

Climate-Smart Finance: Transforming Carbon Markets for Social Prosperity

**A critical innovation in carbon project financials
to improve social outcomes, increase credit
integrity, and de-risk investment.**

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Imagine Jeremy. At age 59, he has been a farmer his whole life. He grows corn on the same land in Southern Iowa that his father, grandfather, and great-grandfather farmed. He has three kids, and he is hoping at least one of them will want to carry on the family farm. But his yields have been declining over the last few years, and the rain is not as reliable as it once was. Jeremy is worried about the future. One day, three men knock on his door. He can tell they are not from anywhere nearby, but he has heard from his neighbors that they had had a similar visit, so he invites the men to coffee on his front porch.

The men are from Kenya and Jeremy cannot understand what they would be doing all the way in this remote corner of the world, but he is curious. They explain that the climate is changing and one of the reasons is because of the way he farms. He is tilling the soil too much and using too much fertilizer. Jeremy has heard of climate change and has felt firsthand the impacts on the rains and on his crop. The men tell him he can help mitigate climate change if he adopts new farming practices. The practices have worked in Kenya, they say; it is an investment at first and will require some training, but after about five years, Jeremy should see increases in yield. In addition, the men explain, since Jeremy will be increasing the carbon in his soil, he can get some payments from a new market that will pay him as long as he keeps up the new practices.

Jeremy is skeptical. The investments might be costly – he needs to make some adjustments to his tractor, set aside some of his land to lay fallow, and get trainings from an extension agent. The men want him to commit to the new practices for 40 years – a time long after he hopes to have passed the farm onto his children. He also has to allow these men to take soil samples from his farm and come around and monitor his work; Jeremy is not used to being supervised.



The men promise him a “carbon payment” if he signs a contract with them. The money could make a real difference since his family’s finances have certainly been challenging in the last few years. But it all seems risky. Jeremy does not know if the new practices will actually increase his yields — maybe they will cost him his crop — that would ruin him. And he does not understand where the annual payment comes from, how often he will get paid, or what a fair price for such a thing would be. Jeremy tells the men he will think it over and he talks to some of his neighbors. A few of them are excited — it is basically free money, they say. They want him to sign up, since the project needs a large land area for it to work. But other neighbors think it is a scam — there is no way anyone from outside Iowa knows how to farm their land better than they do; and the payments seem uncertain and far in the future. They advise Jeremy not to take the risk. Jeremy is confused about what to do.¹

Farmers like Jeremy, as well as ranchers, herders, foresters, and land stewards around the world, are facing a similar and scary future. Climate change is increasing the frequency and intensity of droughts and floods, leading to decreases in productivity, and even crop failure and livestock death. Biodiversity loss is impacting pollinators,

degrading habitats, and driving increased human-wildlife conflict. Land degradation, inflation, market fluctuations, demand for natural resources, encroachment, and land-use conflicts are all impacting livelihoods and well-being. All across the rural landscape, the people and ecosystems who sustain the world’s food and fiber systems need help. Technical and financial assistance is urgently needed for investments in new practices that can adapt to a changing climate, regenerate soil health, increase agricultural productivity, and keep forests standing.

Around the world, carbon developers are knocking on farmer’s doors, offering just that. These project developers are making offers to people like Jeremy, promising future benefits for today’s changes in practice. But can carbon projects deliver on those promises?



¹ This story is purposely presented from a reverse perspective – the more common dynamic in the carbon markets today is project developers from the Global North approaching farmers, ranchers, herders, foresters, and land stewards in the Global South to invite them to participate in carbon projects. Seen from the flipped perspective, we can perhaps more greatly appreciate the gravity and riskiness involved in trusting one’s livelihood to strangers. The story also helps us appreciate the taste of neo-colonialism that comes along with any external development project. While Jeremy and his story are fictional, this scenario is a fair representation of some of the issues people grapple with when dealing with carbon project developers.

Introduction

Carbon markets present an unprecedented opportunity to channel private capital to rural communities. As the climate emergency drives voluntary commitments from corporations and others to achieve “net-zero” greenhouse gas emissions, the demand for carbon credits is growing dramatically. Carbon markets are expected to grow from a \$2 billion valuation in 2021 to as much as \$50 billion in 2030.² This soaring interest and demand have positioned nature-based carbon markets to potentially become the largest private investment in poverty alleviation, landscape restoration, and nature conservation in history.³

Yet, as with all things that offer a high reward, carbon markets also carry high risks. To realize these multiple goals, projects must be done correctly. Poorly designed or hastily implemented projects will not only fail to achieve these objectives, but they could also cause human rights violations, result in adverse impacts on biodiversity, increase GHG emissions, and undermine the confidence, and therefore viability, of the entire market.

² [A blueprint for scaling voluntary carbon markets to meet the climate challenge](#) (Blaufelder et al., 2020)

³ On the other hand, investing in other carbon market sectors (e.g., technological forms of carbon capture and storage, destruction of ozone-depleting substances, etc.) may produce valuable reductions in GHGs, but will not provide biodiversity or human well-being benefits. In fact, these investments will likely result in the financial benefits going to large industrials or a handful of tech companies, rather than being widely distributed to rural landowners/managers around the world.

The increasing demand for carbon credits has driven a surge in for-profit carbon project developers and investors who are racing to lock in potential projects. While some of these developers meet high standards for quality and integrity, others aim to maximize profit at the expense of quality and equity. These “carbon cowboys”⁴ have generated predatory contracts containing unfair terms, non-transparent and inequitable benefit-sharing arrangements, and human rights violations—all of which contribute to general confusion and erosion of trust in carbon projects. These low-quality credits are hitting the market first and at scale, thus undermining the opportunity for those seeking true climate, conservation, and community benefits. Carbon credit buyers seeking the lowest possible price while not demanding high standards of quality and equity feed into this dynamic.

While carbon credit standards exist to try to avoid these problems, they are often not applied or audited as rigorously as needed. Several efforts are currently underway to improve the rigor of the standards and drive consensus toward agreed upon best practice.

Due to these issues, there are diverse groups voicing strong opposition to carbon markets. Many of their concerns are based on real cases and valid issues. But banning carbon projects or

⁴ “Carbon cowboys” is a term that is commonly used to refer to carbon project developers who rush to lock in carbon projects without undertaking necessary rigor in stakeholder and rightsholder engagement and benefits.

putting an end to the market would be throwing the baby out with the bathwater (i.e. getting rid of the core value instead of fixing the issues). The size of the investment in carbon markets and their immediate impact on climate mitigation, nature conservation, and livelihood improvements is too important to discard without an earnest attempt to make the system reach its potential. The carbon markets are at a critical pivot point—either they make fundamental improvements to address the very real issues, or they are likely to collapse under their own false promises.

In this paper, we propose the incorporation of a **“Sustainable Livelihoods Transformation Compensation” (SLTC)** as a common practice in the financial model for carbon projects. The SLTC is a payment system that undertakes full accounting of costs accruing to different actors participating in carbon projects (with an important emphasis on accounting for the whole suite of costs incurred by landowners and communities) and makes cost-based payments to all actors in addition to developing a profit-sharing mechanism. The SLTC also allows the profit share to include an advance “incentive payment” to drive enrollment and sustain commitment to the project in the early years before carbon revenue begins to flow. The SLTC aims at greatly increasing the transparency in the negotiations around “benefit-sharing” to help all actors involved better understand the financial impacts of the project. By ensuring everyone’s costs are clearly identified and covered by the project, everyone has more confidence that there are no net losses. By then clearly defining expected profits, negotiations around a fair distribution of the financial benefits from the project are much more transparent.

The SLTC addresses some key inequities present in many nature-based carbon projects and provides significant benefits to a suite of market actors, as we describe below. If the project developers who visited Jeremy had clearly laid out the project’s costs and explained how and when those costs would be covered and what additional payments he would receive, he would have been in a much better position to decide whether the project was in his best interest or not. This paper describes issues with the current financial models and “benefit-sharing” arrangements in many carbon projects, describes the SLTC in much greater detail, and makes the case for why it should become common practice. Finally, it concludes with concrete recommendations for a suite of market actors, including farmers like Jeremy.

The SLTC is a payment system that undertakes full accounting of costs accruing to different actors participating in carbon projects.



Current Cost Models in Existing Carbon Projects

Carbon projects are often quite complex and difficult to understand even for experts who have been in the space for decades. The carbon markets are still evolving and there is a lot of uncertainty in market demand and pricing, making it difficult for anyone to judge what a “fair” price ought to be. For landowners like Jeremy, assessing the costs and benefits of participation may be confusing, or even impossible, if the project developers are not transparent with the project financials. Despite this uncertainty and dynamism in the market, we try to describe here what a typical cost model for many existing carbon projects includes or excludes and highlights the issues that this current model creates.

What Information is Available

To understand how costs are typically calculated in projects and how they are considered when defining the distribution of revenue, we conducted a review of existing projects from a variety of project proponents. The requirement to include “fair and equitable benefit sharing” as part of projects that impact property rights was first introduced in the Verified Carbon Standard (VCS) version 4.5, released in August of 2023. A review of 46 randomly selected projects (30 Agriculture Land Management [ALM] projects and 16 REDD [Reducing

Table 1. Level of Detail on Financial Benefit Sharing Mechanisms, by Project Type

Level of Detail	PROJECT TYPE		
	REDD	ALM	Total
High Numbers provided as part of financial plan	13%	10%	11%
Low Reference was made to a financial benefit sharing plan, but no detail provided	25%	40%	35%
None No financial benefit sharing plan mentioned	63%	50%	54%

Emissions from Deforestation and Forest Degradation in Developing Countries] projects) on the Verra Registry from both before and after the introduction of this requirement found a significant lack of transparency around benefit-sharing arrangements. Over half (54% or 25 projects) of the reviewed projects had no mention of a benefit sharing mechanism, or the mechanism did not describe financial benefits.

Of the 21 projects that did mention benefit sharing, the descriptions were frequently vague, referencing benefit sharing mechanisms either not yet developed or not included within the project document, or using unspecific language such as “investments in local communities” or “financial support of farmers”.

A small number of projects described more specific breakdowns within project documentation, such as one REDD project's 50-50 split of revenues between project proponents and villages, or another REDD project that directs 20% of project revenues to communities. Of these projects, ALM projects more frequently mentioned upfront costs shouldered by smallholders to participate in the project, however no project reported any sort of cost accounting to quantify these burdens. Only one project of those reviewed acknowledged and compensated for the opportunity cost of lost wages for participating in project activities.

What is Commonly Included

Given the lack of information available from existing projects, we can only describe what we understand to be the typical model used by project developers today, based on our experience working in the carbon markets.

Costs are typically modeled from the perspective of the project developer. Costs borne by the developer include: (1) certification costs with the carbon standard, including all upfront development costs and recurring costs associated with verification events; (2) direct costs associated with implementing the mitigation activity on the ground; (3) sales, general, and administrative expenses (SG&A); and (4) financing costs.

Certification costs vary depending on which standard the carbon project is registered with. Periodic costs associated with monitoring and verification events are impacted by the project's verification schedule. In addition to these upfront and recurring costs, the

carbon operation also typically includes registration costs and issuance levies, and methodology rebates that vary according to the number of issued credits.

The costs associated with implementing the mitigation activity on the ground are also difficult to generalize because there are many different ways to carry out these activities across numerous project types. Typical operating expenses might include contracting specialists who provide extension services and planning support to landowners. Typical capital expenses will include property, plant, or equipment expenditures associated with the mitigation activity.

Sales, project development, and administrative expenses are indirect costs associated with the carbon and mitigation activity implementation operations, and include the developer's personnel expenses, workshops, travel costs, and audit fees, etc.

Furthermore, other financial costs will occur in carbon projects seeking financial support. This may include the cost of debt, equity, or assumed discounts associated with streaming or royalty agreements.

What Costs Are Commonly Excluded or Inadequately Calculated

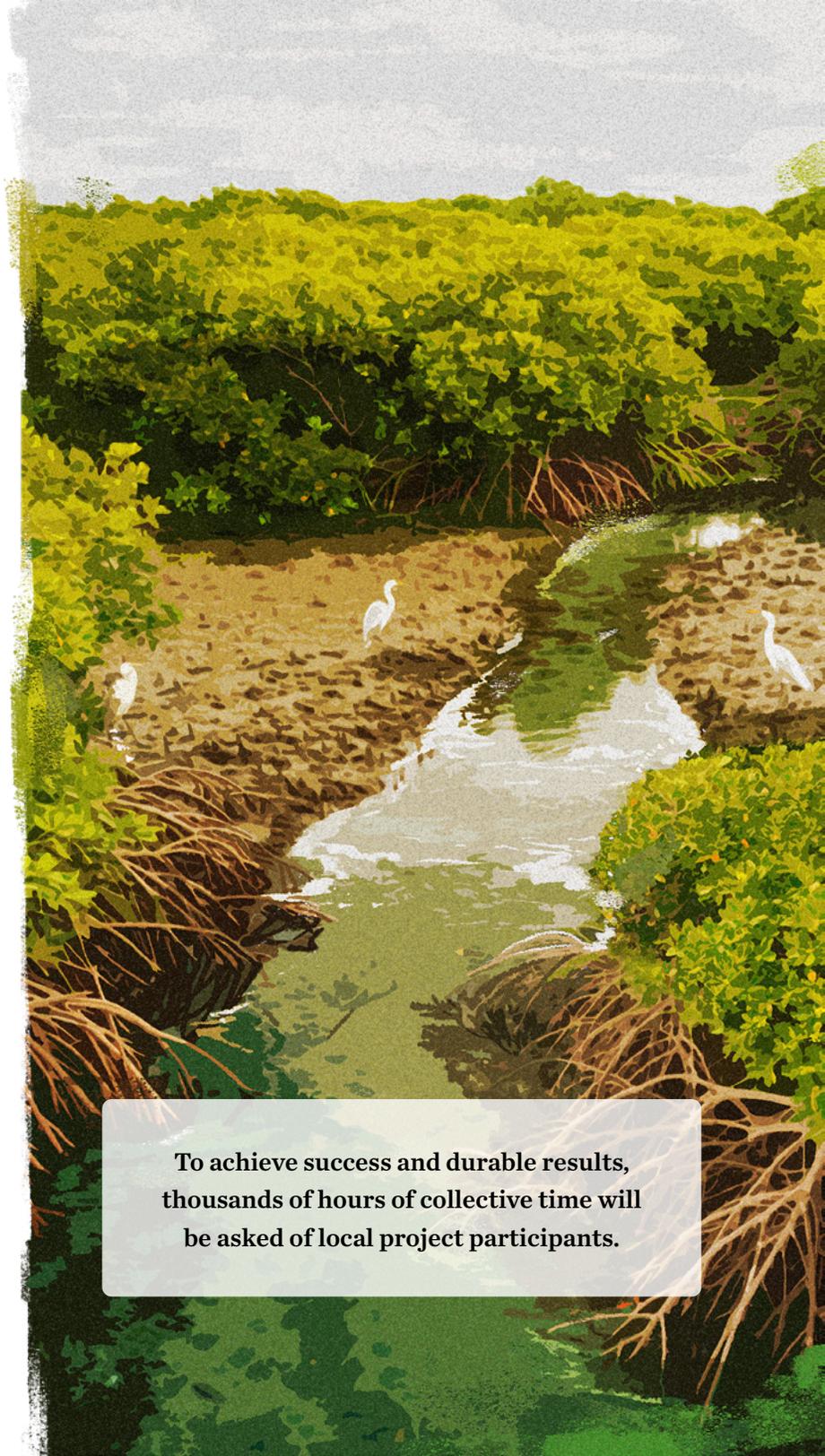
While project developer costs are often well defined and fully covered in the financial models for carbon projects, many of the costs and risks to the landowners, land managers, and/or communities are either excluded or inadequately accounted for. Developers need to work with landowners to ensure the project's financial model include all landowner costs and that those costs are covered by project financing.

First, the landowners or community members often contribute significant time and knowledge to the project design process. Projects should undertake multiple meetings, workshops, trainings, and consultations to (1) build local people's understanding of carbon markets and the proposed carbon project; (2) gather data and information about existing local land use, practices, institutions, and issues; (3) get input and feedback on proposed project interventions; and (4) negotiate and agree to project terms. These meetings are not only required to gain the Free, Prior, and Informed Consent of rightsholders in the project area, they are critical to effectively design the project and ensure that implementation will be successful and the results will be durable. To achieve these outcomes, potentially thousands of hours of collective time will be asked of local project participants.

While the time spent by the project developers to design and implement these meetings is accounted for in the overall project design costs (and therefore remunerated), the same time the community spends in the meetings is not often included as a project design cost. The landowners and/or community members should be considered as key design partners who are contributing their intellectual property and deep knowledge of their ecosystems to improve the project design. Their costs to attend the meetings, including daily labor rates,⁵ travel costs to and from the meetings, childcare expenses, etc., should be accounted for in the project cost model.

Second, landowners and/or community members often incur significant implementation costs for the project. These may include purchase of new equipment or materials (e.g., tractors, gas, fences, fertilizers, seedlings,

⁵ While it may not be optimal to cover daily labor rates at the time they occur (as this may encourage people to attend in order to get paid rather than to effectively contribute to the project design), those costs should be logged and covered at the revenue distribution stage.



To achieve success and durable results, thousands of hours of collective time will be asked of local project participants.

etc.), additional labor days annually to implement more labor-intensive practices (e.g., rotational grazing vs. extensive, unmanaged grazing), travel and labor costs to undertake training, monitoring and reporting, and other costs. While some of these may be included in the implementation costs, others, particularly additional labor days, are often excluded. If landowners/managers are required to provide extra time to implement project activities, that time should be included as a project cost. These costs are relatively fixed and straightforward to calculate and should be incorporated into the cost structure directly, rather as some future percentage of revenue.

Third, and perhaps the most often overlooked, is opportunity cost. Landowners/managers may lose income due to time spent in on-going meetings related to the project (thus missing days of work) or due to changes in practices (i.e., sustainable agricultural practices that are less productive; reduction in livestock numbers). These income losses may be significant; for example, if a herder must reduce the number of livestock they own or spend significant time and energy in changing grazing practices, that represents a real loss of income that needs to be accounted and compensated for through the project. If landowners or managers lose certain use rights to land (e.g., they are required to set aside a portion of their forest to remain unlogged, or they can no longer farm along a riparian zone, etc.), the opportunity cost of lost income on that land needs to be accounted for. Additionally, there are timing considerations to account for—*if the farmer may get higher yields from improved practices in five years, but for years 1–4 they will have lower incomes, that time-value of money could be significant.*

Finally, there is landowner and community risk. Investor risk is often well calculated through sophisticated modelling, and investors will insist upon a higher return if they take on a higher risk. However, the

same consideration is not given to the level of risk required of the landowner. While the actual dollar amount investors put upfront may be quite large, it is often a small percentage of their overall portfolio. At the same time, local communities, farmers, and ranchers may risk a small overall dollar amount by implementing a new practice on their land, but that could risk their entire harvest or livelihood for that season, especially if the practice has not been tested—they are risking a much higher overall percentage of their assets. Sources of risk in financial models should reflect these nuances.

By excluding or inadequately accounting for these real costs to landowners or communities, project developers and investors are essentially asking their poorest partners, and those most exposed to risk, to subsidize the project.

Issues with Current Cost Models

The gaps in the cost models for current carbon projects described above often result in inequities for landowners and managers, Indigenous Peoples, and local communities. These inequities are not only a moral or ethical issue, but they also undermine the success and effectiveness of the project itself. Because carbon market projects are contractual, long-term, behavior change projects, well-defined incentives and benefits are not an optional activity or a requirement to be checked-off to meet a standard—**they are paramount to the project's success.** The effectiveness of the conservation activities and the durability of carbon impact directly depend on the landowners and community members seeing sufficient value in changing their behavior and then maintaining the new practices over their entire lifetime.

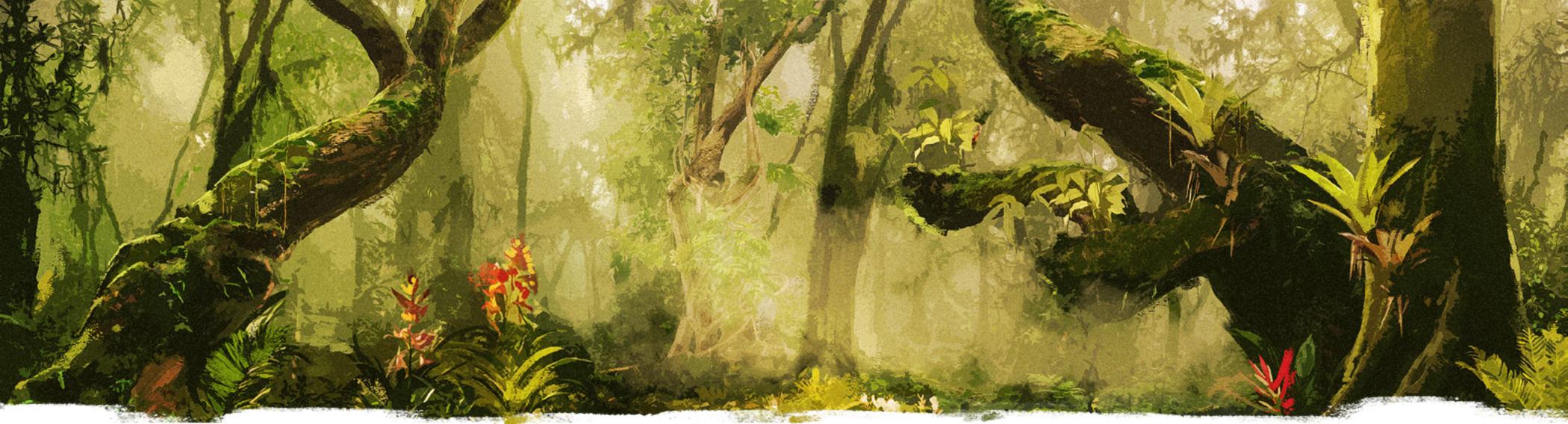
One key tenet of successful conservation or development projects is that they show tangible benefits in the early stages. Without those tangible benefits, landowners and communities often lose trust and interest in the process. Spending a lot of time in meetings and workshops before any visible work gets done on the ground tests people's patience. Participants may drop out of the project, resulting in lost investment and/or jeopardizing the ability to get through design phase. In worse case scenarios, conflict may arise among parties, rumors may start to circulate, and trust may be lost.

Fully accounting for and compensating for all project participants' costs is critical to avoiding this outcome. This is important during all phases of the project. If the project does not at least cover the full capital and operational costs for the landowners and communities, they may stop implementing the practices required to generate carbon revenue and the project will fail. If landowners or communities perceive that they are investing time, equipment, or materials that are not covered by the project or if their yields have been reduced and that lost income has not been compensated for, etc., they will go back to what they were doing before because that is the rational economic response. Too many projects fail to account for the full suite of implementation and on-going operational costs incurred by the people on the ground, and this leads to the financial incentive structure being insufficient to maintain the desired behaviors over time.

Projects often fail to recognize and account for the valuable knowledge, skills, and practices that landowners and communities contribute.

In addition to jeopardizing the ultimate success of the project, inadequate cost accounting is inequitable. Equity is generally defined as having three components: recognitional, procedural, and distributional. While it may seem like inadequate cost accounting results in inequities only in the last dimension, it really impacts across all three:

- **Recognitional** (*acknowledging and respecting rights and the diversity of identities, knowledge systems, values, and institutions of different actors*): Projects often do not recognize that the landowners and communities own the physical carbon (i.e., the land, trees, and soil)—they own or manage the asset that is being sold and thus should be recognized as key **rightsholders**. Those rights need to be recognized and respected by the project. Furthermore, projects often fail to recognize and account for the valuable knowledge, skills, and practices that landowners and communities contribute to the **design and implementation** of the project. Almost always, it is the local communities who are actually implementing the climate mitigation activity—planting the trees, implementing new grazing practices, and protecting the forests. Finally, the landowners are often the largest **investors** in the projects, as a share of their assets. By relegating landowners and communities to “beneficiaries,” projects fail to recognize their roles as rightsholders, project experts, implementation leads, and major investors.
- **Procedural** (*participation of actors in decision-making, transparency, accountability, and processes for dispute resolution*): Projects often develop benefit-sharing arrangements through non-participatory processes and present them in a non-transparent way. In many cases, project developers simply offer a straight percentage take of the carbon revenue. There is no transparent accounting for the full costs of each actor, no shared understanding of forecasted revenue, and no balanced negotiation on how costs will be covered and



profit will be distributed. As such, the landowners or communities have no way of knowing whether the amount they will receive will cover their full costs and provide a fair share of overall profit. If the benefit-sharing arrangement is not defined through a fully transparent process that provides clear accounting of project costs for all actors, a clear estimate of project revenue, and a fair negotiation of the distribution of revenue, the project fails to meet the procedural dimension of equity.

- **Distributional** (*allocation of benefits and costs across the set of actors, and how the costs/burdens experienced by some actors is mitigated*): Finally, and perhaps most starkly, failure to account for landowner and community costs in the project's financial model means that they often do not receive a fair share of the project revenue. For example, while a 60% share of the revenue may seem fair, if the landowner or community actually incurs 80% of the project costs the amount would not be fair at all. To meet the distributional equity dimension, the project would need to cover the costs of all project actors and only then include a negotiation on a fair share of the profits for each actor.

These issues do not just present a problem for local communities, landowners, and Indigenous Peoples. They are a problem for the project developers and actors on the demand side as well. Today's carbon market demands much more than climate outcomes.

Community development and livelihood transformation have shifted from ancillary “co-benefits” to outcomes that are inherent to high-quality carbon credits.

High-ambition corporate buyers are willing to pay a significant price premium as long as these outcomes are rigorously and transparently quantified. Project developers that do not meet equity standards will have an increasingly difficult time finding buyers or will have to sell at reduced prices. The current market norm of not de-risking the often-substantial in-kind investments of landowners and land stewards fails to meet expectations of high ambition buyers and reduces the value of the carbon credits.

Sustainable Livelihoods Transformation Compensation

We propose a Sustainable Livelihoods Transformation Compensation (SLTC) as a critical shift in the mindset and process that feeds into the financial models of carbon projects to address the issues outlined above. The SLTC is both a **process and a payment** that safeguards and de-risks the project for the actors that generate and manage the physical carbon—the farmers, ranchers, herders, foresters, and land stewards, like Jeremy.

The **SLTC process** is a transparent and participatory discussion among all project actors in which the full costs to each actor are defined and agreed to, to the extent possible. Carbon credit generation and revenue is then forecasted and disclosed to all project actors. Once the full suite of costs and revenue are understood, the project participants can then have a much more transparent negotiation of how the revenue will be distributed amongst project actors. While these negotiations may still lead to inequitable outcomes due to information and power imbalances among the parties, this level of transparency makes it much harder for inequitable deals to go through.

This negotiation should ensure everyone's costs are covered as a first priority, including full coverage of community costs, as

discussed above, as well as a base-level return to investors (to cover the cost of finance). During project design, the project developer needs to work with the rightsholders and stakeholders to undertake a process to cost out the project within the financial model. Some costs may be difficult to estimate, but a lack of data should not be an excuse to fully exclude important costs. Reasonable estimates should be included. All actors should agree to the model—everyone needs to validate that it represents a reasonable estimate of all relevant costs. (See Figure 1 below for an example cost model for a project.) This may require some negotiation as there will be an incentive, on all sides, to overestimate costs.

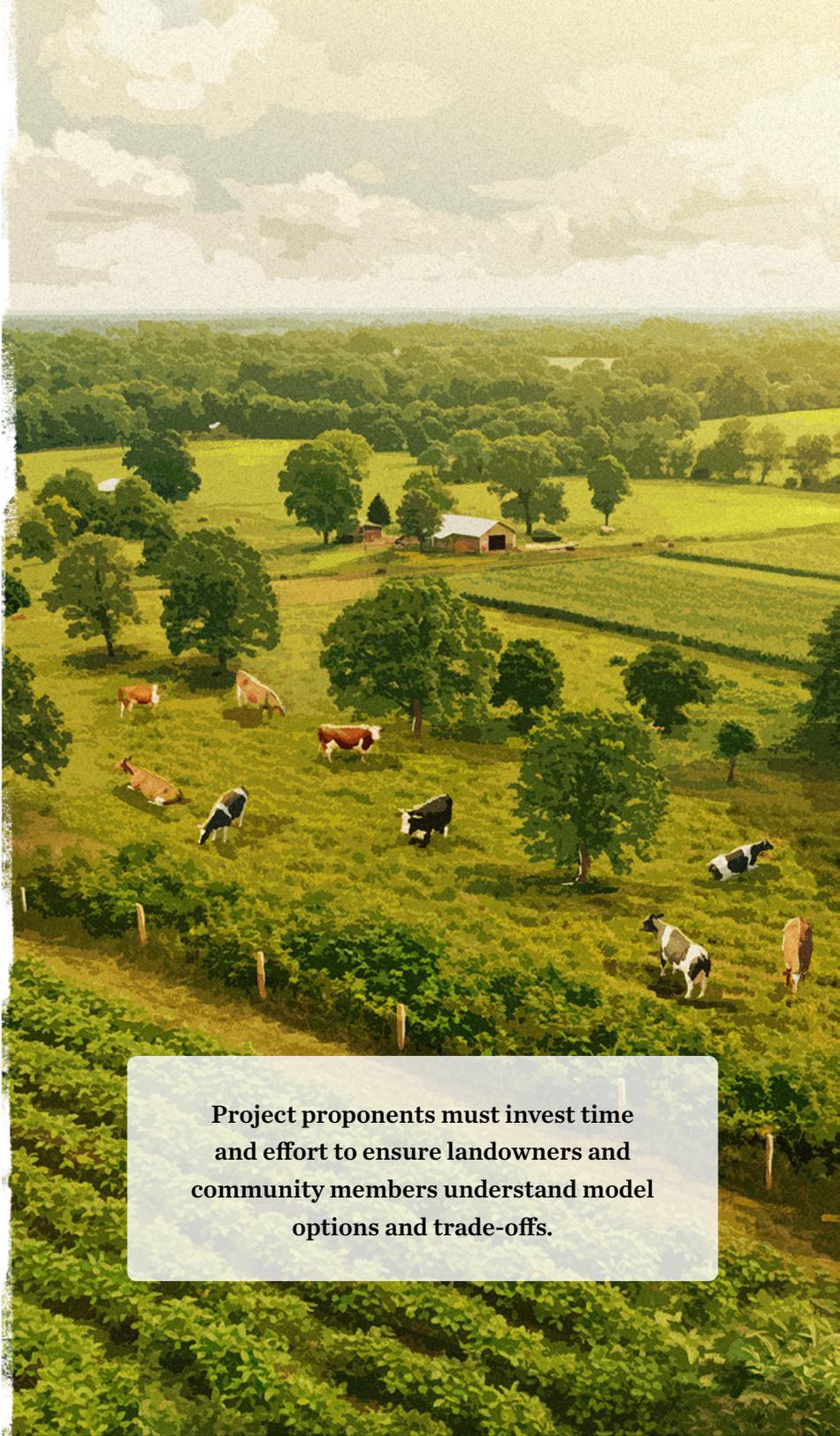
The **SLTC payment** is made up of two components, described below. These components can be flexed to meet the needs of the landowners (e.g. some landowners may be more risk-averse and want all costs covered and a higher advance incentive payment in lieu of higher profit share later, while others may desire the opposite).

- 1. A compensation payment:** This covers the costs incurred by the landowner or community and ensures that they incur no net losses due to the project. This is negotiated in the first part of the process described above.

2. An incentive payment (case specific): In some cases, ensuring people are just as economically well-off as before the project may not be sufficient to drive interest and enrollment (e.g., Why would I go to the hassle of participating if I am just going to be at the same level as before?). In such cases, it may make sense to provide an early incentive payment to actors on the ground to make the project worth their while from the get-go and increase project uptake and enrollment. This early incentive could be considered part of profit-share and thus reduce the profit-share those actors receive later in the project once carbon revenue starts to flow.

These two payments are complementary to the additional profit-share that the landowners or land managers will also receive as project partners, as described below.

Once costs are defined and an upfront incentive payment defined, negotiations can then focus on profit-share. Focusing negotiations on profit share rather than revenue share makes discussions much more transparent and understandable. These negotiations may take timing into account—some landowners or community members may want payments sooner than carbon revenue will flow and may want a reduced overall share of the profit in exchange for earlier payments. The negotiations may also take risk into consideration—some landowners or community members may want to be completely de-risked and willing to accept a lower profit share in exchange for guaranteed minimum payments. Project proponents need to take the time and invest the effort in ensuring that landowners and community members understand the options and trade-offs of various models. External legal assistance may be needed for communities to evaluate these options.



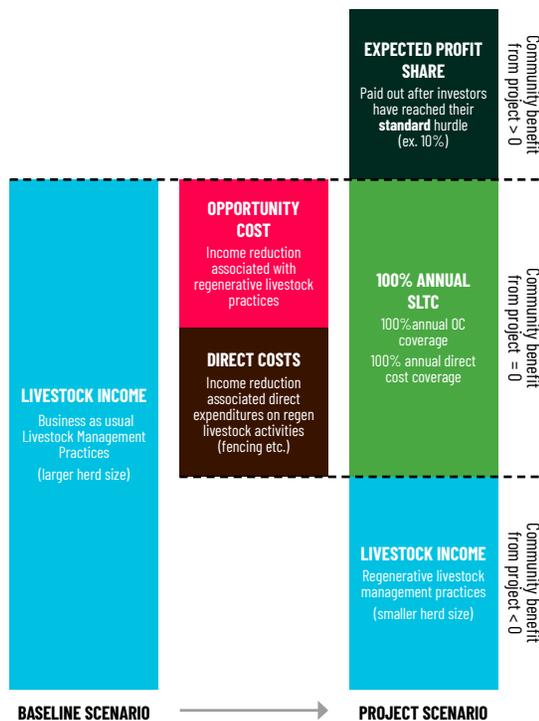
Project proponents must invest time and effort to ensure landowners and community members understand model options and trade-offs.

Three examples of how the SLTC could work within a project

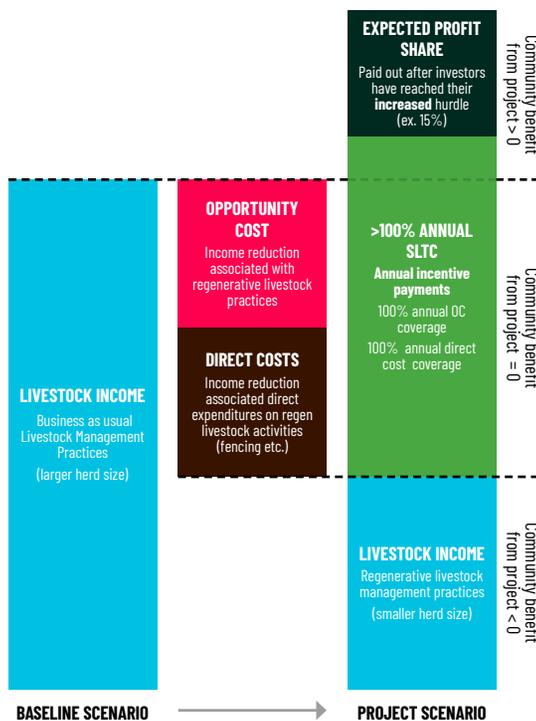
PROJECT EXAMPLE

A sustainable grazing project proposes that herders reduce their livestock numbers to the carrying capacity of the grassland and implement improved grazing practices. These interventions will allow the grasslands to regenerate, sequestering carbon in the soils and aboveground biomass. However, the herders incur costs, including direct implementation costs (additional labor days to undertake rotational grazing) as well as opportunity costs (lost income due to reduction in number of livestock). The SLTC process would identify and account for those costs and the “make whole” payment will ensure that they are fully compensated. However, many herders are still hesitant to participate as their status in the community is very tied to how big their herd is. As such, the project offers an incentive payment to the herders to drive enrollment. In the different examples, communities choose how much advance incentive payment they would like to receive in exchange for more or less profit share in the future. The level of risk the communities are willing to take on impacts the required base return rate to the investors (i.e. lower community risk leads to higher investor risk and thus higher investor return; if communities take on more risk, investors take on less and thus receive a lower base rate of return).

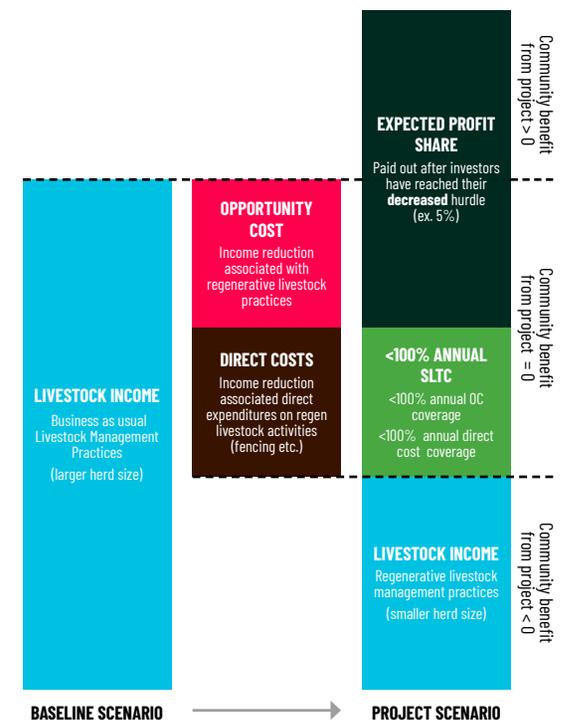
Example 1: Communities choose 100% coverage of their costs, with no additional incentive payment.



Example 2: Communities choose to receive 100% cost coverage as well as an additional incentive payment in advance. This reduces their profit share in the future.



Example 3: Communities choose to forgo coverage of some of their costs in exchanges for a higher percentage of the profit share later.



Benefits of the SLTC

CARBON INTEGRITY BENEFITS OF THE SLTC

The SLTC process and payment improves the technical integrity of the project. It may be tempting to consider the SLTC as “nice to have.” This would be short-sighted and ignore the essential contributions these payments make to climate integrity. And without climate integrity, market demand will be significantly reduced.

The full recovery of implementation costs and negotiated incentive payments achieved by the SLTC not only ensures that the proper incentives are in place for continuance of project interventions but also serves to address three critical elements defining the integrity of climate benefits: additionality, durability, and complete accounting of net climate benefit.

Demonstration of **financial additionality**, that the project activity would not have otherwise occurred in the absence of incentives available through carbon finance, is a fundamental requisite of climate integrity in carbon offset markets. By definition, financial additionality depends on *money being spent*, and specifically money directed to enable implementation of the project activity (i.e., participation and commitment by local actors in direct land management activities). Where projects have undertaken an incomplete accounting and not provided for the recovery of costs associated with adoption and implementation of new land use practices, additionality is called into question. Namely, if some significant portion of costs is unaddressed, it raises the question of whether there is some other incentive or motivation independent of carbon finance that is driving implementation. A more complete

and transparent rendering of project costs via the SLTC process, can serve to better report and substantiate the demonstration of financial additionality (and can also serve to identify projects that are not additional or financially viable).

Climate integrity in carbon markets further requires that emission reductions achieved and applied as offsets to fossil fuel emissions must be **durable** (sometimes also referred as “permanent”). In other words, carbon benefits generated by projects must be held out of the atmosphere for a long period of time. Most voluntary carbon market standards apply a 100-year benchmark for durability and require that the original emission reductions or removal achieved can expect to be maintained over this time period. Risk of reversals related to abandonment and cessation of project activities can be directly addressed by ensuring that the proper incentives and compensation of costs are in place, which will in turn drive the sustained commitment of the actors involved. Open, un-recovered, opportunity costs, for example, pose durability risk, and addressing them definitively through the SLTC process, will result in a higher proportion of marketable carbon credits (by up to 8% where the Verified Carbon Standard’s AFOLU Non-permanence Risk Tool is applied).

Integrity in carbon markets also demands complete accounting of net climate benefits, from the perspective of the atmosphere. Net emission reductions must include an accounting of **leakage**, or emissions directly attributable to the project activity that are displaced elsewhere. This could occur, for example, where a farmer participating in the improved grazing project described above simply moves the livestock exceeding carrying capacity to another pasture outside of the project area. In this way, the farmer avoids any net loss in cash flow from livestock management, but as a result

drives the other pasture beyond its carrying capacity, effectively cancelling out the benefits achieved in the project area. Instead, the SLTC “Full Compensation Payment” completely compensates for the farmer’s income reduction associated with the improved grazing activity, and safeguards against this kind of activity-shifting leakage driven by outstanding opportunity costs.

FINANCIAL BENEFITS OF THE SLTC

In addition to the climate benefits of the SLTC, there are some clear financial advantages to investors covering the SLTC. The principal direct and indirect financial benefits include increased buyer confidence, reduced investor risk, premium pricing, and reduced project discounts (resulting in higher overall credits).

Projects that utilize the SLTC can provide buyers and investors with increased **confidence in the overall integrity of the carbon credit** by meeting their requirements for transparent, rigorously quantified outcomes. Companies and investors want to be able to proudly communicate how their carbon purchases are not only mitigating the climate crisis but also improving people’s lives. If those carbon credits require communities to take on disproportionate livelihood risk in the first years of the project this exposes these companies and investors to significant reputational risk. The SLTC significantly reduces this risk.

Investor risk is further reduced by the SLTC as it is likely to increase the rate of uptake of project activities by landowners and community members, since they perceive more immediate and tangible benefits from participation. Additionally, the project

area might be expanded due to increased interest in participation, potentially making the project more profitable on a per hectare basis. These benefits lead to larger carbon outcomes on a shorter timeline, allowing the target IRR to be met sooner.

Increased buyer and investor confidence can lead to **premium pricing** for projects adopting the SLTC. With expenses accounted for in both actuals and forecast financial models, as well as in expenditure records, buyers can get a relatively good assurance that the developer has made a real effort to ensure the stakeholder’s needs are addressed— compared to current common approaches, where no such information is available.

While there is not much documented evidence of this to date, there is ample evidence of buyers paying price premiums for credits with biodiversity benefits that positively impact communities and improve livelihoods; therefore, it is assumed that a similar premium would apply for full assurance that negative livelihood impacts are absent.

Finally, the SLTC can help **reduce the non-permanence discounts** for carbon projects. If the project is certifying credits through the VCS, then the SLTC coverage of opportunity cost will directly help the project achieve lower discounts for non-permanence. Simply put, the AFOLU non-permanence risk tool (NPRT) factors opportunity cost into its overall risk score, and by covering opportunity costs this score decreases—meaning the project’s buffer contribution is lower and more issued credits are available to the proponent for sale. This results in high revenue for the project.

It is clear that there are financial benefits to including the SLTC in carbon projects. However, there is one distinct disadvantage to SLTC cost coverage that must be acknowledged. Most carbon project developers will not have enough resources to cover the SLTC costs themselves and will require financing—and financing has a cost. The extent to which SLTC cost coverage is beneficial depends on whether the revenue gains from the above drivers exceed the developer's cost of financing it. It should be understood that SLTC cost coverage will always favor developers with the lowest costs of capital, the ability to market this approach to buyers, and the technical capacity to ensure this approach continuously benefits their NPRT scores. Developers looking to implement SLTC cost coverage should be aware that the financial benefits of the SLTC may be limited or unrealized if they fail to meet such conditions.

SOCIAL BENEFITS OF THE SLTC

From a social equity perspective, the SLTC addresses the issues we described above in the current cost models of projects.

It provides an early, tangible benefit to landowners and communities, so they get engaged and stay engaged in the project. It then provides a clear, transparent, right-sized level of incentives

throughout the duration of the project to drive continued and long-term behavior change, as well as improved economic resilience. It significantly increases the likelihood of project success by ensuring it makes economic sense to the local communities.

The SLTC also meets each dimension of equity:

- **Recognitional:** It recognizes and respects the landowners' and/or communities' rights and role as the owner of the physical asset and therefore full partner in the process. A shift from revenue sharing to profit sharing recognizes landowners and community members as empowered investors in the project outcomes. They are no longer end "beneficiaries" receiving an arbitrary payment after project implementation; they are recognized as co-designers, co-implementers, and co-investors.
- **Procedural:** Through the SLTC process, everyone is engaged in defining the relevant costs, estimating the revenue, and negotiating the profit. The process is much more transparent and more easily understandable to landowners and communities.
- **Distributional:** Through the SLTC, all costs are covered—everyone is made "whole," and therefore no one suffers a net loss. Profit-sharing negotiations may still result in inequities but those will be much easier to identify and address.



Conclusion and Recommendations

Carbon markets are facing a pivot point. They have the opportunity to drive not only immediate action on climate change, but also an unprecedented amount of new private sector finance to farmers, ranchers, Indigenous Peoples, and traditional communities the world over. Investing in carbon credits represents an unprecedented opportunity to mitigate climate change, protect biodiversity, and address rural poverty. The opportunity is simply too urgent and important to walk away from.

However, poorly designed and inequitably implemented projects will not only fail to achieve these objectives, but they could also cause human rights violations, result in adverse impacts on biodiversity, and actually increase GHG emissions. Additionally, those projects are driving a loss of buyer and investor confidence, threatening the market as a whole. Market actors need to acknowledge the existing shortcomings and address them, or the market will collapse under the weight of bad projects.

The Sustainable Livelihoods Transformation Compensation process and payments that we propose in this paper offer a critical improvement to carbon projects. The SLTC addresses recognition, procedural, and distributional equity issues, increases the technical integrity of the credits, and provides financial advantages.

For those interested in improving the equity and effectiveness of carbon markets we recommend ensuring the SLTC process and payment are included in the projects you are developing, implementing, investing in, certifying, and buying from. Some specific actions that market participants can take include:

- **Landowners and Communities:** If approached by project developers, do not sign any agreements until you have participated in clear full-cost accounting, transparent disclosure of forecasted credit generation and revenue, and open negotiations, assisted by legal representation—if needed—of cost coverage and profit share. This ensures you incur no losses from the project while providing a transparent means for you to negotiate and receive a fair share of the profits. Jeremy could urge his neighbors to request this information and band together to negotiate clear and fair terms for their participation in the project.
- **Project Developers and Proponents:** Integrate the SLTC process and payments into your financial models for your projects. This can drive landowner enrollment, increase uptake and improve implementation of project activities, increase credit yield, increase durability of project outcomes, and more access to buyers willing to pay price premiums.
- **Project Investors and Credit Buyers:** Complete due diligence to ensure that projects have undertaken a full-cost accounting process and held open and transparent negotiations with landowners and stewards to ensure they understand the costs and benefits of the project and receive a fair compensation. The SLTC offers confidence in the integrity of the credit and reduced risk.
- **Standards Bodies:** Including requirements in the standards on full-cost accounting and transparent revenue and profit share will greatly increase the integrity of the credits you are certifying.

Realizing the full potential of carbon markets requires clear and continuous improvements across all market actors. Adopting the SLTC is one critical improvement that can move us closer to achieving that potential.



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