with tillage method changes he adopted after 2010. More recently, Trey started shifting from 2- to 3-crop rotations in some fields,and/or otherwise modifying the order of crop rotations to maximize SOC stock gains and minimize N losses to the atmosphere. Most recently, Trey introduced winter cover crops to minimize the acre-days that bare soil is exposed to the air, reducing soil erosion (and related organic C loss) rates. Planting cover crops between commercial crop rows during the growing season and winter cover crops between growing seasons also enables the Supplier to better control weeds with limited pesticide use.

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

All covered in responses to prior questions.

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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

Nori's greatest need is to hire additional team members to achieve our goal of scaling carbon removal globally to address climate change. In order to do this, we are currently fundraising. The most impactful thing we can do to secure funding is to demonstrate to investors traction in both demand and supply. One of our biggest priorities is to hire more people on the supply team to increase the total enrolled projects in our platform. Highly visible demand is the single most effective driver of not only securing investment, but also in securing new supply for the Nori market.

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

Max 500 words

Nori has been able to create a storefront where buyers can directly pay Suppliers for carbon removals on a small scale (say to negate emissions for a family vacation) without going through third parties like brokers. This ensures that the NRT supplier receives a much larger share of the payment that the buyer makes. Nori uses and couldn't do this without the use of Stripe's payment portal.

This is the first of dozens of US croplands projects currently being enrolled in the Nori platform. We have over 500,000 acres of pre-qualified committed croplands in our supply pipeline. Additionally, the Harborview Farms Project will continue to generate NRTs for sale in the Nori marketplace for at least 10 and potentially 20+ years.

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

[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.