

Berkeley Carbon Trading Project

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RE: Proposed updates to the VCS program – Tonne-year accounting

Dear Verra Secretariat:

Thank you for the opportunity to comment on Verra's proposed updates to the VCS program.¹

I would like to raise two concerns about the introduction of tonne-year accounting as an alternative approach to non-permanence risk within the VCS Program.

(1) Additionality

I suggest not allowing tonne-year accounting to be used with protocols not specifically designed to accommodate tonne-year accounting because they aren't designed to address the greater additionality challenges of tonne-year accounting. I also suggest designing any tonne-year accounting specific protocols in a way that explicitly accounts for non-additional crediting and adverse selection under such a program.

Additionality is trickier with tonne-year accounting than with AFOLU protocols requiring longer-term storage. Additionality can potentially be addressed in the design of tonne-year accounting specific protocols; but allowing existing protocols to apply tonne-year accounting invites non-additional crediting.

If we knew perfectly what each forestland owner would do each year without offsets we could accurately measure the effect of offsets on on-site forest carbon stocks and credit appropriately. In practice, baseline stocks are uncertain in a long time frame and are even more uncertain in any particular year. Forests of similar types can be managed differently, affected by many factors including type of timber product being sold, distance from roads, changes (and expected changes) in timber market prices, changes in local mill capacity, and family landowner goals and financial needs over time. It is possible to statistically estimate what a landowner is likely to do by comparing with other similar lands using dynamic baselines and taking into account the landowner's past practice. But it is not possible to predict with confidence what would happen on any particular plot, and even less so in any particular year.

¹ https://verra.org/wp-content/uploads/2016/05/VCS-Program-Public-Consultation-2022.02.07.pdf

This means that carbon offsets will result in adverse selection. Of the pool of similar landowners, those that would not have harvested in the credited years are most likely to participate, because they can be paid for what they would have done anyway.

Non-additional crediting due to adverse selection is an inevitable challenge with any offsetting program and must be managed to avoid over-crediting. Current IFM protocols use baselines designed to average over many years. The long-term commitment to hold carbon can partially remedy over-crediting at the project start. Even if initial credits are non-additional, the offset program acts like an easement, preventing management changes over decades. For some plots (but not all) non-additional credits generated early in the project can become addition over time as landowner management choices are constrained. It can be argued that the biggest effect of current IFM protocols is the long-term commitment – the year on year requirement to avoid forest conversion or carbon reduction. Even though there is still a timing disconnect – credits generated for reductions that could happen over many decades are used to offset immediate emissions from the buyer – the offset program can still reduce forest carbon loss over the project life.

Tonne-year accounting abandons that long-term commitment, significantly weakening the effect of the offset program and making it essential that credits are truly additional each year. Owners of managed timberlands can earn credits for cyclical growth periods, and harvest as they would have without offsets. Family landowners can earn credit for natural growth, and then harvest when they need the income as they would have without offsets. Ideally the credits would cause a change in land management. But with tonne-year accounting, even more business-as-usual land management could be credited since the lack of long-term commitment creates a lower barrier to entry and more opportunity for gaming.

I strongly recommend not allowing the use of tonne-year accounting by IFM protocols that are not specifically designed to address these additionality and adverse selection risks.

Any protocol designed for tonne-year accounting, would need to explicitly address the inevitable generation of credits from non-additional activities including the effect of adverse selection to avoid over-crediting. Protocols that discount credits to account for the risk of non-additional crediting should take into account adverse selection – that landowners are most likely to participate if they would not have harvested regardless of the payment. Ideally credits would be assessed programmatically, looking for noticeable changes in land management over the pool of participating lands and re-adjusting discount rates as needed to avoid over-crediting.

(2) Short-term tonne-years of storage can not be equivalent to reducing CO₂ emissions

Tonne-year accounting attempts to create an equivalence between the emission of one tonne of CO₂ and the temporary removal or storage of a greater quantity of CO₂ from the atmosphere. But the nature of the effects are different enough to make an equivalence claim problematic.

In the long-run, short-term storage has little to no climate benefit. All else being equal, over the long run, drawing carbon temporarily out of the atmosphere does not change the amount of warming caused by that carbon - it only shifts that warming back in time.

But all else is not equal. Since temperatures are rising, pushing back when carbon is in the atmosphere by short periods of time causes more climate impact over the atmospheric lifetime of that carbon, because each tonne of atmospheric CO₂ causes more damage when temperatures are higher. If that temporary storage is used to offset the release of a tonne of CO₂ it doesn't neutralize or counterbalance the climate effects of those emissions. It only reduces warming temporarily and may cause even more warming in the future.

Temporary storage therefore cannot truly "offset" the climate impacts of releases of CO₂ into the atmosphere. If they are used in addition to (not instead of) emissions reductions, temporary removals can potentially help to "buy time" or smooth emissions peaks until dramatic emissions reductions and significant removals are performed. **Does Verra have the ability to create a second type of credit in the form of a tonne-year of carbon storage not intended to be used to offset direct emissions and not claiming equivalence with emissions reductions?**

Most sincerely,

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