SUMMARY OF PUBLIC COMMENTS: JULY 2022 VCS PROGRAM UPDATE CONSULTATION

Release Date: 21 December 2022

1 INTRODUCTION

This document summarizes the feedback and input from comments received during the 13 July to 11 September 2022 consultation on proposed VCS Program updates. It provides a summary of the conclusions Verra drew from said comments and presents the full comments with Verra's responses. Verra received 165 comments from over 20 different stakeholders from a variety of different backgrounds. Verra sincerely appreciates all submitted comments.

During the consultation, Verra sought input on the following updates:

- Introduction of requirements for geologic carbon storage (GCS) activities, including associated tools and requirements;
- Updates to the requirements to help avoid double claiming of carbon credits in Scope 3 emissions inventories;
- Addition of a discount factor for crediting in cases of upstream greenhouse gas (GHG) displacement, and;
- Clarification of the long-term average GHG benefit calculation for afforestation, reforestation, and revegetation and improved forest management projects.

Verra analyzed all the comments received and drew useful insights from both the converging and diverging views on the proposed updates. Verra incorporated this feedback to adjust where appropriate and finalize the updates to the relevant VCS Program documents.

One proposed update included in the consultation – the addition of a discount factor for crediting in cases of upstream displacement – will be deferred to a future VCS Program update. This is due to the stakeholder-identified need to develop a Verra-determined default discount factor(s) to accompany the update.

Coming out of the consultation, the following updates have been made and integrated into the latest version of the corresponding program documents. More information about these updates and the full list of VCS Program Updates released in December 2022 can be found on the Verra website.

Program Documents	Summary of Updates
VCS Standard, v4.4;	New requirements for GCS projects have been published in the new *VCS Geological Carbon Storage Requirements, v4.0*

VCS Program Definitions, v4.3; *VCS Geologic Carbon Storage Requirements, v4.0;* *GCS Non-Permanence Risk Tool, v4.0*	document. Requirements provide key details related to regulatory oversight, technical and non-technical project design, non-permanence risk, project ownership, monitoring, closure, and crediting periods for proponents seeking to register a GCS project in the VCS Program. Definitions for GCS-related terms have also been added to the *VCS Program Definitions, v4.3*. The *GCS Non-Permanence Risk Tool* has also been published to provide the procedures for assessing the non-permanence risk and buffer determination required for GCS projects.
VCS Standard, v4.4; *VCS Program Definitions, v4.3;* *VCS Issuance Representation, single representor, v4.2;* *VCS Registration Representation, single representor, v4.2;* *VCS Project Description Template, v4.2;* *VCS Joint Project Description & Monitoring Report Template, v4.2;* *VCS Monitoring Report Template, v4.2;* *VCS Joint Validation & Verification Report Template, v4.2*	Updates have been made to the *VCS Standard* and VCS Program documents to help avoid double claiming of emissions reductions and removals in Scope 3 emissions inventories, including a requirement for public statements by the producer(s) of impacted goods and services to disclose the existence of the VCS project and the potential for the request and issuance of VCUs. New terms related to this update have also been added to the *VCS Program Definitions, v4.3*, including: impacted goods and services, Scope 3 emissions assertion, Scope 3 emissions double claiming, and supply chain.
VCS Standard, v4.4; *VCS Program Definitions, v4.3*	Updates to rules for the calculation and application of the long-term average GHG benefit calculation for afforestation, reforestation, and revegetation projects, as well as improved forest management projects, have been added to the *VCS Standard v4.4*. A new definition of 'Harvesting Activities' has been added to the *VCS Program Definitions, v4.3*.

2 SUMMARY OF COMMENTS

The summary of comments below highlights some of the main inputs received as part of the consultation.

Topic	Summary of Comments	Response to comments
1) Introduction of requirements for geologic carbon storage (GCS) activities, including associated tools and requirements	There was general agreement that limiting project activities to jurisdictions with suitable regulations was the best approach to limit project risks. Some suggested expanding this scope in the future to more broadly develop requirements that can be used in the absence of sufficient regulations in select jurisdictions. Comments generally agreed with the proposed NPRT approach and risk categories. Some pointed out that select elements may be too punitive, while others made suggestions to improve the NPRT approach and scoring system. Comments varied on the suggested crediting period and number of allowed renewals for GCS projects, with most suggesting that a 35-year total crediting period may be slightly short. Respondents provided suggestions to improve the requirements for the expansion of GGS projects with a focus on rigor and additionality. Respondents generally supported the approach on demonstrating ownership, while some suggested to improve clarity to ensure an accurate reflection of planned ownership and collaboration models for GCS projects.	Verra maintains that GCS projects require a reliable and stringent regulatory system to limit project risk. At this time, developing standalone requirements for jurisdictions that do not have appropriate regulations falls outside of the scope of work. Verra adjusted the NPRT where possible to increase workability, while maintaining high environmental integrity and limiting risks. The proposed NPRT scoring and details have been adjusted accordingly. Verra has set the project crediting period to be at most seven years, renewable up to five times, with a total project crediting period not to exceed 42 years to consider the longer lifespan of GCS projects. Verra has adjusted the text related to project expansion requirements accordingly. Verra has adjusted the text related to GCS project ownership requirements accordingly.

2) Updates to the requirements for avoiding double-counting of carbon credits in Scope 3 emissions inventories	Comments generally expressed support for the intention of the update to improve the integrity of both VCUs and Scope 3 emissions assertions. Concerns were expressed about the method of implementation, specifically that project proponents should not be required to ensure that other supply chain companies are not claiming the same emission reductions or removals as represented by VCUs. Similarly, concerns were made regarding whether the eligibility of VCUs would be at stake if double claiming were found in Scope 3 assertions. Several stakeholders recognized the limitations of the proposed update and various suggestions were made to further avoid double claiming of VCUs in Scope 3 emissions assertions, including Scope 3 registries, working with emissions factors databases, standardizing reporting and assurance of Scope 3 emissions assertions.	Verra has continued with the update and made amendments. These comments pointed to the need for tighter terms and definitions in the Standard. Verra has amended the update to be clear about implementation requirements. The requirements are now limited to a public statement by the owner of goods or services impacted by the VCS project and for which VCUs could be requested and issued. These comments pointed to the need for tighter terms and definitions in the Standard. Verra has amended the update to only require public statements as above. Verra appreciates the suggestions made and recognizes that the update will not prevent Scope 3 emissions from double claiming entirely. However, the steps that have been taken are as far as can be reasonably undertaken within the purview of the VCS Program. Further opportunities to avoid Scope 3 emissions double claiming may be available through the development of a Verra Scope 3 Program.
3) Addition of a discount factor for crediting in cases of upstream displacement	Comments generally supported the addition of a conservative discount factor; most requested examples or provision of a default discount factor, as well as clarity on how the discount factor would be applied in specific methodologies. Several additional types of evidence were suggested to support the determination of the discount factor. Some comments pointed out the challenges in measuring displacement and pointed out the similarities between the displacement challenge and the double-counting challenge.	Suggestions were incorporated to provide more clarity on how to apply the discount factor. Verra plans to provide a default discount factor that may be used by methodology developers. We will continue to consult with current and pipeline methodology developers impacted by this update. Verra incorporated suggestions for certain types of evidence to support the determination of the discount factor and will continue to assess the suitability of other types of evidence (e.g., laboratory analysis) as we determine the default discount factor. Verra acknowledges these concerns and encourages stakeholders to make use of the default discount factor

		when it is available and to review the 2022 Q4 VCS Program Update related to double-counting of Scope 3 emissions.
4) Clarification of the term "harvesting activity" and consideration of updates to the long-term average (LTA) GHG benefit calculation for ARR and IFM projects that harvest as part of project activities.	Respondents generally agreed that 20% was an acceptable threshold for the allowable carbon stock reduction over a five-year period to improve forest health; some comments requested more guidance on how carbon loss should be accounted. Commenters also pointed out contextual variables such as locality and species to consider. Regarding the requirement to apply the LTA when planting non-native/commercial tree species, and to require a forest management plan in such instances, responses suggested additional consideration of species and location is needed. Responses varied regarding extending the crediting period. While some stakeholders were supportive, others were concerned about the impact on the non-permanence risk and of potential impacts on project finance commitment. Respondents provided some suggested clarifications for when the LTA applies. Respondents provided suggestions and advice on standardizing the LTA calculations, including suggestions to include local context when possible.	Harvesting activity is defined as the harvest of trees, vegetation, or other biomass, which results in a reduction of more than 20% of carbon stocks, over a five-year period, that starts when a reduction of carbon stocks occurs. Comprehensive changes to the long-term average are being considered for future updates. Based on public comment feedback and internal dialogue, we have decided to defer the proposed change related to requiring the planting of non-native or commercial species to apply the LTA. We will not be changing the requirements for the crediting period at this time. The period for assessing the long-term average will be reviewed as part of a future program update cycle. Verra considered all the suggestions provided and will consider how to incorporate them in a future update, including using locally specific information when available.

3 COMMENTS AND VERRA RESPONSES

1.1 Geologic Carbon Storage

1.1.1 The current proposal limits project activities to jurisdictions where suitable regulations exist to decrease project risks, which may limit project locations to advanced economies. What concerns are there with this approach, and what alternatives might you suggest that could open broader jurisdictional participation?

Comment #	Issue Raised	Verra Response
1	- Adequate regulations need to be in place whereever a storage site is operational, and they also need to address liability. - Appropriate and robust site monitoring and closure plan are necessary. - Multilateral or supranational agreements can, in the absence of dedicated unilateral regulations, guarantee site management and address liability if similar stringent requirements are fulfilled. - Exploration (not operation) of storage sites in the Global South should be supported early on even if these do not yet fulfil the requirements.	GCS projects require a reliable and stringent regulatory system. For this initial phase of work, the VCS, the VVB community and accreditation bodies do not have the expertise to develop standalone requirements for jurisdictions that do not have appropriate regulations.
2	Future Biogas support Verra's decision to set regulatory requirements within the eligibility criteria. While any reversal risk would be quantified by Verra's NPRT ('regulatory framework risk' metric), the VCS Standard sets the bar for GCS projects, establishing minimum requirements. This ensures: (i) all removal-based VCUs are of a high quality, instilling confidence within the CCS market and VCS (ii) carbon removals are delivered sustainably, mitigating unnecessary risk of reversals which may undermine confidence across the whole CCS market All GCS projects in all regions must be able to meet these minimum standards. Verra can provide tools and resources to support developing countries meet these eligibility requirements.	GCS projects require a reliable and stringent regulatory system. For this initial phase of work, the VCS, the VVB community and accreditation bodies do not have the expertise to develop standalone requirements for jurisdictions that do not have appropriate regulations.
3	If the project meets all the other requirements and is in an area without suitable regulations, we would be supportive of a set of "substitute" rules developed by alternate body to allow these projects to come to fruition.	GCS projects require a reliable and stringent regulatory system. For this initial phase of work, the VCS, the VVB community and accreditation bodies do not have the expertise to develop standalone

		requirements for jurisdictions that do not have appropriate regulations.
4	While we understand the reasons behind this approach we also think that it could limit the diffusion of carbon credits from geological carbon storage. In fact, the most probable scenario in advanced economy, in the near future, is that CCS will be applied to decrease scope 1 emissions of industry or power sector, either to avoid costs related to emissions (such as European ETS) or to comply with policies or take advantage of existing incentives (e.g. 45Q in the USA). Only in a limited number of cases the stored CO2 could be used to generate credits, such as with BECCS, if the process can be demonstrated to be carbon negative from a life cycle point of view. On the contrary, it is probably easier to find suitable projects for generation of carbon credits from geological storage in developing countries, where there are less incentives for emitters to decrease their emissions, and the value of carbon credits could be a significant economic driver enabling the projects to take place. We would suggest considering the possibility that, in absence of a well defined and developed regulation, standards verified by a third party (also by Verra itself) could be applied to the Project in order to let the Project be eligible for carbon credits without jeopardizing storage safety and minimizing risks.	GCS projects require a reliable and stringent regulatory system. For this initial phase of work, the VCS, the VVB community and accreditation bodies do not have the expertise to develop standalone requirements for jurisdictions that do not have appropriate regulations.
5	Land Life supports the limitation of project activities to jurisdictions where suitable regulations are in place. As it stands, the importance of adequate regulation and quality projects trumps the option of broader jurdisdictional participation.	We appreciate your comment, and it is acknowledged.
6	All responsibility is put on the relevant regulatory oversight. There are no “hard” requirements from Verra. Verra should have the provided requirements and the proponent need to proof that they are fulfilled. That could be done by, e.g. documenting the regulatory oversight or by providing an third party independent oversight. By doing so, there would be no limitation by location. Chapter 3.4.3.: CO2 injections shallower than 800m might be less efficient, but should not be excluded. Does it means that shallow injections on Iceland into Basalt formation are excluded? The differentiation between saline aquifers and depleted oil fields is not necessary, as the requirements for both types are exactly the same. Chapter 3.4.5: As the amount of buffer credits is based on the NPRT, it would be better to divide it into different independent reservoirs. Otherwise, it might give cases where the storage side could be extended towards, e.g. a shallower formation/reservoir,	The current focus on changes to the VCS Standard relates to the first phase of work under the GCS umbrella (storage in saline aquifers and depleted oil and gas reservoirs). The points related to GCM are noted and we acknowledge potential changes to the VCS Standard may be required for future project types. Note that an additional GCS project is an option when adding storage sites, it is not a requirement to create a new project and we understand some stakeholders may want the option to do so. GCS projects require a reliable and stringent regulatory system. For this initial phase of work, the VCS, the VVB community and accreditation bodies do not have the expertise to develop

	but it is not done due the additional amount of required buffer credits from the original one. Chapter 3.4.6: “Project proponents may instead choose to create additional GCS projects when adding storage sites.” This might add too much bureaucracy and can be avoided. A storage site might have various reservoirs. For each reservoir, the amount of buffer credits should be estimated.	standalone requirements for jurisdictions that do not have appropriate regulations.
7	This is a major concern regarding the widespread of project outside of the developed countries. We woud like to propose that there is a mechanism in place in which when in a country there is no legislation regarding geological storage, that the project mimics something from a country that does. That would be for example that the project activity implements a Wells Type VI norm and be validated by the third party VVB. This shall apply for the whole existance of the project and monitoring of closure of the geological formation.	GCS projects require a reliable and stringent regulatory system. For this initial phase of work, the VCS, the VVB community and accreditation bodies do not have the expertise to develop standalone requirements for jurisdictions that do not have appropriate regulations.
8	It is better to limit the the project activities to jurisdictions with suitable regulations to decrease project risks as the project activity is new, complex and is still in the experimental phase. Once the project activity is tested and verified on ground we can later shift it to locations with flexible regulations. Numerous gaps and overlapping legal issues initially could prevent the expansion of CCS projects.	We appreciate your comment, and it is acknowledged.
9	We agree that a strong regulatory framework will be one of the key predictors for ensuring CO2 is stored permanently. We don’t think Verra currently goes far enough in integrating its guidance with the highly stringent regulations for CO2 storage which exist in the EU, UK and US. Key areas where greater weight should be placed on existing regulatory regimes, rather than putting in place new requirements that might cut across them are: • Liability for reversals: Across the EU / UK / US there are incredibly stringent requirements on liabilities and remediation responsibilities faced by storage operators in case of CO2 leaks. National / state-level regulatory regimes often specify when / how liability for CO2 storage is transferred from capture projects to storage owners / operators and eventually to national / state Governments. The requirements in the voluntary carbon market should not cut across those national / state-level frameworks. Verra’s proposals should not require issues to be dealt with in contracts between capture projects, where those issues are dealt with (whether in the same or a different way) by national / state-level jurisdictions. We do not believe that an additional liability to “make good” to Verra, including through e.g., buffer arrangements (with liabilities cascaded through contracts with capture, transfer, storage operators), should be required	Verra has reviewed and adjusted text related to contracts/liability as required to ensure our intentions are clear. The potential integration with jurisdictional approaches has been evaluated and will continue to be as they evolve to best understand potential integration and/or changes. The VCS has integrated with other regulatory or compliance systems in other ways in the past. The proposal here would be a programmatic relationship that requires an enduring trust and dependence with each regulatory counterparty.

	in jurisdictions with sufficiently stringent liability rules already in place. To exemplify, a capture operator who is the project proponent / eventual credit owner, should not be required to include legal liability for leaks in its contracts with storage operators, as these storage operators are already liable to government to make good. Concretely we would recommend to make the following edit to the draft standard: "Where contracts establish diverse ownership the contracts shall include clauses that clearly assign responsibility for each of the following, unless these responsibilities are already covered by regulations in the relevant jurisdiction: Remedial and climate liabilities, Monitoring activities, Closure and/or post-closure requirements, Funding for PISC1 costs as per the Non-Permanence Risk Tool for Geologic Carbon Storage" • Integration with ETS / Cap and Trade: As an addition to the above, in countries with ETS systems in place and CO2 leaks included in these, there should be no necessity for any other recompense to be made in the voluntary carbon market in the event of a future leak from a storage site, since this would be double counting. As these overall ETS markets are capped, if a storage owner is required to purchase ETS allowances in the event of a leak, this will result in emissions being reduced elsewhere, because the volume cap on the ETS scheme will control the total number of emissions. This should be sufficient safeguard for a purchasers of carbon credits, knowing that in the event of a future leak, action will be taken by the storage owner / operator, that will ensure that the effect of the carbon credits purchased remains the same (the leak has been compensated for by emissions being reduced elsewhere, which will have been paid for by the storage owner / operator).	
142	OLCV supports a risk assessment framework for CCS projects under the VCS that recognizes projects occurring in jurisdictions where regulations exist to safeguard the environmental integrity of CO2 sequestration will, in general, be less risky than projects occurring in jurisdictions where regulations for CCS projects do not exist. However, the existence of regulations and regulatory oversight does not necessarily guarantee environmental integrity of CCS projects in those jurisdictions that have them. There are additional regulatory and operational aspects that are important to help protect the environmental integrity of CCS projects such as: 1) sufficient training and funding for regulatory authorities and project operators; 2) transparency for public reporting and public communication; and 3) maintaining high quality work through properly managed operating standards/best practices and sensible liability structures.	An appropriate approach is being taken to manage project risks through Verra's requirements in addition to jurisdictional regulations. Verra agrees with the proposed additional elements but, these would be outside of Verra's realm as the standard setter.
148	Response 1: Concerns with this approach include: - Credibility of method with which 'suitable' regulations are defined and determined (i.e., what framework is Verra relying on to determine the suitability	1. Verra is not screening regulators or scoring their suitability, rather the NPRT scoring would result in some projects not advanced or with higher buffer pool contributions to mitigate concerns with higher

	of a jurisdiction? Who is making the final call on which jurisdictions are suitable? etc.) - Potential implications arising from differences in regulations across jurisdictions (e.g., how will Verra account for differing levels of rigor in regulations? will there be different project requirements / quantification approaches based on the type(s) of regulation(s)? etc.) - Potential bias from regulators evaluating a project's siting, reservoir characterization, reservoir model, monitoring program, and closure plans (e.g., what kind of regulators are conducting these evaluations? How is Verra vetting them? etc.) Response 2: In both jurisdictions with and without suitable regulation, sites should still undergo a strict technical assessment and approval process. There is a technical Storage Resource Management System (SRMS, published by SPE in 2017) that classifies various categories of geological storage resources with their associated uncertainties/risks. All GCS projects should be approved by certified geoscientists and engineers of professionals in the states. Response 3: As developing economies grow, so too will their energy demand. Depending on a variety of factors including geography, weather, and natural resources, these countries can (and do) turn to carbon emitting energy sources to power their growth. Designing energy markets with CCS at the onset will be much easier to implement rather than attempting to do it after the fact (as we are doing in developed economies). Perhaps an international governing body could be established to oversee the program across borders. It is crucial that this standard is applied across the world. Response 4: This approach relies on states, counties, and localities that have well developed processes to monitor subsurface activity as well as maintain data and standards on existing wells. This requirement could reduce the focus on areas where the local policy approaches are minimalist; which may include many counties with huge existing wellbores and depleted reservoirs. This will also create issues for jurisdictions with abandoned and orphaned wells which may provide good candidacy for injection, but where there is no private party to take accountability. Therefore, sets of de-risking criteria should be considered and adopted to provide guidance to these counties and localities so that they can take pragmatic steps to make their wellbores candidates for projects.	risk profiles. 2. Acknowledged, such detailed technical requirements are outside the scope the Verra's role. 3. Acknowledged, an international governing body for future projects may be appropriate. The proposed updates to the VCS Standard are being advanced for global applicability. 4. A high bar has been set to ensure any potential projects that might be eligible for credits under the VCS are advanced in the highest integrity and lowest risk reservoirs to uphold public/operational safety and mitigate any environmental and/or permanence risks.

1.1.2 Do you agree with the NPRT approach and risk categories? What suggestions do you have to improve the risk categories?

Comment #	Issue Raised	Verra Response
10	- Risks related to natural disasters (e.g. earthquakes, floods) need to be addressed? - The processes and expected carbon flows in carbon capture and utilization with CO2 sequestration projects need to be more clearly defined.	The requirements put forward for site selection intend to avoid potential sites with such risks. This limits the requirement for duplication in the NPRT. The concerns regarding the utilization flows or processes are unclear.
11	Agree. Being a brand-new market, the details of carbon removal pathways are not well understood across all sectors and organisations. Specifically, removals' permanence and reversal risk are often the topics with the greatest uncertainty or confusion. A NPRT can help quantify the reversal risks, demystifying the removals market and enabling parties to compare removal pathways. Consequently, this can help instil fair pricing for removals options, where lower risk removals can command a higher value, thus incentivising pathways to minimise risk wherever possible. However, while this tool improves the transparency of reversal risk, Verra must be mindful of its potential impact on the perception/understanding of non-permanent removals. Both permanent and non-permanent removals will be essential to the delivery Net Zero targets. Often refer to as nature-based removals, carbon can be sequestrated away from atmosphere within ecosystems for years or decades at a time, delivering additional positive externalities; for example, spreading carbon-rich biofertilisers can improve soil health and displace demand for non-renewable resources. Repeated application of these non-permanent solutions can in-effect deliver long-term carbon removals, while supporting the transition to sustainable environmental practices. Risk of reversal must not be conflated with permanence. Net zero targets require a diverse portfolio of removals pathways - from temporary, high-risk of reversal solutions (e.g. planting trees) to permanent, low-risk of reversal solutions (e.g. geological storage of bio-CO2). Crucially, the NPRT must convey that the metric relates specifically to risk of early reversal - i.e. the chance that the re-release of carbon earlier than expected. The NPRT should be applied to all removal pathways, both permanent and non-permanent, to help communicate risk across all solutions, thus aligning with the AFOLU tool and acting to future-proof the standard.	We appreciate your comment, and it is acknowledged.

12	No. We think the job of the registry is to certify the credits are legitimate, not to help manage the risk of loss.	We appreciate your comment, and it is acknowledged.
13	Table 1-Element A: we think that in order to properly assess the element A, it should be better clarified the meaning of "priority to CO2" in the context of regulatory framework. As a general consideration, we suggest that risks should be evaluated according to the completeness of the regulatory framework as per regulatory standards proposed by Verra. As indicated in question 1, we suggest considering the possibility of finding a minimal standard requirement to open jurisdictional participation to countries where suitable regulation does not exist (or is not sufficiently developed) and consequently changing the Regulatory Framework Risk Element A basing on regulatory framework completeness. Table 3-Element A:. In our idea and from our experience, the risk of pore space is not strictly related to who is the ownership of it (government or private/community entities). Anyway, we understand why Verra got this approach and we are available to further discuss this point together, sharing our experience into more details. Table 3-Element B: According to our understanding there seems to be an overlap between this risk element and the eligibility criteria of long term liabilities, since the commitment over long term liabilities should already cover the risk related to any possible expiry/renewal of the elements identified in table 3, concerning the risk of reversal. We kindly ask for a clarification on this. Table 4: we understand the reasoning behind the formulation of this risk criteria evaluation; however, we think that in some cases this could brought to a penalization of projects that actually have a low financial risk. We propose to consider a mechanism similar to the Oil&Gas decommissioning liabilities requirements: in this case, financial risk is addressed with evidences of the financial capabilities of the company to accomplish its long term liabilities. It is not required a dedicated secure funding with the meaning given in paragraph 2.2.4. In analogy, we propose to let the project the possibility to accrue PISC costs along with CO2 injection without impact on risk assessment, as long as financial capabilities are verified. Table 5-Element C: We think that the NPRT Design Risk C category is too punitive towards depleted reservoir CCS projects, where the existence of any type of heritage well is providing a 2% risk regardless of any other consideration. A legacy well can be demonstrated not to be an issue in many ways. We suggest that the following text "The project proponent has access to relevant data (e.g., drilling logs, seismic data, core samples) from all wells that penetrate the primary or any secondary seals of the AOR for site characterization and monitoring as part of the monitoring program AND can obtain subsurface access rights sufficient to allow appropriate monitoring and/or remedial activities if necessary" is changed in "The project proponent has access to relevant data	T-1 Verra believes suitable regulations are necessary for CCS projects. Where concerns have been raised, we have ensured the text is clear. T-3A- Acknowledged T-3B- Acknowledged T4- In select jurisdictions, such an approach has historically underfunded the liabilities. T5- Verra acknowledges the stringency may be viewed as punitive by some and has adjusted where possible to increase workability, while maintaining high environmental integrity. 3.4.5- The current proposal put forward by Verra seeks to incentivize the lowest possible risk options for projects.

	(e.g., drilling logs, seismic data, core samples) from all wells that penetrate the primary or any secondary seals of the AOR for site characterization and monitoring as part of the monitoring program OR can obtain subsurface access rights sufficient to allow appropriate monitoring and/or remedial activities if necessary" VCS Standard par 3.4.5: while we understand that the rationale of your proposal for multiple geological storage zone is the most precautionary, we think that in cases where the storage site with higher risk is among the less capacious, this approach could be too punitive to the project as a whole. We think that a viable alternative could be the evaluation of the risk for each storage site and the calculation of the overall risks according to the foreseen CO2 injected in each storage site (e.g. by a weighted average). In this way, VCUs to be put aside in the buffer account will be proportional to the real risk of the project.	
14	We agree with creating a new NPRT for GCS, as it reflects the inherently different risks associated with different kinds of carbon-removal projects. However, we are hesitant with the proposal of a buffer account that incorporates GCS buffer credits into the same pool as AFOLU credits, as the difference in risk between these credits is significant. Thus, a preference for separate buffer pool accounts for ARR, REDD and GCS is due to these significant differences in risk, and the clarity this separation may provide as credits are further differentiated in the future within these categories due to new labeling requirements.	The proposed buffer account will be specific to GCS projects.
15	Profit margins for CCS projects will stay low. The amount of buffer credits will have an impact on these projects. As long as only few projects exist, it is legitimate to have a sufficient amount of buffer credits. With time, the amount of buffer credits will significantly sum up. Projects might cooperate to collect their buffer credits in a pool to, on one side, increase the total amount of available credits in case of a leakage at one storage side, and, on the other side, decrease the total amount of buffer credits for the individual storage side. That way, we can increase the visible reliability of projects and their profitability to further accelerate CCS projects. The NPRT tool ranks project between 1-24 point. Only 1 (DR) of 5 criteria is related to the physical seal of the reservoir. That does not represent the real physical risk. E.g. the political risk might change quickly in both direction. I would argue for at least the same importance on the subsurface part as for the juristic/financial part. Even when the political and financial situation is uncertain, it is not related to an immediate leakage of already stored CO2 to surface. The geological risk can be illuminated in more detail. Risk related issues are: Depth of reservoir, amount of wells penetrating the reservoir, condition of legacy wells, information about the caprock, evaluation of buffer zones in the overburden, evaluation of natural leakages, fault zones connecting the reservoir	Verra acknowledges the stringency may be viewed as punitive by some and has adjusted where possible to increase workability, while maintaining high environmental integrity.

	to the surface or shallower formations, amount and quality of available data (e.g. 2D or 3D seismic), well barriers -> potential for cross-flow and leakages, tectonic situation, ...	
16	Table 1: there should be an option that the project will be applying an international regulation due to lack of jurisdictional one. This should lessen the risk. Table 2: adding governance score to the risk value, only makes developing countries be less attractive for investment on CCS. This needs to be reviwed or even taken out. Table 3: all OK, we agree. TAble 4: all OK. Table 5: An additional detailed guideline along with the Appendix 1 to transform the unfit wells into the wells with zero risk or an alternative way of storing CO2 (non-supercritical) would help increse the storage capacity drastically with zero risk.	International standards have their respective limitations in comparison to jurisdictions with stringent regulations which may (or may not) incorporate such standards. Given the complexity of CCS projects, a higher governance score has a direct linkage to a higher risk profile which Verra acknowledges. We see limited opportunity to achieve a completely zero risk well and while we acknowledge the stringency may be viewed as punitive by some and has adjusted where possible to increase workability, while maintaining high environmental integrity and reducing risks.
17	Risk categories can be more detailed, like technical risk and environmental risk, which includes local/regional hazards. Design risk can include safety like system safety, geothermal safety, and other long term reliability measures. Additionally, a category like emerging risk can be added which is basically a risk resulting from a newly identified hazard to which a significant exposure may occur, or from an unexpected new or increased significant exposure and/or susceptibility to a known hazard.	Verra acknowledges the stringency may be viewed as punitive by some and has adjusted where possible to increase workability, while maintaining high environmental integrity.
18	As above, we do not believe that additional requirements / liabilities (such as buffers) should be placed on capture projects, if CO2 liability is already dealt with by national / state-level jurisdictions. In addition, we believe there are two major flaws to the current NPRT approach, which lead to buffer sizes which are not commensurate with the underlying risk. This creates a significant risk of deterring investments into these nascent technologies: • Buffers mandated by regulators: Across the EU / US there are already highly stringent buffer systems / post-closure funds / industry body funds that are required to set aside money for monitoring, mitigation and compensation. These should be taken into account in any standard to avoid unfair double penalization • Parametrization of buffers: Research indicates CO2 leaks from Geologically Stored Carbon is likely to be in the range of 0.1%-1% over 1000 years. Our own and peers initial testing of Verra's proposed NPRT is leading to buffer numbers that are 10-100x larger than the underlying risk.	Verra acknowledges the stringency may be viewed as punitive by some and has adjusted where possible to increase workability, while maintaining high environmental integrity.

143	Please note that the comments listed below have been summarized and shortened from the comments in NPRT Draft. Regulatory Framework Risk We do not believe the items covered in Table 1 Regulatory Framework Risk address the core issues with respect to risks of non-permanence associated with a regulatory body/framework. More relevant regulatory framework considerations might include: 1) the capacity of the regulatory body to implement and enforce its rules to ensure compliance; 2) coverage of relevant technical requirements that serve to reduce the risk of leakage (cross-referenced to permanence guidelines); and 3) a liability structure that establishes adequate programs and funding be in place to ensure the safety and security of the CO2 sequestration site regardless of who will own that liability after project closure. Political Risk The World Bank Institute's Worldwide Governance Indicators (WGI) help businesses assess the commercial risk for executing a project within a given country at a given point in time. This commercial risk, or stated more bluntly this likelihood of corruption, is inherently different from a technical non-permanence risk for CCS projects as it depends on politics which can be quite messy. If the goal of this tool is to both allow the inclusion of CCS Projects in locations that have a history of corruption and or political instability and be able to assign a risk rating reflective of the local politics to provide assurance to potential credit offsets buyers/registries, we would suggest changing this framework in the following ways: 1. Evaluate Political Risk separately within the tool or introduce another mechanism outside of the tool to evaluate political risk altogether. 2. Identify potential governance issues within a country that prevent the project operator from managing effectively or prevent the VVB from performing their duties effectively. 3. Political Risk should be managed differently between the active operating periods and less active monitoring periods for a given CCS Project. 4. Recommend revising the current Political Risk scoring values as they heavily outweigh the other core risk categories which are more directly linked to permanence. These potential risk scores generally appear too high for carbon removal projects. 5. Replace and/or amend the Political Risk Category with an Operator Risk Category that evaluates a project's non-permanence risk based on the Operators past experience/performance in geologic sequestration of CO2. Land and Resource Tenure Risk OLCV questions the quantitative impact pore space ownership has on non-	The proposed NPRT scoring and details have been adjusted accordingly and as needed.

	permeance for secure geologic storage. The majority of land in the US is privately owned and the associated legal framework(s) that have been developed around mineral rights provide an excellent case for why private pore space ownership can be less risky compared to public pore space ownership. It is unclear to us why projects with private ownership should be perceived as being a higher risk when compared to public ownership. Additional clarification and/or evidence to support this risk category would be greatly appreciated. Closure Financial Risk Recommend normalizing the values from Table 4 Closure Financial Risk such that at a 100% PISC costs covered by secured funding would correspond to a Closure Financial Risk of 0%. The Closure Financial Risk would be eliminated if the PISC costs are covered by all secure funding. However, the equation to estimate risk in Table 4 does not reflect this.	

1.1.3 What is an appropriate total crediting period for GCS projects, and why? The VCS rule for technological and industrial (non-AFOLU) projects is seven years, twice renewable for a total of 21 years. What is an appropriate number of crediting period renewals for GCS projects?

Comment #	Issue Raised	Verra Response
19	Crediting periods shall be as long as the injection takes place; there should not be any inherent limitation.	Providing a limitation for crediting helps uphold the integrity of the VCS and CCS projects while also providing the external certainty that stakeholders seek.
20	Support the inclusion of buffer credits, based on the NPRT. However, it is critical that the NPRT sets an appropriate buffering capacity: too low, the VCS fails to provide long-term integrity; too high, the cost of removals increases and potentially limits uptake. Consequently, the methodology used to determine the buffering size must be periodically re-calibrated based on cumulative industry data. Reassessments incentivise those delivering removals to maintain best practice and implement measures to reduce any reversal risk.	Verra supports the suggestion to re-visit the NPRT in the future for potential re-calibration.
21	Term of crediting period for GSC projects should reflect underlying emitting asset. 7 seems short for initial term. 12-20 years would match term of our deals.	The proposed crediting period of 7 years, twice renewable for a total of 21 years would encapsulate all 12-20 year deals put forward as examples.

22	We think that the proposed crediting period of 7 years renewable five times up to a total of 35 years is appropriate.	We appreciate your comment, and it is acknowledged.
23	We encourage the establishment of longer crediting periods for sequestraion projects in general, because it supports long-term permenance. GCS projects claim their permanence, but as these projects are largely in the pilot phase, this permanence has yet to be fully proven. Land Life suggests a longer crediting period (fixed 100 years, 40/50 years renewable), with mandatory long term independent monitoring protocol in place for both CO2 and CH4, similar to ARR projects.	A longer crediting period does not correlate to increased permanence as the crediting period would be tied to the projects operating timelines and determining what is appropriate. Safeguards are in place to ensure long-term project permanence.
24	GCS projects are large projects high capex/opex costs. These projects can only be realized when their revenue stream from carbon credits can be secured for at least 25 years – better longer. As long as the additionality criteria can be fulfilled for every expansion period, a time limit does not seem to be necessary. In reality, point emitters have to reduce their emissions over time. That means that they can only generate carbon credits for a declining fraction of their total capture. E.g.: a cement factory might start capturing 100% of their emissions today. As they might be not able to afford the project without revenues from carbon credits, they will take only 10% of the capture CO2 on their account – while generating carbon credits on the remaining 90%. Over time, the cement factory will be required to further reduce their emissions. Therefore, they have to increase their share on the capturing and sell less carbon credits. The VCS would allow for such a concept even within ETS schemes (it would require to still pay ETS allowances for the fraction for which carbon credits are issued) and would allow for a crowd-funding of CCS projects (selling point: convert allowances into real carbon emission reduction).	The integration of voluntary and compliance requirements is an ongoing discussion.
25	35 years is very short for a CCS project, we propose that it needs to be at least 40 years the project duration with crediting periords of at least 10 years as the data should be easily accesible to VVBs when needed. Due to the nature of the projects all is always being monitored.	We appreciate your comment, and it is acknowledged.
26	Total crediting period for GCS project activities can be around 10 years, with thrice renewable for a total period of 30 years. This is recommended because of the longer time frame between project registration and crediting period and these projects also involve investment for the project development and even during monitoring. Longer crediting period ensures that project proponents have enough time for the generation of offsets.	We appreciate your comment, and it is acknowledged.

27	In order to provide investors' confidence in investing billions into engineered removals a 7 year time horizon of certainty of revenues is far too low. We would suggest 20 years would be necessary to provide sufficient confidence and align with investment time horizons. Furthermore we do not see any rationale whatsoever for a cut of date of 35 years for projects that have no other economic reason to keep running unless there are carbon credit revenues associated to continued operations	We appreciate your comment, and it is acknowledged.
144	Proposed crediting period for GCS project in the updated VCS Standard of 35 years appears acceptable for individual CO2 Capture Project/Modules. However, additional crediting period distinctions will need to be made between individual CO2 capture projects (CO2 Sources) and the shared infrastructure (CO2 Transportation Pipelines/Sequestration Hubs). Large scale, secure geologic storage sites with shared infrastructure will most likely have project life cycles much longer than 35 years. For example, Oxy is still managing active CO2-EOR projects with transportation infrastructure, surface processing equipment, and injection wells constructed in the 1970s.	We appreciate your comment, and it is acknowledged.
150	Response 1: The crediting period of a GCS project should be set according to categories of storage based on the SRMS categories and their varying range of uncertainties. Longer crediting periods can be offered to storage sites deemed to be higher quality by the NPRT, e.g. depleted hydrocarbon gas reservoirs that have a proven history of storing hydrocarbon gases for millions of years vs. deep saline reservoirs that may have higher leakage risk given lack of proven sealing capacity. Response 2: A 15-20 year crediting period seems reasonable, considering the substantial timeline to get a project like this online. Extending past 20 years could disincentivize innovation in the space.	We appreciate your comment, and it is acknowledged.

1.1.4 What suggestions do you have to improve the requirements allowing expansion of GCS projects?

Comment #	Issue Raised	Verra Response

28	- Allowing expansion of GCS projects makes sense if this supports construction and operation of joint infrastructure and hubs/clusters.	We appreciate your comment, and it is acknowledged.
29	Require verification of carbon origin. It is critical that frameworks can distinguish between fossil- and biogenic-carbon as removals markets are developed. BECCS and DACCS solutions are carbon negative, actively removing atmospheric carbon; whereas, the CCS of fossil carbon is carbon neutral, avoiding carbon emissions. The origin of carbon must be traceable throughout the supply chain. If a GCS expansion increases the rate of fugitive emissions from capture/transport/storage, accounting for the origin of carbon will determine whether emissions are carbon positive (fossil) or carbon neutral (biogenic). This requirement would be particularly appropriate within the gas-related GCS projects. For example, a producer of blue hydrogen will capture and store CO2 derived from the steam reformation of fossil natural gas (carbon neutral). However, it could procure biomethane transmitted through the grid to produce biohydrogen via the same process, where subsequent CCS would deliver GHG removals (carbon negative). Both fossil methane and biomethane could be processed simultaneously within the same equipment, yet the carbon outcomes would be different. The proportion of biomethane and natural gas may vary over time, and thus the GCS requirements must ensure the carbon's origin is reliably reported.	These points will be captured in the requirements of the methodology and modules being developed.
30	We suggest to better clarify what the Standard means with interconnecting infrastructure: in our view this should not be limited to pipeline (3.4.4) but, in general, shipping by vessel of CO2 (3.6.20) should also be allowed.	Verra agrees with the sentiments expressed here.
31	We belive GCS seqestration credits should have the same rigiourous requirements as AFOLU ones, including, but not limited to SDG goal attainment, environmental and social benefits, and long-term monitoring. Land Life supports the general consensus that all carbon sequestion project methods should be valued as equal, and as such, GCS project requirements should be on par with other VCS ER projects, in terms of the fulillment of rigourous criteria.	Verra agrees with the sentiments expressed here.
32	Project extension should be based on new captures which have proven their additionality. Transport and storage facilities should be allowed without any time limitation. Time limitation should be for the capture part only. Chapter 3.6: “Expansion activities shall not have comparable additionality or baseline scenarios to the initial GCS project activity.” That statement might	Text clarified related to these statements as deemed fit.

	exclude many additional projects. The additionality itself should be the criteria for new projects or its expansion, not the kind of additionality.	
33	3.6.21 Project expansions shall not have multiple project activities credited (i.e., shall not use VCS methodologies that are not intended for GCS activities). NOTE: this item needs to be expanded, as the boundary of the project well explained, for example, a plant with coal production of energy using a state of the art boiler (high pressure) could count as an energy efficiency activity under GCC, would this be a problem? (VErra does not accept energy efficiency projects)OKwith addity and baseline requirements.	Project expansions refer specifically to the addition of capture, transport and/or storage and crediting from the additionality of the expansion accordingly. Revisions have been included for clarity.
34	Inclusion of a financial incentive like an insurance for investment which takes into account the risk related to storage site and capture plants. Also, more requirements for GCS facilities to ensure that operations are safe and effective in transporting and retaining the CO2.	The comments related to integrity/safe operations apply to any GCS project activity (original and expansion), the other requirements alluded to will be addressed further in the methodology/modules.
35	We agree with the proposed approach	We appreciate your comment, and it is acknowledged.
145	Numerous - see separately submitted comments in attached documents.	Comments reviewed/adjustments made accordingly as needed.
151	Response 1: It's important to ensure the technical requirements and assessments are applied equally to any additions and are not compromised by expansions. Response 2: Humans can't predict the future, so there isn't much else to can say. Building in this contingency makes sense, though, as a catch-all to say "projects will have the ability to implement new technology as it is created." Response 3: The requirements should include a study of any externality impacts on the reservoir that may have changed since the last approval period as well as an attempt to gather the impact of operations in the life of the project.	Verra agrees with the sentiments expressed here and the existing requirements encapsulate an evaluation of the expansion to ensure the integrity of the existing project with and after the proposed expansion.

1.1.5 Do you support the approach to demonstrate ownership and mineral rights for GCS projects? To what extent do you think a legal opinion can address uncertainty around ownership and mineral rights to a project's GHG emission reductions and removals? Do you have any suggested additions or improvements?

Comment #	Issue Raised	Verra Response
36	- Yes, the proposed approach seems suitable.	We appreciate your comment, and it is acknowledged.
37	Support the requirement to supply a legal opinion from an independent third-party lawyer, endorsing the validity of pore space availability and ownership. This can provide carbon suppliers with the confidence that CCS investment is suitably viable. At present, projects planning to access GCS are limited by the storage facilities available, and thus business models are dependent on a specific GCS project. If this GCS project were to become over-subscribed, for many suppliers of carbon, it would not be feasibly to switch to another GCS project. Consequently, it is essential that storage capacity is effective proportioned to suppliers over their operational lifetime. Without this certainty, CCS investment may be hindered and climate targets may not be delivered.	Verra agrees with the sentiments expressed here.
38	We think land owner owns and controlls pore space. While mineral trespass is a concern, this issue is delt with in well permitting. So we think that the project should demonstrate legal right to pore space but addressing the mineral rights is overkill.	Verra has proposed surface/subsurface access rights and pore space rights. There is no mention of mineral rights.
39	We support the requirment to demonstrate ownerhips of mineral rights for GCS projects for the full crediting period.	We appreciate your comment, and it is acknowledged.
40	Looks good	We appreciate your comment, and it is acknowledged.
41	i. Is proof of ownership justified as a requirement for "pore space", "mineral rights" and "land", or just for "pore space"? ii. There are twin challenges of demonstrating ownership of pore space - long permitting times, and inconsistent legislation across different jurisdictions. A suggested reference for clarity is the LB650 - a piece of legislation enacted by the state of Nebraska, USA in May 2021. The Bill promulgated extensive	Verra has proposed surface/subsurface access rights and pore space rights. This approach can be applied globally.

	legislation on subsurface GCS which might provide clarity, consistency and reduced uncertainty regarding pore space ownership, unitization, permitting, and long-term ownership upon project completion.	
42	We do not think the approach as outlined reflect the realities of how cooperation will work between players in this space. Furthermore, as mentioned above, ownership and liabilities needs to be further integrated into existing regulatory frameworks • 3.7.4 and 3.7.5 of the methodology as it relates to ownership of pore space/mineral rights, implies that the project proponent must own the pore space or have a direct contract with a pore space owner to be eligible to register and receive credits. We believe this is not representative of how this market should / is likely to evolve. We would expect capture players to have contractual agreements with storage operators, and storage operators in turn to have contractual agreements with pore space owners. In order for capture players to be project proponents, paragraph 3.7.4 and the description of "diverse ownership" in 3.7.5 should hence allow for a party seeking to register to demonstrate that a contractual chain of contracts is in place that shows that pore space and storage sites have been secured (i.e., indirect contracts with evidence of due diligence having been carried out). We believe the carbon capture player is responsible party for creating negative emissions, with storage operators being a crucial enabler, but fully agnostic to what type of CO2 they store (avoided or removed). In order to build the negative emissions project our planet needs, capture players need to be rewarded by being allowed to be the owners of carbon credits (we believe the US 45Q allocation to the capture player, not the storage player, sets a strong precedent) • Ownership and liabilities needs to be further integrated into existing regulatory frameworks. In particular contracts between capture, transport and storage players should not be required to replicate conditions which are already assured by regulation (i.e., liability for CO2 leaks) Furthermore we think the requirements for legal opinion requires further work by Verra, as the test to be signed off the by the legal practitioner is vague ("contract clearly assigns all of the responsibilities") and we would expect any legal opinions will only be provided on a qualified and caveated basis.	The text per this comment has been reviewed/revised to ensure clarity as needed.
146	OLCV would like to humbly request more time to answer question 5 and review potential case studies with our internal legal teams before responding to this question publicly.	We appreciate your comment, and it is acknowledged.

152	Response 1: The outlined approach to confirm the project's right to the pore space/mineral rights makes sense, though the rest of the question is unclear. Either a project has a legal right to operate or it doesn't. That legal permission gives the project the right to store carbon (GHG emissions reductions/removals), but verifying those removals is a scientific process totally separate from the legal process. The legal opinion should clarify any and all uncertainty around ownership and mineral rights. Response 2: The existing legal framework around mineral ownership and leasing was not designed to deal with large scale injection paradigms; the fundamental uncertainties about what occurs underground will present issues, especially if there are significant financial benefits to being a 'storage' landowner with the uncertainties of plume migration. VCS or other key players should pursue state level mineral cases in Oklahoma and Texas at a minimum to seek framework clarification on the interpretations of mineral and surface rights for these situations (for example, the ownership principle of 'right of capture' could get very confusing in injection and storage situations). The way the current approach is written could require a full title search and opinion for each wellbore which could impose a significant financial burden, especially in situations where the wellbores have been orphaned. VCS should seek interpretations and clarifications of the state laws that may pertain to these activities; as well as pursue state policy and legislative activities in key states to ensure that there is a legal framework as these projects become more financially impactful. There should also be more guidance on the type and detail of mineral and surface ownership research required to proceed with a project.	We appreciate your comment, and it is acknowledged.

1.1.6 General comments

Comment #	Issue Raised	Verra Response
43	- Monitoring period lengths need to be set as a function of inherent storage durability of different activity types. Monitoring periods for geological storage projects resulting in demonstrated mineralization of the carbon (in e.g. basaltic rock or periodite) can be reduced to the time needed for full mineralization. A volcanic eruption in the project area after the end of the monitoring period shall be deemed a reversal.	Verra is proposing flexibility related to monitoring requirements to allow adaptability/uniqueness for each project type.

44	The GCS category should not include CO2 utilisation, as proposed. Typically, utilisation pathways often represent short-live carbon storage, where carbon is re-emitted after use, such as in the manufacture of food and drink. While the use of bio-CO2 presents an effective solution to mitigate these industrial emissions, it does not belong within the 'Geological Carbon Storage' category. GCS is associated with robust, permanent (>10,000 year) storage solutions, with minimal risk of CO2 re-release. Maintaining this clear category definition helps to develop confidence and transparency across the carbon market. The inclusion of utilisation would confuse the broader understanding of GCS solutions, particularly within lay audiences. Moreover, geological storage is expensive to deliver, at present. However, its delivery may be facilitated by the high value companies are placing on high-integrity, permanent removal solutions. Verra must be conscious not to dilute the GCS category with the inclusion cheaper, non-permanent utilisation options, which risk bringing down the overall value of GCS solutions (and thus risk their financial viability).	Currently proposed GCS requirements apply only to CCS projects; clarity will be provided as needed in subsequent phases and/or as new activities are added. Comment acknowledged.
45	Yes, reported in the General Comments sheet.	We appreciate your comment, and it is acknowledged.
46	Land Life supports any update to ensure the creation of high-integrity of GCS credits. Being an organization that centres on AFOLU projects, we do not have the adequate knowledge and information to make a more informed, detail-oriented response.	We appreciate your comment, and it is acknowledged.
47	Differentiating reduction/removal - THE reason why I couldn't realize CCS projects as business developer. The mitigation hierarchy is really important! First reduction, then removal. The hype for “removal” is contra-beneficial for e.g. stopping deforestation (we are not able to simply re-plant rain forests) and for technology based emission reduction projects like post-combustion CCS. The atmospheric impact counts first. Then we should look at the energy consumption of a method, its costs and other co-benefits (like SDG). The source of the CO2, or if the reduction of atmospheric CO2 is achieved by a reduction or removal project, does not matter. It is not necessary to distinguish between reduction and removal. That will happen automatically: when we have done all affordable reduction, we move to more costly removal methods. Especially for technology-based methods, the energy efficiency of projects should be considered. In the current absence of sufficiently available energy, we have to put a focus on the energy consumption! E.g.: To capture the CO2 emissions from	Verra acknowledges the comments made related to removals and reductions.

	a modern gas power plant with DAC, requires more energy than the gas power plant produces. The reduction project (post-combustion CCS at the gas power plant) would therefore make more sense than the removal project (DAC). This example illustrates that the differentiation between removal and reduction is less helpful than a label on energy efficiency. It would be great, if the Verra registry could be filtered for technology-based methods by the energy efficiency. Actually, the CCS+ methodology has the values for energy efficiency already included. An implementation would be therefore straight forward. There is no precise scientific/technically definition available which distinguishes reduction from removal. The most common definition in Europe is from ZEP (Zero-Emission-Platform), but it has unfortunately loopholes and it is not precise. ISO definition is as well insufficient. I try to sketch some major challenges: o Differentiation based on the CO2 origin: Biological or fossil. That might be a possible solution, as long as the pre-industrial atmospheric CO2 concentration is the base. For today, it would mean that around ~45% of the CO2, captured e.g. by direct-air-capturing, can be accounted as "reduction" and the remaining CO2 would be "removal". This makes clear, that "removal" is nothing else than post-emission-reduction and it should be clearly stated as it. But, where is the advantage for the atmosphere by doing that differentiation? o Direct-air-capturing (DAC) is often seen as "removal" technology. Imagine that one puts the DAC facility closer and closer to the chimney of a coal power plant. Doing so, would make the DAC process more efficiently, as the CO2 concentration would increase with decreased distance to the chimney. At which distance to the chimney would the DAC facility be considered as "removal" and at which distances as "reduction"? Current definitions of "removal" would allow the post-combustion capturing at a coal power plant to be qualified as "removal", as long as the exhaust gas leaves first the chimney (by definition, 1 millimeter would be enough) before it's getting captured. So, how to distinguish between R/R when there is no definition? And, would have a definition an impact on the climate???	
48	The topic of the buffer credits needs to be undertaken again, this will kill projects that are within the area of removals.	We appreciate your comment, and it is acknowledged.
49	i. Does the GCS NPRT account for uncertainty to do with ineffective monitoring? ii. The NPRT is intended to complement project eligibility requirements, but there appears to be dissonance. While the eligibility requirements enforce rigor involving regulatory oversight, site design, monitoring and closure, the NPRT	Uncertainty requirements are part of the methodology requirements and this will be addressed by the methodology. The proposed NPRT and program updates are intended to ensure a high-integrity monitoring program exists for GCS projects

	seems to weaken the case for rigor by allowing for reversal risks (or read vice-versa). This would mean a threshold level of risk needs to be defined by the GCS NPRT for projects to be deemed eligible. The appropriate threshold level will strike a balance between environmental integrity and acceptable uncertainty sufficiently buffered, that can help free up GCS CCS projects.	rather than yielding a higher buffer contribution based on the efficacy of the monitoring program. No action based on these comments.
50	IETA is pleased to see the market interest in GCS reflected in Verra's VCS Program updates and are supportive of having GCS activities recognized by the VCS. We are also supportive of Verra's role as an observer to the CCS+ initiative. IETA generally supports the proposed amendments to the VCS Program to address the unique nature, risks, and timelines associated with GCS projects.	We appreciate your comment, and it is acknowledged.
147	General Feedback. 1. Definitions appear to be missing – these will be incredibly important to the GCS requirements along with the modules in CCS+. Where do these definitions stand currently and will these also be available for review/public comment? Are these currently in the hands of CCS+? How can we help here? 2. Sections from Section 3 Project Requirements for GCS projects appear to be missing – is this related to the comment on page 10 "Note to the consultation version: the addition of the previous subsection, 3.4 GCS-Specific Matters,…"? a. Sections 3.12 to 3.14 seem to partly relate to additionality but have been removed from the document. Are these sections available to review or are they still in progress? b. Sections 3.8.1 to 3.8.5 seem to party relate to additionally but have been removed from the document. Same question as above. c. Section 3.6.1 to 3.6.19 seem to be missing as well. Same question as above. d. Section 3.11 appears to be missing sub sections 3.11.1 to 3.11.4. Same question as above. e. Section 3.16 appears to be missing sub sections 3.16.1 to 3.16.5. Same question as above. 3. The requirements appear to be coming along well; however, we would recommend an additional session for review with the Core Members of the CCS+ Initiative, or at least the ones that have submitted substantial comments to provide their industry expertise where relevant.	Definitions will be published in the *VCS Program Definitions* document. Note, only the proposed new material was put forward for public consulting with pre-existing text from the *VCS Standard* removed to limit the number of pages for feedback. Verra acknowledges this may have created reference gaps/confusion.

153	Response 1: Overall, it's a good addition to the standard given the tremendous storage capacity GCS offers in sequestering anthropogenic CO2 emissions. Response 2: Section 2.2.5 is too vague. All we've really said here is "GCS projects can span large distances," but it's never connected back to any larger thought or plan. To improve this point, VCS should give recommendations about how the exact location of a GCS project will be determined (e.g. the site of the well).	Refining criteria or requirements for the exact siting of wells or projects would be outside of the scope of this methodology and the program updates.

1.2 Double-Counting of Carbon Credits in Scope 3 Inventories

1.2.1 Do the proposed changes to the VCS Standard, Program Definitions and Registration and Issuance Representation documents sufficiently help mitigate the risk of VCUs being double counted as company Scope 3 emissions inventory claims (considering the limitations of project proponents and validation and verification bodies to detect this form of double counting)? If not, is there a better or additional approach for effectively mitigating this risk?

Comment #	Issue Raised	Verra Response
51	- Yes, the proposed changes help to mitigate the risk, but we suggest to insert the word "accounted" after the term "claimed",as a way to reinforce the importance of not considering scope 3 emission reductions under any crediting framework. See the example "Further, the project proponent shall notify the buyer(s) of impacted goods or services that GHG reductions or removals sold as VCUs cannot be accounted and claimed in companies' Scope 3 emissions inventories". Similarly: - "Sustainability reports (e.g., Climate Disclosure Project Reports) of companies with direct supply chain links to the VCS project showing that the GHG reductions or removals sold as VCUs and associated with the impacted goods or services have not been accounted and claimed in any company's Scope 3 emissions inventory".	The update has been amended to require the producer of the goods/services directly impacted by the emission reduction/removal activities, as listed in the Project Description document, to make a public statement that there is a VCS project and that VCUs may be requested and issued for the emission reductions/removals associated with the goods/services being produced. The public statement will be verified by a Validation and Verification Body (VVB) prior to VCU issuance. The update will increase transparency into where VCUs are being issued and help reporting companies identify that there is a double-counting risk. It is not Verra's responsibility nor intention to require the project proponent to monitor or assess any company's Scope 3 emissions accounting, reporting or claims. This is the role of the reporting company and reporting and target-setting frameworks under which reporting companies submit their Scope 3 inventories.
52	Yes - proposed changes clearly establish definitions and guidance which help mitigate risk of double counting.	We appreciate your comment, and it is acknowledged.
53	The proposed changes may not be sufficient, particularly in supply chains with several tiers and poor supply chain transparency. As an example, a downstream CPG may use satellite imagery to generate a supply-shed level Scope 3 emission factor that will be used in their inventory. In this case, even if the direct buyer of the impacted goods is not reporting the S3 reduction themselves, its possible that downstream actors will inadvertently take credit for reductions. Such an emission factor would also not account for any farms within that region who may	Verra agrees that there are situations (e.g., supply chains that lack traceability) where a double-counting risk between carbon credits and Scope 3 inventories will still exist. The current update is intended to increase transparency, beyond the VCS Registry, into where VCUs are being issued to help companies detect where a double-counting risk may

	be engaged in carbon offset projects. Additional approach (long-term): Verra can engage with other programs to develop a 'registry of registries' - a tracking system which aggregates information on carbon credit projects and scope 3 intervention projects via existing and upcoming registries. Companies using physical traceability approach in accounting must check that those reductions have not been claimed via carbon credit or scope 3 intervention projects. Perhaps the system should also have a method for companies to register preferential sourcing arrangements where companies haven't necessarily implemented a project but have paid more to receive a good/service with low carbon intensity (with demonstration of physical traceability).	be present. Verra believes this approach is the extent to which it can reasonably address this issue within the VCS Program at this time. Verra is planning to develop a Scope 3 Program which will include a spatially enabled registry for Scope 3 interventions that will link to this VCS registry. Once the Scope 3 Program and associated registry are created, we can further mitigate this double-counting risk.
54	We believe the proposed changes would be minimally effective in reducing the risk of double counting in Scope 3 emissions inventory claims. In our experience, most companies derive Scope 3 emissions information from publicly available aggregated data sources such as the EPA, not from specific emissions declarations made regarding products and services within their supply chains. Relying on "websites, contracts or marketing materials" outside of common Scope 3 reporting practices to prevent double claiming places a significant burden on downstream firms to confirm VCU sales on a likely small portion of their inputs. We recommend that Verra perform a thorough analysis of Scope 3 emissions inventory practices across industries to determine how and what data sources companies use to report their Scope 3 reductions, as well as how effective the methods outlined in Section 3.21.3 would be in preventing the double claiming of VCUs as Scope 3 reductions in extended supply chains. Moreover, this analysis would be more robust if Verra also reviewed how claims were made for the purchaser of VCUs and how those are then subsequently counted (or not) as Scope 3 reductions for that product's user base.	Verra is aware that most Scope 3 inventories are calculated using emission factors from databases and that these emission factors are usually based on high-level aggregated data that is not specific to the reporting company's supply chain. We have heard from our stakeholders that the coarseness of these factors sometimes protects against this type of double-counting. Nonetheless, we agree that the update has limitations. The Greenhouse Gas Protocol's Corporate Standard (2004) and Corporate Value Chain Accounting Standard (2011) are clear that reporting companies should avoid double-counting carbon credits in their emission inventories. This update aims to increase transparency into where emission reductions are being sold as carbon credits to enable companies to manage this double-counting risk better (where possible). This update was made in response to cases where companies have purchased goods/services for their low-emissions attributes to lower their Scope 3 emissions to achieve a target even though VCUs have been issued for the same emission reduction. The update has been amended to require the producer of the goods/services directly impacted by the emission reduction/removal activities, as listed in the Project Description document, to make a

		public statement that there is a VCS project and that VCUs may be requested and issued for the emission reductions/removals associated with the goods/services being produced. The public statement will be verified by a Validation and Verification Body (VVB) prior to VCU issuance. Verra believes this is the extent to which it can reasonably address this issue. It is not Verra's responsibility nor intention to monitor or assess any company's Scope 3 emissions accounting, reporting or claims, nor is it the intention to require this of project proponents. This is the role of the reporting company and reporting and target-setting frameworks under which reporting companies submit their Scope 3 inventories.
55	Land Life supports the updated definition of double counting, with the inclusion addressing company scope 3 emissions claims. This additional definitional layer is necessary in widening the scope of double counting, and reflects the general concern that scope 3 claims in the form of marketing, promotions, or company sustainability reports are contributing to greenwashing and double-couting risk. Land Life also supports the update that introduces “claims in a company scope 3 emissions inventory” as a form of GHG-related environmental credit. With its categorization as a type of environmental credit, we ask Verra for more insight on the monetary value of these scope 3 claims. We seek a level understanding similar to the clear knowledge on why renewable energy certificates are an environmental credit (the example of RE certificates was cited in the text).	The value of a Scope 3 emission reduction depends on the reporting company's targets, policies and priorities. Verra cannot comment on the monetary value of these claims.
56	Even if the project proponent (PP) does not market the emission reductions, companies can get to know about them and claim them in their Scope 3. In particular: - With no safeguards, average emission factors, available in databases for companies, may include the reductions that have been valued as VCUs by a project proponent. - Companies may perform dedicated, in the field, life cycle assessment and do not perform relevant checks to make sure that no VCUs producing project is in place in their Scope 3. Indeed, companies have no incentive to perform such a check, with validation/verification bodies (VVBs) not being responsible for controlling that and having no capacity to do so. Companies may also not have the capacity, resources, or knowledge/skills to do so. This check may be particularly difficult to perform for companies that have volatile, long and opaque supply chains and when companies calculate their scope 3 emission at a supply	Verra is aware that most Scope 3 inventories are calculated using emission factors from databases and that these emission factors are usually based on high-level aggregated data that is not specific to the reporting company's supply chain. We have heard from our stakeholders that the coarseness of these factors sometimes protects against this type of double-counting. Nonetheless, we agree that the update has limitations. The Greenhouse Gas Protocol's Corporate Standard (2004) and Corporate Value Chain Accounting Standard (2011) are clear that reporting companies should avoid double-counting carbon credits in their

	shed level. For example, a cocoa company measures their footprint at farm level based on the practices implemented in a sample of the farms of their supply chain or just by asking cooperatives which practices their farms implement. They will take into account the fact that no organic waste is going to landfill because a project has been implemented by a PP, but there is no safeguard impeding the company to claim the reduction in their supply chain. The company could claim the reduction knowing that VCUs have been produced but that it is unlikely that the double-counting is identified by anyone. The company could also claim the reduction without knowing it has been claimed as a VCUs because it is not aware of the project and has not performed a search on Verra registry to make sure they could claim the reduction. Furthermore, companies will have little incentive not to account for the reductions in the scope 3 even if they have already been claimed as VCUs by a project provider as there will be no regulating entity.	emission inventories. This update aims to increase transparency into where emission reductions are being sold as carbon credits to enable companies to manage this double-counting risk better (where possible). This update was made in response to cases where companies have purchased goods/services for their low-emissions attributes to lower their Scope 3 emissions to achieve a target even though VCUs have been issued for the same emission reduction. The update has been amended to require the producer of the goods/services directly impacted by the emission reduction/removal activities, as listed in the Project Description document, to make a public statement that there is a VCS project and that VCUs may be requested and issued for the emission reductions/removals associated with the goods/services being produced. The public statement will be verified by a Validation and Verification Body (VVB) prior to VCU issuance. Verra believes this is the extent to which it can reasonably address this issue. It is not Verra's responsibility nor intention to monitor or assess any company's Scope 3 emissions accounting, reporting or claims, nor is it the intention to require this of project proponents. This is the role of the reporting company and reporting and target-setting frameworks under which reporting companies submit their Scope 3 inventories.
57	The proposed update of the VCS regulation directly impacts the ability for Project owners and proponents to maintain a flexibility between accessing climate finance either from carbon offset markets and/or the emerging space of Scope 3-related SBTs. Specifically the wording of section 3.21, which prohibits the issuance of SBTs from VCU projects prohibits innovation, which is currently being sought in the market and by VERRA itself through its Scope 3 Working Group. South Pole believes that maintaining flexibility will be key to the voluntary carbon market, especially within the ALM space and therefore proposes a more nuanced phrasing in the VERRA regulations. Specifically, the intention of VERRA shall be made more clear in its updates to point to the urgency to prohibit any violation of	The Greenhouse Gas Protocol's Corporate Standard (2004) and Corporate Value Chain Accounting Standard (2011) are clear that reporting companies should avoid double-counting carbon credits in their emission inventories. This update aims to increase transparency into where emission reductions are being sold as carbon credits to enable companies to manage this double-counting risk better (where possible). The update is not intended to prohibit interventions quantified using carbon credit methodologies from being used as abatement

	the principle of avoided double counting but allowing for a parallel between SBT and VCU claims as long as the mentioned principle's integrity is maintained. Considering the observed increase in Scope 3 targets, excluding this mechanism will hurt the voluntary carbon market in the mid- to long run, as the entanglement of projects and supply chains will otherwise lead to a severe decrease on project opportunities.	activities in a corporate emissions inventory. It only aims to prevent this if the emission reductions are sold separately from the good/service (i.e., outside the supply chain) as a carbon credit.
154	The proposed changes are definitely a step in the right direction when it comes to mitigating the risk of VCUs being double counted. However, the enforceability of the changes will be quite difficult. Specifically, the following questions / risks come to mind: - How will the project proponent ensure that the buyer(s) of impacted goods are notified if the project proponent is not the direct seller of such impacted goods? - How does Verra plan to enforce that this requirement is met? - How often and to what degree of detail will the project proponent need to notify the buyer(s) of impacted goods?	The update has been amended to require the producer of the goods/services directly impacted by the emission reduction/removal activities, as listed in the Project Description document, to make a public statement that there is a VCS project and that VCUs may be requested and issued for the emission reductions/removals associated with the goods/services being produced. The public statement will be verified by a Validation and Verification Body (VVB) prior to VCU issuance.

1.2.2 Are there other ways that non-occurrence of double-counting could be demonstrated beyond the approaches listed in Section 3.21.3? If so, please explain.

Comment #	Issue Raised	Verra Response
58	- Another way could be to request the reports of the national authority in charge of the carbon footprint, or carbon neutrality program for industries, to cross-check if the VCM project developer is registered in some of these programs, which emissions are reported and what mitigation actions are reported to reduce the carbon footprint (which must not be the same as the project).'KQ - Double Counting in Scope 3'!	We appreciate your contribution. The update does not require validation and verification bodies to check corporate GHG emission inventories; this would be very complex and is outside the purview of the VCS Program. The update has been amended to require the producer of the goods/services directly impacted by the emission reduction/removal activities, as listed in the Project Description document, to make a public statement that there is a VCS project and that VCUs may be requested and issued for the emission reductions/removals associated with the goods/services being produced. The public statement will be verified by a Validation and Verification Body (VVB) prior to VCU issuance. Verra

		believes this is the extent to which it can reasonably address this issue. It is not Verra's responsibility nor intention to monitor or assess any company's Scope 3 emissions accounting, reporting or claims, nor is it the intention to require this of project proponents. This is the role of the reporting company and reporting and target-setting frameworks under which reporting companies submit their Scope 3 inventories.
59	See above for proposed approach in long term. No additional recommendations for approaches in 3.21.3	We appreciate your contribution. Please see previous response.
60	The approaches presented are comprehensive. In addition, perhaps the development a program to validate the net-zero claims of companies can be another way to ensure non-occurence of double counting.	We appreciate your contribution. Verra does not regulate claims. However, the Greenhouse Gas Protocol's (GHGP) Corporate Standard (2004) and Corporate Value Chain Accounting Standard (2011) are clear that reporting companies should avoid double-counting carbon credits in their emission inventories. Further, companies setting net-zero targets under the Science-based Targets Initiative must follow the GHGP rules and requirements when quantifying emissions.
61	National/regional registries or innovation blockchain services could help trace the carbon benefits and how they have been used. Systematic auditing of companies scope 3 footprint would also support the enforcement of the proposal.	We appreciate your contribution and will consider this in the development of our future Scope 3 Program.
62	A solution to the risk of double-claiming on the registry level could be a clear demarcation in VERRA's registry that credits have been retired for the sake of reducing a selected carbon footprint (and have not been sold to a specific third-party entity for climate neutrality claims), i.e., by adding a predefined retirement beneficiary category (instead of the buying entity) as well as a specific retirement reason (i.e., value chain claim) that refers to this category. This would allow project proponents to benefit from the robust and transparent quantification and reporting system of the VCS, while at the same time use the certified emission reductions for value chain purposes. This process could be verified with the established MRV system and third-party audits (VVB).	We appreciate your contribution and will consider this in the development of our future Scope 3 Program.

	On the programme/project level, a thorough reporting and documentation framework can be implemented to avoid double counting. We propose the the Soil Capital programme as an example, which rewards farmers for implementing regenerative farming practices (e.g., reduced or no tillage, planting cover crops). In addition to offsetting, Soil Capital's farmers are part of agrifood companies' supply chain, i.e., Scope 3 emissions, hence, the programme's carbon certificates can be used for insetting. The programme avoids double counting by maintaining a database with the allocation of each individual farmer's crops to a buyer, where relevant, i.e., Soil Capital's database lists each individual farmer participating in the Soil Capital programme. Within each farmer's record is a field identifying if a specific buyer has already been allocated to the farmer for one or more of their crops. When a new purchase of a verified emission factor is confirmed, each individual farmer affected is checked to ensure that they have not already been allocated to another buyer and, if not, their record is updated to indicate the name of the buyer in question and the proportion of the specific crop allocated to that buyer. Soil Capital is putting in place a tracking system to ensure certificates are correctly allocated between the crops/fields that are selling for the voluntary market and those that are selling for the SBT market (Scope 3 emissions).	
155	Has Verra reached out to project proponents and/or the project participants to understand the feasibility of the suggested approaches? Other approaches may exist that may be more tailored to the specific project proponent and/or participant. Additionally, there may be potential in requiring the planned approach for demonstration of non-occurrence of double-counting in contracts between project proponents and participants and/or in the project description template (similar to the way a project proponent needs to define their monitoring plan).	We appreciate your contribution. Verra has consulted some project proponents, consultants and corporate carbon credit buyers. The update has been amended to require the owner of the goods/services directly impacted by the emission reduction/removal activities and measures listed in the Project Activity to make a public statement that there is a VCS project and that VCUs may be requested and issued for the emission reductions/removals associated with the goods/services being produced. The public statement will be verified by a Validation and Verification Body (VVB) prior to VCU issuance.

1.2.3 General comments

Comment #	Issue Raised	Verra Response

63	We are supportive of the rules preventing double counting and feel this is one of the main purposes of registry	We appreciate your comment, and it is acknowledged.
64	At a high level, Section 3.21.3 reads like a description of where we hope the world will be one day, but does not reflect the reality of where the world is today. Today's supply chains are not equipped to comply with these detailed requirements. More specific feedback is below. Can 3.21.3 1) be clarified? Does each buyer need to be notified individually? Or is it sufficient if general marketing materials and websites provide the necessary statements? If the intent is for notifications to individual buyers, then the proposed method is entirely impractical. Many supply chains are long, with goods sold through multiple intermediaries and aggregators where such detailed information is not maintained and tracked with individual batches of goods or commodities. There is typically mixing of impacted and non-impacted goods/services before the point of sale which means a large number of buyers (disproportionate to actual project size) would need to be informed. The buyers of impacted goods may also change year over year. For example, in agriculture it is not uncommon for a farm to rotate 2-3 different crops, meaning they are selling different commodities into different supply chains each year. It is outside the reasonable scope of responsibility for a carbon project proponent to understand the extended downstream supply chain arising from all of their project sites (note that in the case of an ALM project, a project may cover hundreds or thousands of farms, in different regions, growing different crops). Additionally - informing direct buyers of impacted goods/services may not address the main source of risk, which is companies which report Scope 3 emissions much further downstream. It is currently impractical (and often impossible) to ensure that buyers are informed all the way through the supply chain, and informing direct buyers alone may not have the intended outcome. 3.21.3 2) is impractical for many projects. Not all companies report via CDP, and sustainability reports may not provide insight into the inventory or where S3 reductions are coming from. It would also be incredibly time consuming to check each company with a direct supply chain link to the VCS project's sustainability report. This could be dozens or hundreds of companies depending on the project size and length and breadth of supply chain, and the project proponent definitely does not have access to this information. The burden to demonstrate that companies downstream are reporting Scope 3	The update has been amended to require the producer of the goods/services directly impacted by the emission reduction/removal activities, as listed in the Project Description document, to make a public statement that there is a VCS project and that VCUs may be requested and issued for the emission reductions/removals associated with the goods/services being produced. The public statement will be verified by a Validation and Verification Body (VVB) prior to VCU issuance. Buyers throughout the supply chain do not need to be proactively notified.

	emissions appropriately should not necessarily be on the project proponent. As mentioned above, the long-term solution could be to develop a 'registry of registries.' Project proponents' responsibility will be to ensure they have registered the project through the appropriate registry. Reporting companies' responsibility will be to check that emissions they're claiming haven't been claimed already (potentially to be checked during 3rd party verification of the footprint). Outside of 3.21.3, we agree with the proposed changes - such as those requiring that project proponents should make statements that they will not actively promote, market, etc. benefits as another form of environmental credit (including as S3 emissions inventory claim), etc.	
65	1. To effectively mitigate double counting risk, Registry Users should be required to 1) provide public-facing disclosure of monetized emissions reductions and removals, and 2) formally attest to their efforts to avoid double counting. 3Degrees supports the proposed disclosure requirements intended to prevent double counting and requests that Verra clearly establish when and how these requirements should be applied. Authorized Representatives, and in some cases Project Proponents, often have limited visibility into and influence over upstream and downstream buyers of goods and services, particularly beyond tier 1 supply chain entities. Disclosure requirements should reflect this reality while ensuring that projects are doing everything in their power to mitigate double counting risk. We agree that there is the possibility of project activities that exist in a commoditized supply chain (for example, dairy digesters installed at a farm that produces milk) being double counted in corporate scope 3 emissions inventories. That said, our experience advising organizations on compiling greenhouse gas inventories has been that transparency into emissions reductions in a supply chain is incredibly limited. The ability for an organization to account for an emissions reduction in its supply chain, particularly beyond its tier 1 supply chain entities, is limited by the nature of how scope 3 emissions are accounted for (life-cycle emissions) and data accessibility. Organizations are typically only able to report reduced scope 3 emissions if they receive the data directly from their supplier. Additionally, many projects that exist in a commoditized supply chain may sell multiple products, introducing significant complexity in monitoring contracts in various supply chains. We therefore believe it is sufficient to obligate the Registry User to not make claims on or otherwise promote monetized emissions reductions. Several steps can be taken to prevent double-counting for projects that exist in a commoditized supply chain without introducing unreasonable risk or reporting burden. First, we support requiring public-facing disclosure of monetized emissions reductions/removals, including on websites and in sustainability	The update has been amended to require the producer of the goods/services directly impacted by the emission reduction/removal activities, as listed in the Project Description document, to make a public statement that there is a VCS project and that VCUs may be requested and issued for the emission reductions/removals associated with the goods/services being produced. The public statement will be verified by a Validation and Verification Body (VVB) prior to VCU issuance. Buyers throughout the supply chain do not need to be proactively notified.

	reporting. Any such disclosure requirement should be placed on the Registry User. In addition to requiring public disclosure, Verra should introduce a requirement that where applicable, the Registry User communicates to the Project Proponent(s) that it (they) cannot promote monetized emissions reductions or removals, including on its websites, sustainability reporting, and to entities in its supply chain. Fulfillment of such a requirement could be demonstrated through contracts or through language written into annual attestations to be included with each verification. If an Authorized Representative is reporting to Verra, this communication would occur between the Authorized Representative and the Project Proponent; if a Project Proponent is itself the Registry User, this communication should be written into the Verra Registry Terms of Use. Entities involved with the project activity who are not directly reporting to Verra (including, in some cases, project hosts) should be encouraged but not required to include language in contracts with their tier 1 suppliers and customers mandating that no claims be made on monetized emissions reductions/removals. There should be no expectation that Project Proponents or their Authorized Representatives have visibility into contract language beyond tier 1 suppliers/customers. These requirements should be implemented going forward and updates to contracts should not be required in instances where VCUs have already been issued and/or retired. 2. In instances where double counting with Scope 3 emissions inventories does occur, Verra should not penalize projects that have taken all required steps to mitigate double counting risk. Buyers and sellers of VCUs can and should be very clear that credits must not be double counted in another company's Scope 3 emissions inventory. However, the responsibility of avoiding double counting ultimately falls on the companies who are putting together and maintaining GHG inventories. If Registry Users have fully complied with the VCS rules, Verra should not pause credit issuance or take other enforcement measures against registered projects for the actions and claims of downstream or upstream entities over which the projects have no control.	
66	VCS Public Consultation: Response for September 11 2022: Item #3 Scope 3 GHG Reporting Intersection with Credit Issuance Input from Climate Neutral Business Network and Associates VCS is proposing a very serious rule change to address potential double counting that can arise between companies' scope 3 GHG reporting throughout a value chain and the issuance of traditional carbon credits issued from within that chain. As part of its consultative process on this topic it held a webinar on July 27 at 11 ET. Refinements to our understanding of VCS' proposals arose both during	The update has been amended to require the producer of the goods/services directly impacted by the emission reduction/removal activities, as listed in the Project Description document, to make a public statement that there is a VCS project and that VCUs may be requested and issued for the emission reductions/removals associated with the goods/services being produced. The public statement will be verified by a Validation and

	this webinar and during subsequent phone calls with scope 3 program leaders. Given the very serious concerns with the current VCS proposal which surfaced during our CNBN network discussions (summarized below), we developed and discussed with VCS leaders an alternative approach to avoid potential double counting between credit issuance/purchasing, should these credits' reductions also be reported through a value/supply chain as scope 3 reductions in other value chain parties' GHG inventories. VCS staff requested that we provide feedback including an outline of this alternative approach which they feel merits serious consideration. The principle behind the voluntary carbon market is that the entity whose activities are causing the GHG reductions, owns the carbon credits (subject to any private market contracts to perfect such ownership if reductions arise outside of its direct ownership/control). This is a private property right which the VCM has codified, upheld and sustained over decades. As proposed, VCS' scope 3 GHG reporting changes would undermine these central property rights for traditional credits and the essential VCM technical and legal foundations upon which any VCU crediting is premised. We therefore view these changes with very serious concern and took the time to develop an alternative approach with the engagement of many stakeholder leaders. VCS' Proposed Changes: We understand that VCS is anticipating introducing a new instrument (scope 3 interventions) to its certification services. The current proposed VCS rule changes apply only to certain carbon credits, specifically those which are purchased outside of the value/supply chain (termed "traditional carbon credits" in this input paper). Scope 3 interventions (which would not need to meet additionality/other requirements) would be crowd-funded from within a project's value/supply chain – and VCS' current proposals would not apply to such scope 3 interventions. Scope 3 interventions would therefore continue to report all scope 3 GHG reductions for all players across a value chain without requiring any adjustments for double counting. VCS' proposal therefore only applies to traditional carbon credits, which are sold "off-chain". As described in its current proposed Standard changes, VCS' proposal would require all companies in a value chain to adjust their scope 3 GHG reporting inventory by the amount of traditional carbon credits sold "off-chain". There are many problems which arise with this proposal: - VCS cannot verify whether all such scope 3 adjustments have taken place throughout a value/supply chain - Should such scope 3 adjustments not be made by a value chain entity, the project proponent's (PP) VCU issuance would then not be able to meet VCS'	Verification Body (VVB) prior to VCU issuance. Buyers throughout the supply chain do not need to be proactively notified.

	proposed requirements. As a result, value chain entities could simply hold traditional carbon credit VCU issuance hostage at their whim o That is, the credit issuer could be held hostage by other value chain players that refuse to adjust their scope 3 reporting, invalidating and preventing the PP credit project's VCU issuance due to the fact that they could not comply with the full supply chain scope 3 GHG reduction adjustment requirements. o Perverse results would arise: a non-cooperating up/downstream party could prevent a PP from issuing its "toughest to generate" additional GHG reductions – and perversely then receive the benefits of those scope 3 GHG reductions themselves for free having prevented the PP's project from selling its credits outside its value chain. - The proposal therefore undermines the very basic legal/technical frameworks that give structure and value to the voluntary carbon market (VCM), namely the premise that a PP has rights to seek VCU issuance for an activity which drives beyond business as usual GHG reductions. So, VCS' proposal deeply undermines these basic rights/foundation without which no financial capital market can or will function - Traditional carbon credits in the transportation and energy efficiency sectors are ubiquitously reported somewhere in their value chains as scope 3 GHG reductions. VCS' proposals would therefore effectively eliminate all such sectors' crediting since compliance would not be possible There is thus a profound irony in VCS' proposal. The very activities/technology innovations which would deliver the hardest-to-achieve GHG reductions through a value chain (because they are additional) would be prevented from accessing the VCM capital market. Scope 3 interventions, which take place on a business as usual basis, would be supported. So, as one VCS leader put it recently, the carbon credit market is expected to disappear with these VCS proposals. Understandably, stakeholders which have supported the development of the VCM and pioneered innovative traditional credits cannot fathom why VCS would put such a proposal/position forward, recognizing such implications. More importantly, since this proposal would deeply undermine VCU issuance for scope 3 related traditional carbon credits (e.g. spanning all transport and energy efficiency projects etc), the GHG reductions which are additional and the hardest-to-achieve in a value chain would lack capital financing from the VCM. Such innovations are typically the most transformative for value chains. Such value chains would then be relying upon scope 3 interventions to drive their GHG reductions, crowd sourcing such funding. However, most value chains are extremely cost competitive and do not simply "come together around the camp fire" to collaboratively fund such projects. Indeed, it is because so many value chains lack this financial capacity that traditional credits are so essential – and access to off-chain VCM capital markets so essential to drive GHG reductions	

along a value chain. Furthermore, VCS' proposal would require all up/downstream entities to add back in such traditional VCU credit sales into their scope 3 GHG reporting – creating an unnecessary and perverse incentive for value chains to avoid accessing this transformative VCM capital for traditional credits. VCS' proposal would therefore drain capital access to drive transformative value chain GHG innovation – in ways that ultimately would reduce all players' abilities to make progress towards a low carbon future, whether they are reporting GHGs towards an SBTI net zero goal or catalyzing innovations due to access to the VCM capital markets. Ultimately, the incentives to invest (through scope 3 interventions or traditional carbon credits) are therefore would not be optimized in VCS' proposal.

During its July webinar, VCS leaders clarified that they did not now expect to verify all value chain parties' scope 3 GHG adjustment compliance. Rather the VCS proposals would focus only on the actions of the PP to market/promote its credits and the carbon profile of its associated products/services.
Jon, what monitoring of scope 3 reductions will this require for credits through the chain - and how could a project ensure others' accounting if credits are sold? Are others' scope 3 reporting even verifiable by VVBs across the whole chain?
Hi Sue, Verra does not have a Scope 3 program and so we are currently focused on the monitoring and use of VCUs. We recognise the difficulties in monitoring scope 3 claims through the supply chain and so have put the onus on the project proponent to not market any goods or services as lower emissions if VCUs are also generated for those emission reductions.
However, this raises yet another set of problems:
- The language of VCS' current proposal does not limit itself to such a focus on the PP actions. The language applies to "a company's" and "any company's" actions1 -- and therefore applies to any company's actions wherein the associated scope 3 GHG reporting is involved. See below and App A and B. VCS' proposed language is therefore not currently consistent with its revised stated focus from the webinar.
- VCS' proposal would furthermore introduce VERRA to providing an entirely new set of certification services – namely the certification of marketing claims for goods and services. This is a highly contentious arena, subject to regulatory oversight by government agencies worldwide and the subject of frequent law suits. VCS does not have demonstrated competence in this separate certification arena. To require PPs to certify product/service marketing claims through VCS would also open them to substantial legal risks in order to issue credits. PPs would logically look to certify credits with organizations that did not make such unnecessary requirements
- Even if VCS were to embrace the certification of PP's marketing claims, it would not (by its own admission) have the reach to verify whether such claims were being effectively promulgated since it

	1 Sustainability reports (e.g., Climate Disclosure Project Reports) of companies with direct supply chain links to the VCS project showing that the GHG reductions or removals sold as VCUs and associated with the impacted goods or services have not been claimed in any company's Scope 3 emissions inventory. cannot review other entities' scope 3 GHG reporting through the value chain. VCS' product/marketing certification services would again be open to challenge and law suit – as would its PPs - As a result, the legal representations that VCS requires PPs to sign become utterly unworkable. The VCS validation Representation states that "Nobody will seek to … promote, market …" GHG reductions2. No PP signatory to a representation will ever sign such a statement since it covers actions of entities over which it would have no responsibility, accountability or control – namely the accounting adjustment of "a company's" (that is any other company's) scope 3 reporting. This is particularly troublesome when VCS would be expecting such value chain companies to be making these adjustments and referencing them as OECs in the representation. See App A o Should a PP make such a statement, it would leave the PP open to law suits from either credit purchasers or value chain partners who believed that scope 3 reporting had not been carried out in a corresponding fashion o No legal department will be able to sign off on the proposed Representation since there is also no way to ensure its implementation is successful – as VCS has itself also recently recognized. - Furthermore, the alternative compliance option ("Or I will provide evidence"… that the scope 3 GHG reporting adjustments, which now comprise Other GHG related Environmental Credits (OECs) have been cancelled) is by VCS' own admission unworkable. Even VCS' own VVBs cannot have the reach to ensure scope 3 GHG reductions accounting adjustments (now defined formally as OECs) will have been accomplished. See App A Furthermore, although perhaps inadvertently, VCS' current proposals also appear to include scope 2 related VCU issuance. So these same profound concerns arise for scope 2-based VCU credits such as energy efficiency credits. - Even EE projects which "single actors" conduct on site to adjust scope 2 emissions would have upstream scope 3 implications: such projects would need to ensure that the technologies they were purchasing did not have their GHG reductions reported as scope 3 reductions by the upstream product manufacturers in their own upstream GHG inventory - As a result, companies like Siemens and 3M would need to ensure that all of their innovative technologies in their environmental portfolio of low carbon technologies were not being reported as scope 3 reductions by Siemens/3M if these technologies' credits were legitimately being earned from their deployment	

by Siemens' customers' downstream (as scope 2 credits). Similarly, such scope 2 credits could not themselves be issued unless Siemens/3M had correspondingly adjusted their reporting of these products' reductions in their scope 3 inventories
- VCS' proposed definition of VCUs also includes scope 2 related credits as within the scope of its current proposals (see App B, #6)
Thus the scope of VCS' proposals as currently written does not appear to focus only on scope 3 VCU issuance but also impacts scope 2 VCU issuances.

VCS leaders have asked that an alternative approach which we discussed with them be put forward for consideration here. It resolves the double counting concerns between traditional credit issuance/purchasing in order to enable other entities within the credit issuance value chain to continue to report their scope 3 GHG reductions having resolved the credit double counting concerns.

Alternative Approach:

There is an alternative way to address double counting concerns that VERRA seeks to address, in ways that sustain net-net the same scope 3 GHG reporting economy-wide before and after a credit project issues its VCUs and have been purchased by an off-chain buyer. It is far simpler, focuses verification within the same certification scope that VCS already practices (because it focuses only on the PP's GHG reporting) and mirrors the accounting adjustments

2 No person will submit, seek, promote, market, request or receive any recognition of, or legal rights in respect of, the Reductions generated by the Project during the Verification Period and for which VCU issuance will be requested, as another form of GHG-related environmental credit (including without limitation as renewable energy certificates or claimed in a company Scope 3 emissions inventory), or I will provide evidence to the Verra Registry in accordance with the VCS Program Rules that any such credits have not been used and have been cancelled under the relevant environmental credit program.

that are to be practiced by governments for corresponding adjustments against their NDCs. Furthermore this alternative can apply readily if desired to credits sales which give rise to scope 1 and/or 2 GHG reporting scenarios (thus extendable readily beyond VCS's current scope 3 related credit focus). There are also precedents for this approach which have earned their pioneers' invitations to join the White House deliberations in preparation for COP meetings. This approach radically simplifies the scope 3 reporting through the supply chain and enables upstream/downstream entities to easily verify whether VERRA has ensured that a PP has taken the steps in its own GHG reporting to avoid the

	double counting concerns that arise between credit issuance/sales and GHG reporting. Specifically, with this alternative approach, the PP selling the credits would adjust its own scope 3 emissions reporting by the volume of the credits which the PP has sold. This GHG reporting adjustment is equal and opposite to the GHG reporting reduction claim that the credit purchaser has made, when claiming that the VCUs purchased have "offset" and net reduced its own GHG emissions. Thus, in the overall system of scope 3 GHG reporting economy wide, the net effect on the total scope 3 GHG reductions reported economy wide is identical after credit issuance/sale to the scenario where no such credits were generated or sold. The double counting concerns arising between credit issuance and GHG reporting will have been addressed. Given that VCS' concern is such double counting in the context of other value chain reporters' scope 3 GHG reporting, such PP scope 3 adjustments would only be needed for VCU's whose up/downstream impacts give rise to commercial scope 3 reductions; if the reductions arise for individuals, who are not reporting GHG emissions, then no such concerns arise within the scope of VCS' defined context for this consultation so no accounting adjustments would be needed by the PP for VCUs which are related to non-commercial sectors. For example, a EV charger servicing commercial fleet owners' EVs would result in scope 3 GHG reductions in that commercial entity's reporting and so the PP's scope 3 accounting adjustments would be needed. When such an EV charger were servicing individual customers where no such scope 3 GHG reporting arises, then no such adjustments would be needed. VCS' own proposal doesn't and can't apply GHG scope 3 reporting accounting adjustments to value chain parties that are individual customers who do no such reporting. So the alternative framework should thus follow this same logic and only be applicable in value chains where scope 3 GHG reporting (which is only conducted by commercial entities) arises. There are many benefits to this approach: 1. Consistent with current scope 3 GHG reporting practices - The GHG Protocol encourages all scope 3 reductions to be reported system wide in order to encourage the collaborative efforts needed to pursue/report these to flourish. So any scope 3 reduction catalyzed/reported by one party can be reported by all benefitting parties - This alternative approach preserves this premise while avoiding double counting concerns. VCS' value chain approach, by contrast, attempts to swim against this current, requiring dozens of scope 3 GHG reporters to adjust their accounts. - By contrast, if the PP adjusts its own scope 3 emissions by the amount of the	

	sold credits – mirroring the credits' new reductions claimed by the purchasing party – the net change to the total scope 3/GHG reporting system economy wide is zero. That is the scope 3/GHG reporting economy wide is the same post credit sale as pre credit sale – and thus no double counting arises. So the project's other value chain partners can continue to credibly report their scope 3 GHG reductions as they always have. 2. This alternative approach enables VCS to focus its V&V activities on the PP's actions (not those of all other value chain entities). VCS has reasonable control over this focus on its PP (since VCU issuance is subject to VCS V&V) and the PP is motivated to adjust its scope 3 GHG reporting since it has received remuneration for the VCU's sold 3. The simplicity of focus mirrors the accounting adjustments that are to be practiced by governments for corresponding adjustments against their NDCs if/when VCM credits are to be sold to governments or CORSIA. So there is global consistency with other new reporting practices seeking to avoid double counting at the intersection between credit issuance and GHG reporting. 4. The approach can be easily extended to credit issuance which intersections with scope 1/2 GHG reporting, should VCS decide this is warranted 5. There are award winning precedents for this GHG accounting adjustment practice which have been sustained for more than a decade. - When a dozen campuses sold energy efficiency credits to Chevrolet – whilst reporting their GHG's to Second Nature towards their own net zero GHG goals – they decided to be fully transparent and accountable for the credits they sold. Given their scope 1 and 2 EE credits sold, within their public GHG reporting, they added back in the credits sold to Chevy as adjustments to their scope 1 and 2 GHG reports. When the campuses no longer sell credits after their project crediting period(s) expire, their lower scope 1 and 2 GHG emissions will continue to be reported (without credit adjustment). Indeed the additional funds the campuses received have enabled them to reduce their GHG emissions far more rapidly than would otherwise have been the case and secure their net zero goals even faster. Ball State University's reporting and practices is this regard is exemplary. https://unhsimap.org/public/institution/70 - Such innovations earned Chevy and the campuses invitations to the Obama White House meetings in preparation for COP meetings and a Climate Leaders Innovative Partnerships Award In this fashion, there is a simple alternative to address double counting concerns	

	if credit issuers follow the practices which CNBN PPs have followed for decades -- long before this consultation process was convened. This alternative approach also has significant benefits for value chain scope 3 GHG reporting entities including: 6. It enables up/downstream entities to verify easily that the appropriate accounting adjustments have been made by PPs to avoid double counting - Such PP scope 3 accounting adjustments will have been made a condition of VCS VCU issuance - There will be transparent references to such accounting adjustments in the PP PD/MR documentation publicly available on the VCS Project Database - Verification that double counting has not taken place now needs to only focus on one place – the PP reporting – not all the way up and down all entities' reporting in a value chain - With the assurance that the double counting has been addressed in this simple fashion, value chain entities can continue to report scope 3 GHG reductions as they always have. 7. This approach delivers many other benefits to up/downstream entities reporting scope 3 GHG against net zero targets including: - Enabling such reporters to continue to report reductions VCU's have delivered to the supply chain as scope 3 reductions while avoiding the double counting concerns which the PP itself will have resolved – enabling the upstream-downstream parties to reach their SBTI targets in ways that a traditional offset issuance within their chain would otherwise have precluded i. With VCS' current approach, these other value chain reporters would have to add back in VCU reductions which would have reduced progress towards their SBTI goals - Avoids a downstream entity from needing to access a different sourcing area (e.g. for cocoa) if a traditional credit had been sold from that region (provided of course that its PP had followed this alternative approach's scope 3 accounting adjustment) - Avoids the unnecessary and perverse incentive for a downstream reporter to use average sector emission factors in order to avoid the greater accuracy/granularity of a "real" tailored emission factor if a credit had been sold upstream. The alternative approach thus motivates more accurate reporting while avoiding double counting. - Downstream entities have better control over their scope 3 GHG reporting footprint. With VCS' approach, the downstream entities would need to adjust their scope 3 GHG reporting by the amount of upstream VCU credits sold each year – and these would a) vary each year b) could vary even more significantly if some VCUs were sold one year as scope 3 interventions and another year as	

	traditional credits. The alternative approach therefore gives value chain reporting entities more control and predictability in their scope 3 GHG reporting and thus greater confidence/capacity to meet SBTI goals - Avoids inconsistencies arising from situations where different value chain entities calculate their scope 3 GHG emissions differently (e.g. field based assessment, cooperative based data inputs, market average, etc.) and thus make different adjustments to their accounting for the value chain's traditional credit sale - Avoids requiring all value chain scope 3 reporting GHG entities develop the capacity and access to interrogate the VCS Registry to assess whether accounting adjustments are needed - Avoids such entities needing to conduct such complex diligence when they can be confident that a VERRA traditional credit has resolved the double counting concerns for them through VCS' certification procedures (which can nonetheless as above be independently confirmed by value chain players through the VCS database and project documentation) 8. If the PP does not have a formal GHG reporting practice, VCS can alternatively require that the sale of credits be publicly noted on the PP website - In such cases, the economy-wide reporting of scope 3 credits is still the same pre/post VCU issuance - We note that if the PP is an entity which is merely convening a number of partners or parties into a grouped project – from whom ownership of the credits is sourced and to whom credit financial benefits ultimately flow – the PP could ask these partner/parties to make the scope 3 GHG reporting adjustments or note the credit sales on their websites. Ultimately, this alternative approach optimizes investment in a value chain to accelerate all players' progress towards a low carbon future while avoiding double counting. Projects with hard-to-achieve GHG reductions can still access off-chain VCM capital markets (which is essential in cost competitive value chains). Ultimately, (like the Chevy campuses) when a traditional credits' project-crediting period is completed the PP (which drove these reductions) can also report them towards their long-term GHG goal (since they are no longer selling VCUs and so don't need to continue with accounting adjustments). Scope 3 interventions (should chains have cash flow to collaboratively direct) can still take place for less demanding GHG reductions (whereupon all players including the scope 3 intervention project proponent could reflect the GHG reductions in their GHG reporting inventory). This alternative approach therefore avoids the perverse incentives and sub-optimization of investment found to arise in the current VCS proposal.	

	Capital Market Implications: Capital markets have been essential to any global restructuring of economies and the climate challenge will be no different. So for VCS to propose the adoption of rules which will actively undermine and eliminate credit issuance in scope-3-related VCU credits is entirely counter-productive. The principle behind the voluntary carbon market is that the entity whose activities are causing the GHG reductions, owns the carbon credits (subject to any private market contracts to perfect such ownership if reductions arise outside of its direct ownership/control). This is a private property right which the VCM has codified, upheld and sustained over decades. VERRA with its VCS program has been a prime architect and steward of those private property rights and the carbon capital market. VCS' proposed introduction of new policies at the intersection of scope 3 reporting/credit issuance therefore concedes a massive premise in the VCM – namely that such credit property rights can be abrogated, assumed and/or modified by up/downstream scope 3 GHG reporters when such reporters did not pay for the investment in the GHG credits, nor did it cause them to arise -- and thus it is not a party to such credits in any shape or form. In private capital markets, this is considered a "takings issue" – and when such actions arise, private capital markets weaken and ultimately are eviscerated. These property rights (in any capital market) rest upon the legal frameworks which created and sustain them. VCS is a steward of these legal and technical frameworks for the VCM capital market. Its actions are therefore central to the viability of the VCM capital market. Conclusion: The introduction of VCS' proposed scope 3/credit issuance rules changes as they have currently been framed should therefore not pursued. They are not necessary to avoid double counting and would only serve to undermine the VCM at its core. Fortunately, there is an alternative way to avoid the double counting concerns that arise at the intersection of credit issuance and scope 3 reporting. This approach is consistent with the responsibilities which VERRA holds to sustain and uphold the fundamental foundations of the VCM capital market. VERRA should pursue the alternative model outlined here to address these concerns. This approach simply distinguishes 'Reporting' from 'Claiming' of credits, wherein a transfer of ownership (a Claiming) in the value chain is accounted in a Reporting by the Project Proponent.	

	End Note: A few outstanding questions remain: 1. Will a PP know if its VCUs have been sold off chain? Will this be visible to a PP from within VCS' Registry? a. If different GHG reporting treatments are required for scope 3 interventions vs VCU issuance, how will a PP know which is applicable if it can't track the sale of a VCU "off chain" 2. Furthermore, if VCS believes that the new VCU accounting treatment should also arise for a VCU sold within a value chain, then serious inconsistencies arise. For example, a project framed as a scope 3 intervention (without additionality) purchased by a single value chain entity would result in a all value chain entities reporting scope 3 reductions including the PP. However, if that same project (assuming additionality) were purchased by that same single value chain entity, it would result in the PP being required to make accounting adjustments (under the alternative framework proposed above) or all value entities needing to make scope 3 reporting adjustments (under VCS' proposal). There is therefore a prejudicial accounting treatment required for a project to be capitalized as a VCU rather than a scope 3 intervention – when the funds could be supporting the very same project activity and funded by the same single value chain partner. How does VCS propose to address this inequality? 3. With both proposals, we note that the typical timing for companies to report GHG emissions is often Q2/3 as their sustainability reports are published. Credit issuance focuses on Q1/2. So there may be a time lag between the time when credit issuance is sought and a PP (or in the VCS proposal all value chain players) report their scope 3 reduction adjustments. Integrating credit GHG claims with GHG reporting in both cases therefore raising timing considerations which will need to be finessed – particularly when both the PP and the credit purchaser would be looking to report their corresponding GHG adjustments (one for credits sold, the other for credits purchased) during the same Q2/3 GHG reporting annual window.	
67	APPENDIX A: Attestation/Representation Issues In the context of VCS' expectations re scope 3 GHG reporting adjustments by parties throughout a value chain, its Representation attestation raises significant challenges and become unworkable No person will submit, seek, promote, market, request or receive any recognition of, or legal rights in respect of, the Reductions generated by the Project during	We appreciate your contribution. Please see previous response.

	the Verification Period and for which VCU issuance will be requested, as another form of GHG-related environmental credit (including without limitation as renewable energy certificates or claimed in a company Scope 3 emissions inventory), or will provide evidence to the Verra Registry in accordance with the VCS Program Rules that any such credits have not been used and have been cancelled under the relevant environmental credit program. - VCS now defines Reductions delivered by credits when claimed in a company's scope 3 emissions inventory as an Other GHG-related Environmental Credit (OEC). The term "a company's scope 3 emissions inventory" does not limit its application to the project proponent's inventory but applies to a company's inventory – and it thus not specific and would apply to any company's GHG reporting throughout the value chain (see App B) o Indeed, one of VCS' proposed standard changes explicitly states "any company's" reporting - However, VCS' Representation must now be viewed in the context of VCS' expectation that all value chain entities' scope 3 GHG reporting would be adjusted to account for sales of traditional credits from within that same chain – particularly when any company's claiming of scope 3 GHG reductions reflecting the credit's Reductions are now within the scope of the Representation. - As a result, the legal representations that VCS requires PPs to sign become utterly unworkable. The VCS validation Representation states that "Nobody will seek to … promote, market …" GHG reductions. No PP signatory to a representation will ever sign such a statement since it covers action of entities over which they have no responsibility, accountability or control – namely the accounting adjustment of "a company's" (that is any other company's) scope 3 reporting. - Furthermore, the alternative (indeed, burdensome) compliance option ("… I will provide evidence"… that the scope 3 GHG reporting adjustments, which now comprise Other GHG related Environmental Credits (OECs) have been cancelled) is by VCS' own admission unworkable. Even VCS' own VVBs cannot have the reach to ensure all other companies' scope 3 GHG reductions adjustments have been accomplished. - Having defined a company's scope 3 GHG reporting of a credit's Reductions as an OEC, VCS then also stipulates that these OECs must be canceled under the relevant OEC program. No such program exists for scope 3 GHG reduction accounting adjustments through a value chain. And VCS has already acknowledged that it cannot itself even assure that such accounting adjustments would have been completed. As a result, no PP's legal department could seriously countenance signing a Representation which defines a company's scope 3 GHG reporting as an OEC	

	and swears that NO PERSON will seek or receive recognition of that scope 3 reporting reduction over which it has no control. By contrast, if the alternative approach is adopted, the compliance task is far simpler. The adjustment to the PP's own scope 3 GHG reporting can be verified by the VCS VVB during its Monitoring Report verification. No changes to the current Representation would be required. "A company's scope 3 emissions inventory" would not need to be defined as an OEC. The Standard would simply make requirements of the PP to publicly reflect the credits sold either in its scope 3 GHG reporting or if this is not performed in a public website where value chain entities can readily reference its statement. In this case, the PP would be able to provide the evidence that the OEC (namely its own scope 3 reporting of the project's Reductions) has been cancelled through its own scope 3 GHG reporting adjustments Appendix B: Proposed Standard Revision Language Concerns From its webinar statement, VCS wants to place a focus on marketing/promotion of the good and services: Hi Sue, Verra does not have a Scope 3 program and so we are currently focused on the monitoring and use of VCUs. We recognise the difficulties in monitoring scope 3 claims through the supply chain and so have put the onus on the project proponent to not market any goods or services as lower emissions if VCUs are also generated for those emission reductions. However the language in VCS' current proposal does not reflect this focus or intention: 1. VCS' language in your proposal paper doesn't place a focus on the PP's marketing/promotion claims. The text states references in many places "a company's scope 3 emissions inventory" which is non-specific and can apply to any company's scope 3 emissions inventory reporting. Other sentences are generic without a specific reference to which scope 3 emissions are intended (e.g. "scope 3 emission claims") and thus imply any and all scope 3 emissions are the frame of reference. For example: both sold as a carbon credit and claimed in a company's Scope 3 emissions inventory towards a GHG target. have seen evidence of this type of double-counting occurring between carbon credits in the voluntary carbon market and Scope 3 emissions claims.	

	Further, we anticipate that this risk will grow as more companies report their Scope 3 emissions and track progress towards achieving their abatement targets. è The VCS text as currently framed implies applicability to all value chain entities' scope 3 emissions claims/inventories which is not consistent with its claimed focus on the PP è Many such sentences should read as "the PP's" not "a company's" or "companies'" 2. The proposed changes to the standard are also generic – and are not specific to the PP as the intended company. For example, the proposed Standard change language states: Further requirements relating to potential overlap of projects with other programs and mechanisms such as emission trading programs, company Scope 3 emissions inventory claims, and the Paris Agreement are set out in Section 3.21 below. In order to maintain environmental integrity, GHG emission reductions/removals that are issued as VCUs cannot be issued as GHG allowances or other types of GHG credits under an emissions trading program, or as other forms of environmental credit such as renewable energy certificates or company Scope 3 emissions inventory claims. è The VCS text as currently framed implies applicability to all value chain entities' scope 3 emissions claims/inventories which is not consistent with its claimed focus on the PP 3. Furthermore, it is also made clear from other standard proposed language usage that "a company's scope 3 inventory" refers to OTHER companies' scope 3 reporting since otherwise VCS would have made it clear that it meant the project proponent's inventory. For example: the project proponent shall not promote or facilitate the double-counting of that same GHG reduction or removal in a company Scope 3 emissions inventory. This sentence would otherwise have read "the project proponent shall not promote or facilitate the double counting of that same GHG reduction or removal in its Scope 3 emissions inventory" The same ambiguity arises here:	

	Websites, contracts or marketing materials stating that the GHG reductions or removals associated with the impacted good or service have been sold as VCUs and cannot be used towards a company Scope 3 emissions inventory claim. 4. One section of the VCs text contradicts what VCS clarified in the webinar. Here VCS makes it clear that VVBs must look at ANY companies with direct supply chain links to the VCS project and show that reductions have not been claimed in ANY company's scope 3 emissions inventory. Sustainability reports (e.g., Climate Disclosure Project Reports) of companies with direct supply chain links to the VCS project showing that the GHG reductions or removals sold as VCUs and associated with the impacted goods or services have not been claimed in any company's Scope 3 emissions inventory. è this language is completely inconsistent with the webinar statements è the language clearly states that verification of any company's scope 3 reporting must be conducted by VVBs and all the associated problems (impractical, PP credit hostage taking by value chain entities etc) arise 5. The proposed definition for double counting is also written generically and so applies to any company's scope 3 GHG reporting Double Counting The scenario under which a singular GHG emission reduction or removal is monetized separately by two different entities or where a GHG emission reduction or removal is sold to multiple buyers or is claimed as both a VCU and in a company Scope 3 emissions inventory claim. 6. Furthermore, the frame of reference as written in your text, extends beyond scope 3 related VCUs since the way it's written would apply to to scope 2 reductions as well (since they also arise in a supply chain) Where VCUs represent a GHG reduction or removal in a supply chain, è So as written the proposed changes apply to scope 2 related credits as well (eg to electricity based energy efficiency projects) è Thus for all the reasons delineated above for Scope 3 related VCUs, VCS' current language would also close down scope 2 energy related crediting è So all energy efficiency scope 2 credits will be impacted alongside scope 3	

	energy efficiency and transport credits Appendix C: Public webinar written responses PUBLIC RESPONSE #1Q: Jon, what monitoring of scope 3 reductions will this require for credits through the chain - and how could a project ensure others' accounting if credits are sold? Are others' scope 3 reporting even verifiable by VVBs across the whole chain? And your response: Hi Sue, Verra does not have a Scope 3 program and so we are currently focused on the monitoring and use of VCUs. We recognise the difficulties in monitoring scope 3 claims through the supply chain and so have put the onus on the project proponent to not market any goods or services as lower emissions if VCUs are also generated for those emission reductions. Appendix D: Ball State University (BSU) Public GHG Reporting BSU delivered dramatic reductions in its scope 1 emissions by pioneering a carbon credit project sold to Chevrolet and later other purchasers when (among many other activities) it replaced on-site boilers with a campus-wide geothermal heat pump system. It continued to report its scope 1, 2 and 3 emissions reflecting the reductions in scope 1 emissions it achieved. Its gross emissions (blue line totaling scope 1 2 and 3 emission totals) thus declined over time. To be transparent it also added back in to its gross emissions the carbon credits sold to create a net emissions line (red). Stakeholders can therefore see both the dramatic underlying reduction in scope 1 emissions and recognize that (with the credits sold, reflected in the red net emissions lines) a creative strategy was used to access VCM capital to help finance this progress. When BSU stops selling credits, its GHG reporting will simply report the gross emissions line (blue) which has declined dramatically from 2011 due to this creative capital strategy. "The Ball State approach resolves the issues arising from the contraction of claiming and reporting and in its transparency maintains the integrity of the value chain reporting versus claiming while assuring the viability of the carbon capital market, which is so necessary to the achievement of accelerated carbon reduction globally." Prof. Bob Koester, BSU.	

68	Overall, while we are supportive of Verra's efforts to reduce the risk of double claiming we believe any review requirement along the supply chain of a company creating VCUs would be difficult, if not impossible, to implement. In particular, if a product has a complex supply chain, the requirement could end up extending to hundreds of companies. This requirement is also impractical from a timing perspective. Some companies do not conduct annual sustainability reporting, or there may be a significant time lag between when the report is published and when the emission reduction occurs (multiple years).	The update has been amended to require the producer of the goods/services directly impacted by the emission reduction/removal activities, as listed in the Project Description document, to make a public statement that there is a VCS project and that VCUs may be requested and issued for the emission reductions/removals associated with the goods/services being produced. The public statement will be verified by a Validation and Verification Body (VVB) prior to VCU issuance. Buyers throughout the supply chain do not need to be proactively notified.
69	The suggested approach may lock some reduction levers in companies scopes 3 as the reductions actually are happening but valued as VCUs by a project proponent. For companies who have set carbon objectives or Science Based Targets (SBTs) it may have two opposite effects depending on the situation: - Incentivise companies to invest in reductions in their scope 3 they would not have invested in otherwise, maybe in projects that are less easy to implement - Prevent companies from reaching their carbon objectives or SBTs at all leading to companies: - abandonning their objectives - reorganising their scope3/supply chains in order to choose supply chains with no project producing VCUs. This artificially inflated carbon footprint may disincentivise companies looking for low-carbon raw materials to buy the raw material, even though this product is virtuous. - avoiding calculating their scope 3 with a high granularity as average emission factors may be more favourable for them and cheaper. If this proposal is validated, it is important to make the information widely available for companies and service providers calculating footprints, for example through a coordination with the GHG Protocol and SBTI. The companies who will have to artificially add the amount of VCUs produced to their carbon footprint will have no control over their scope 3 footprint, making it difficult to secure a budget. Also, there may be some significant variations from a year to another, depending on whether it is a verification year and on how many VCUs the project proponent has decided to produce that year versus reductions in the supply chain. The PP can be held hostage by the supply chain companies who decide to claim the reduction anyway and the PP cannot issue their VCUs driving the PP to legal	We appreciate your contribution. Please see previous response. Also, please note the Greenhouse Gas Protocol's (GHGP) Corporate Standard (2004) and Corporate Value Chain Accounting Standard (2011) are clear that reporting companies should avoid double-counting carbon credits in their emission inventories. Further, companies setting net-zero targets under the Science-based Targets Initiative must follow the GHGP rules and requirements when quantifying emissions.

	actions. The responsibility of the PP and supply chain company are unclear. The current proposal is not clear enough on the boundaries of the PP's responsibility and how the PP should communicate to the companies who result with the project in their scope 3. Sue Hall from Climate Neutral Business Network has developed an alternative proposal in which only the project proponent has to add up the VCUs emitted to their carbon footprint then allowing all companies of the value chain in which the project occurs to account for the reductions. This proposal would solve all the concerns raised in question 1 and question 3 above. In her submission she explains in detail the advantages on her proposal. ClimatePartner agrees with them and does not write them again here in detail. Overall, her proposal: - solves the major problem with the current Verra proposal that proponents can be hold hostages by supply chain members makes Verra proposal applicable as VVBs will be able to control the whole scope of application of the updated VCS proposal - allows companies to reach their carbon targets/SBTs That being said, ClimatePartner also see some limits to Climate Neutral Business Network's proposal: - In some cases, Verra's proposal could incentivise companies to invest in further reduction projects in their Scope 3 - Companies may by-pass the rule and externalise the responsibility to add-up the amount of VCUs produced to the Scope 3 footprint to a PP who agrees to do so in order for these companies to claim both the Scope 3 reductions and receiving the VCUs bought. For example, a cocoa trader can fund a project in their cocoa farms, make sure that the cooperatives they work with are those responsible for adding up the VCUs to their Scope 3 footprint instead of the cocoa trader. Then the cocoa trader can both claim the reduction and received the VCUs. There should be mechanisms that prevent the buyer of the VCU from claiming both the reduction and the offset.	
70	3.21.3.1) Comment on wording: Requiring a statement that VCUs "have been sold" might miss the point of how some projects might have been set up. The above example shows that some project might issue VCUs but not sell them, but instead retire those credits and submit the related claim towards stakeholders in the value chain. Therefore, we suggest to rephrase this statement: "Websites, contracts or marketing materials stating that the GHG reductions or	The update has been amended to require the producer of the goods/services directly impacted by the emission reduction/removal activities, as listed in the Project Description document, to make a public statement that there is a VCS project and that VCUs may be requested and issued for the emission reductions/removals associated with the

	removals associated with the impacted good or service have either been sold as VCUs or retired to be used towards a company Scope 3 emissions inventory claim but will not be accounted twice." 3.21.3. 2) Comment on feasibility: Demanding proof through sustainability reports from companies with direct supply chain to the respective project will not be feasible due to the fact that (especially within the ALM space) projects are often intertwined with numerous supply sheds and obtaining access to this information will be too complex. Further, reporting timeframes are often not sufficiently overlapping, i.e., a company linked to a project might release their reports unrelated to the project's MRV intervals. Additionally, to determine what counts as "companies with direct supply chain links" is difficult to define in a complex and intertwined setting (i.e., within the ALM space). Section Concept 3.21: Comment on wording: Scope 3 claims are not issued, but reported, hence the word "issuance" that specifically references a registry system causes confusion since it refers only to VCUs.	goods/services being produced. The public statement will be verified by a Validation and Verification Body (VVB) prior to VCU issuance. The update is not intended to prohibit interventions quantified using carbon credit methodologies from being used as abatement activities in a corporate emissions inventory. It only aims to prevent this if the emission reductions are sold separately from the good/service (i.e., outside the supply chain) as a carbon credit.
71	IETA generally agrees that there are double-counting risks, and that these risks must be addressed, however we do have concerns with the current proposal. Specific issues: 1. The guidance should only avoid double counting of the same credit against more than one GHG target. The Scope 3 emissions of more companies in the supply chain would be lowered when VCUs are generated by a service provider (upstream or downstream of those companies). That means actors in that supply chain can communicate the lower carbon footprint of a product, for example. However, this reduction of Scope 3 emissions should not count towards those companies' GHG reduction targets just the company who retired the VCU. This should be made clearer in the proposed update. 2. In case an emissions trading system acknowledges VCU credits these credits can be fungible or used as GHG allowances if that system requires retirement and corresponding adjustment, so that only one country reports the credits against its NDC target. General Issues: We support the disclosure requirements intended to prevent double counting and request that Verra clearly establish when and how these requirements should be applied. However, we urge Verra to carefully consider that project proponents have different levels of visibility into and influence over upstream	The update has been amended to require the producer of the goods/services directly impacted by the emission reduction/removal activities, as listed in the Project Description document, to make a public statement that there is a VCS project and that VCUs may be requested and issued for the emission reductions/removals associated with the goods/services being produced. The public statement will be verified by a Validation and Verification Body (VVB) prior to VCU issuance. The update will increase transparency into where VCUs are being issued and help reporting companies identify that there is a double-counting risk. It is not Verra's responsibility nor intention to require the project proponent to monitor or assess any company's Scope 3 emissions accounting, reporting or claims. This is the role of the reporting company and reporting and target-setting frameworks under which reporting companies submit their Scope 3 inventories.

	and downstream buyers of goods and services. Disclosure requirements should reflect this reality while ensuring that projects are doing everything in their power to mitigate double counting risk. For example, there should be no expectation that projects have visibility into contract language beyond tier 1 suppliers/customers. We also have concerns that this proposed update may cause confusion and misunderstandings around GHG accounting and thus suggest Verra wait for the finalization of GHG Protocol's Land Sector and Removals Guidance and make corresponding updates as necessary.	
156	These updates are definitely a step in the right direction; however, risk still exists with the quality, consistency, and credibility of demonstrations over non-occurrence double counting. In addition, it would be helpful to know if these proposed changes would be applied retroactively (and if so, how far) or only on a go-forward basis.	Thank you for your contribution. Verra agrees that the proposed solution is not perfect, but believes this is the extent to which we can reasonably address this issue at this time. The proposed changes would only be applied on a go-forward basis.

1.3 Guidelines on Crediting Upstream Displacement

1.3.1 Do you agree with the proposed use of a discount factor to account for displacement that is less than 1 in methodologies that seek to credit displacement occurring upstream of a project intervention? Do you have any suggested improvements or additions?

Comment #	Issue Raised	Verra Response
72	I support the continued use of 1 to 1 displacement. I agree market dynamics may cause events such as substitution thereby breaking the 1 to 1 correspondence. But in such cases, theoretically speaking, you are supposed to calculate emissions from the production of all affected commodities. I think it is next to impossible and too cumbersome. Though incomplete, I think the continued use of simplified 1 to 1 rate will be sufficient. In the proposed Tonne-year method, VERRA used a simplified scale, too.	To lessen the burden on project proponents, a conservative discount factor will be established at the methodology level. Verra plans to provide a default discount factor that may be used for where a sector-based value is particularly cumbersome to determine or has not been developed yet.

73	Yes, we agree that the proposed use of a discount factor to account for displacement has the potential to conservatively account for the effects of a wide array of impactful interventions. We're excited about the work that Verra is doing in this space, especially in light of the tremendous challenge that lies before us in providing offset opportunities that meet the scale of our climate change goals. We have a few suggestions and requests for clarification on the proposed language: * Our first suggestion is a clarification on Section 3.9.5. It is currently unclear whether or not the discount factor mentioned in Section 3.9.5 applies in addition to what is already applied in Section 3.8.3. We want to ensure that there is no double discounting for the products without specific upstream sites, as the factor included in Section 3.8.3 would already take into account the relevant, conservative factor that should be included in the calculation of emission reductions. Sugggested language for Section 3.9.5: When a methodology seeks to credit GHG emission reductions or removals on a 1:1 basis from product substitution, fuel switching, decreased demand for a given activity, product, or service, or other forms of displacement occurring upstream from an intervention, monitoring shall occur at the relevant upstream GHG sources, sinks, and reservoirs. In cases where the upstream sites cannot be specifically identified, e.g., in a co-mingled supply shed, a discount factor shall be used to account for displacement that is less than 1, unless already applied to the displacement in question as outlined in Section 3.8.3. * Our second suggestion concerns the inclusion of language regarding a standard, conservative factor for items with sparse or impracticable research or data. Certain emission-intensive products may be difficult or too specific for research to appropriately account for its displacement dynamics. Still, there should be ways for methodologies to reasonably account for their expected displacment dynamics. For instance, the methodology could reasonably allow for (1) the use of research on a similar product (e.g., using broiler chicken data to account for presumably-analogous effects within the turkey context), or (2) research based on an umbrella category (e.g., research into the dynamics within the meat industry or a wide array of food categories to account for presumably-analogous effects within the turkey context). Ideally, the use of an analogous factor should enable accounting for similar production practices (e.g., if the regions have similar predominant farming practices, regardless of the regions of the world where each practice is done), as well as accounting from similar	Verra appreciates your contribution. We will integrate your first suggestion to add more clarity on applying the discount factor. The discount factor should only be applied once, either to the baseline or project emissions, as appropriate. We will integrate your second suggestion and agree that analogous products or activities may be used for the determination of a discount factor. Further, Verra plans to provide a default discount factor that may be used by methodology developers.

	regional contexts (e.g., allowing one to reasonably assume that production practices are analogous within a regional context). Suggested language for Section 3.8.3(2): A market analysis of supply and demand elasticities associated with, or analogous to, the considered activity, product, or service.	
74	For several reasons, we do not believe that a discount factor should be applied if 1:1 displacement cannot be proven. First, proving that a unit of a high-emitting activity/product would have occurred but didn't requires proving a counterfactual, which is inherently not possible. Secondly, the time and resources required to attempt to prove 1:1 displacement or to calculate a discount factor are disproportionately prohibitive to startups and small companies participating in the carbon markets. Lastly, discount factors add another layer of complexity to an already complicated system, disincentivizing participation. Widespread market participation should be the highest priority, and this is enabled by streamlined systems and reduced administrative burdens. To illustrate our point, let's say a company pays people to cancel their plane tickets in order to reduce the total number of daily flights. If a given flight is booked with 200 people, then the first 199 people to accept the deal may be seen as having no impact on the flight until the 200th person also accepts the deal. However, each person who accepts the deal is equally responsible for that flight not proceeding, and applying a discount factor to the first 199 people would disincentivize them from taking the deal. Similarly, there is a lag between the introduction of low-emitting activities/products and the displacement of their high-emitting counterparts, especially in today's climate of rapid technological innovation. Applying a discount factor for <1 displacement enhances this lag by decreasing carbon credit revenue to early innovators, thereby disincentivizing participating in the carbon markets and inhibiting the market penetration of technology necessary for economy-wide decarbonization. To accelerate the demand-side shift away from high-emitting activities/products and towards their low-emitting replacements, support for supply-side growth should include crediting low-emitting activities/products in full even when 1:1 displacement cannot be proven and reducing administrative burdens required to access revenue from carbon credits. In general, administrative costs, time, and complexity for carbon market participation should be reduced, not increased. Dedicating limited funds and labor hours to proving displacement, among other administrative requirements, directs resources away from scaling low- or negative-carbon technologies. While	We agree that the determination of a discount factor could be a large burden on smaller developers and introduces additional complexity to methodology development, thus we will be providing a default discount factor value that can be used. This will allow interventions with a net positive atmospheric benefit to continue to take place.

	producers can estimate their potential for displacement, actual success cannot be measured until after the fact. Since one of the key functions of carbon credits is to provide revenue needed for nascent decarbonization strategies to scale, requiring proof of displacement prior to reaching scale limits market participation and delays climate action.	
75	Agree, but it would be ideal to mention examples of discount factors in the guidance or as an annex. Also, further elaboration on how to apply the discount factor in the baseline and when to apply it is needed (at which stage, how often).	We appreciate your contribution and will be providing a default discount factor for use. The requirement will explicitly state that the discount factor must be applied to either baseline or project emissions, as appropriate.
76	Yes - the discount factor helps compensate for greater system complexity and wider error marings.	We appreciate your contribution and agree that the discount factor can help account for supply chain complexity.
77	As a developer of ARR projects, Land Life does not have enough knowledge on this subject to make an informed assessment and response.	We appreciate your comment, and it is acknowledged.
78	As written, the proposed guidance would call for project developers to justify how one pound of fertilizer use avoided directly translates into one pound of fertilizer not produced – and adjust this number accordingly through a discount factor if the evidence suggests the ratio is not in fact 1:1. Requiring project developers to demonstrate the direct impact of a point-of use-decision on upstream activity (often in industries one or more steps removed from the point-of-use) is a departure from precedent and will have implications for any project where there is an alternative to a carbon-intensive process or product. Therefore, our first recommendation is for Verra to inventory the impact of this rule-change across the spectrum of already approved methodologies and established precedents. A short list of these methodologies is inlcluded in the attached PDF	We appreciate your input. Verra has analyzed the impact of this update on our current selection of methodologies. The use of a discount factor will allow for approaches that incentivize the use or sale of alternatives to carbon-intensive processes or products while enhancing the integrity of quantification of impact. Individual project proponents will not be required to develop a relevant discount factor, rather, this will be handled at the methodology level. To streamline the process, Verra plans to provide a default discount factor that can be applied across sectors.
79	A discount factor allows for a transparent project development. What needs to be specified is what kind of displacement needs to be considered: - Market displacement: Does the project proponent need to prove that the material in question (e.g., recycled plastic) has an economic end-use (e.g., production of a new product)? - Functional displacement: Does the project proponent need to prove that the quality of the material is good enough to displace the original material (e.g.,	Both market and functional displacement may be considered when providing credible evidence on whether displacement is 1:1 or not.

	meets the requirements/quality of primary material)? If it is the latter, we suggest to add laboratory analysis to be allowed for evidence.	
80	IETA generally agrees with the use of a discount factor to account for displacement that is less than 1 but request clarification on the specific methodologies that will be subject to this new requirement. It may be difficult to calculate proper factors for some specific displacement as there are a variety of influences (financial, political, etc.) We request that Verra provide some reference discount values to support this.	We appreciate your contribution. Developers of current and pipeline methodologies that credit upstream displacement will be contacted and given the option to calculate their own discount factor or use the Verra-provided default.
157	The use of this discount factor makes sense, though it could potentially deter involvement in abatement activity. A discount factor might unfairly punish smaller developers for lacking the market influence necessary to drive 1:1 substitution, especially compared to larger developers that hold greater market share. In addition, we'd like to see additional clarification around the following: - Is it correct that a discount factor would be calculated during each round of verification? And, therefore, is it correct that this factor is subject to change? - Is there potential for future reversal of discount factors (if, for example, the displacement becomes greater than 1)?	A discount factor will be determined for use at the methodology level. It need only be applied in the absence of evidence that 1:1 displacement is occurring. If new data becomes available, a discount factor may be updated, similar to how positive lists for additionality are re-assessed when new data becomes available.

1.3.2 Are there additional types of credible and robust evidence that could support the determination of a discount factor?

Comment #	Issue Raised	Verra Response
81	I don't think so.	We appreciate your comment, and it is acknowledged.
82	- internal- external audits?	Audits may be provided as evidence to demonstrate that displacement is 1:1.
83	We find it difficult to justify the determination of a discount factor given that there is often a temporal shift in impact. To use a tangible example, if one person decides to travel by train instead of plane, the flight would have taken is not canceled. This is true for ten, and possibly even 100 passengers. If, however, thousands of people opt to travel by rail, flights will be cancelled and fewer planes will take off. The challenging nature of connecting manufacturing with	We appreciate your contribution. The introduction of the requirement of a discount factor is intended to allow the crediting of upstream displacement and activities that have a net environmental benefit,

	complex market and use decisions is part of the reason the current method of carbon accounting around upstream emissions for renewable energy is widely accepted, and why we are encouraging continued adherence to this precedent. Additional justifications can be found in the attached PDF.	while enhancing the integrity of the credits generated.
84	See above, laboratory analysis to prove characteristics of new material and displaced material are comparable.	As we work to determine a default discount factor, Verra will also consider whether laboratory analysis will be an acceptable form of evidence to demonstrate 1:1 displacement and for determining the discount factor.
158	Potentially, would the evidence required to demonstrate that displacement is 1:1 (i.e., peer-reviewed literature, government records, production facility records, survey data, or reports compiled by industry associations, etc.) also support the determination of said discount factor? If leveraged properly, these types of evidence, coupled with an analysis, could support the determination of a discount factor.	We appreciate your contribution. We expect that all the forms of evidence listed will be acceptable for demonstrating 1:1 displacement and for determining the discount factor.

1.3.3 Are there other ways that a discount factor might be applied beyond the examples given in the proposed new Section 3.8.3 of the VCS Methodology Requirements (e.g., to the baseline emissions or the net GHG emission reductions or removals)? If so, please describe these other applications.

Comment #	Issue Raised	Verra Response
85	I don't support the application.	We appreciate your comment, and it is acknowledged.
86	-This needs to be applied in the baseline emissions more than in the net emission reductions since it is a displacement occurring upstream of the project intervention, so it would affect directly the baseline.	We appreciate your contribution. The guidance will be changed to require the discount factor be applied to the baseline or project emissions, as appropriate.
87	Registries and verifying bodies have (until now) refrained from explicitly offering guidance on the inclusion of Scope 1 (direct emissions) and (upstream displacement), viewing it as more of a policy decision than an objective quantification. The proposed rule reverses this position, ostensibly to prevent the issuance of credits that count a reduction in GHG emissions both as a scope 3, upstream emissions reduction, for one process (e.g. synthetic N fertilizer	The proposed update intends to account for unequal displacement between a downstream intervention and impact upstream with the introduction of a discount factor. You will note that along with this update, we have also changed our rules to require a public statement on low-emission products or goods

	application in agriculture) and again as a scope 1, direct emissions reduction. However, this approach ignores that every Scope 3 inventory is another company's Scope 1 and 2 emissions. By clearly identifying the equivalent of scope 1, scope 2, and scope 3 emissions in a project, Verra could enable a more holistic view of project impacts and encourage project developers to conduct research on publicly available information at each level of emissions reduction. Specific industry examples are given in the attached PDF.	from VCS projects in order to prevent double counting between offsets/Scope 3 reductions.
159	To reduce complexity and confusion, Verra should be explicit about where and how a discount factor is applied (i.e., in equation x during project phase y)	We appreciate your contribution. The guidance will be updated to require the discount factor to be applied to the baseline or project emissions, as appropriate.

1.3.4 General comments

Comment #	Issue Raised	Verra Response
88	As stated earlier, we believe that the proposed use of a discount factor to enable conservative accounting of upstream displacement has the potential to enable a wide array of impactful interventions. We're excited about the work that Verra is doing in this space, especially in light of the tremendous challenge that lies before us in providing offset opportunities that meet the scale of our climate change goals.	We appreciate your contribution and agree that there are many positive environmental outcomes that can be incentivized with these approaches.
89	Sec 3.9.5: It seems unreasonable to think that a project proponent would ever have access to actually monitoring emissions upstream of the project activity.	We agree that this is challenging. The use of a discount factor can account for discrepancies between a downstream intervention and its impact upstream, while enhancing the integrity of the accounting. We will not require project proponents to monitor upstream emissions.
90	We agree with the use of a discount factor to account for displacement that is less than 1 and request clarification on the specific methodologies that will be subject to this new requirement.	We appreciate your contribution. We will contact all current and pipeline methodology developers impacted by the update.
91	We believe it is nearly impossible to show that avoiding one unit of high-carbon-intensity product will lead to one unit less of production or any other specific ratio outside of the direct replacement of that product at point-of-use. Furthermore,	We appreciate your contribution and agree that it is challenging to measure displacement. In the absence of peer-reviewed literature or market

	we are not aware of any peer-reviewed studies that make this claim, and do not have a path to develop market models that accurately reflect the threshold event associated with changing demand dynamics. Rather than trying to come up with discount factors that account for displacement in an arbitrary way, we recommend developing approaches which prevent double-counting between industries. By focusing on safeguards that restrict the potential for double counting, we allow each industry to take responsibility for the impact resulting from a practice change specific to their operations. This approach is consistent with existing, implicit treatment of upstream emissions in current methodologies. Laying out general guidance and making that guidance explicit could be of benefit for every methodology that incorporates this thinking. Additional details are provided in the attached PDF.	models, we encourage stakeholders to use Verra's default discount factor value, which will be released soon. Further, we would encourage you to review our update that focuses on preventing the double counting of Scope 3 emissions.
92	Section 3.8.3: Comment on wording: We suggest to reformulate for more clarification: include publications from "reputable journals that are listed in the Expanded Scientific Citation Index". Section 3.8.3: Comment on evidence needed: In order to demonstrate a 1:1 substitution, relevant private market analyses / studies from the technology provider (i.e., plastic recycler) need to be allowed as proof, even if they are not published in a peer-reviewed study. Such market analysis are often published in a report but not in a peer-reviewed study and contain mostly all information needed. Additionally, it is unclear if one evidence (peer-reviewed literature, government records, production facility records, survey data, or reports compiled by industry associations) is enough to demonstrate 1:1 substitution or if again 3 evidences are needed. Overall, we believe that implementation will be difficult, i.e., quantifying how high the deduction should be designed. For many projects, we will not be able to find 3 peer-reviewed studies which quantify such discount factors. We thus need more guidance and clarification on how such a discount factor can be quantified and implemented in practice.	We have accepted your suggestion to source from journals in the Expanded Scientific Citation Index. A market analysis or manufacturer report would both be appropriate to use as evidence to demonstrate 1:1 substitution is taking place. We recognize the challenges of determining a discount factor. Verra plans to provide a default discount factor that can be used by any methodology. Further, we will provide guidance on how to determine a sector-specific factor.
160	What type(s) of publications could be sourced for the 'analysis of at least three peer-reviewed publications in reputable journals that are listed in the Scientific Citation Index…'?	Any relevant publication that can support the determination of a discount factor may apply, so long as the publications are peer-reviewed and sourced from journals cited in the Expanded Scientific Citation Index.

1.4 Long-Term Average

1.4.1 Is a 20% reduction in carbon stocks over a five-year period adequate to allow for forest management activities intended to improve forest health? If not, what is a globally applicable and adequately conservative level of carbon stock reductions? Is five years an appropriate time interval over which changes in carbon stocks should be tracked?

Comment #	Issue Raised	Verra Response
93	Is the 20% threshold calculated simply calculated as the change in carbon stocks due to harvesting, or as overall change in carbon stocks? In other words, is growth included in the calcuation? For example, if a project starts with 100K t C and 25 t C is harvested over a 5 year period but due to growth carbon stocks are 90 t C at the end of the 5 year period, does this project include "harvesting activites" as defined?	This definition refers to the change in carbon stocks due to harvesting, which must be made immediately after harvesting occurs. The definition has been updated to clarify that the reductions must not exceed 20% of carbon stocks at the time the reduction occurred, for a period of five years.
94	The LTA GHG benefit of a project is and will remain a projection during the entire crediting period, particularly if the time period for calculating the LTA will be extended to 100 years for all projects (i.e., be of longer duration than the crediting period). It is not clear to what case the consultation is referring to. However, if it is referring to the case where there is a temporary loss of the cumulatively credited GHG benefits that is likely to be offset within the crediting period, and that 5 years should be the maximum duration ot the time period during which offsetting should happen (otherwise a "reversal" must be assumed to have occurred), then 5 years is a reasonable maximum time, regardless of whether the temporary loss of the cumulatively credited GHG benefits is 20% or more.	We are proposing that if a reduction of less than 20% occurs the project will not be required to apply the long-term average. We assume that five years will allow project growth to make up for reductions over the five-year period. If reductions exceed 20% at any point in the five years following a reduction, then the project will be required to apply the long-term average for any future crediting events.
95	- Five years seem long given potentially high (unintended) annual changes in carbon stocks (e.g. via burning or pests). Hence, we propose annual tracking. - 20% reduction would be adequate for forest health (Huang et al. 2020), however, repeated removals even at low intensities can have a detrimental effect on the habitat over a longer period (Lindenmayer and Franklin 2002). - Five years would be an appropriate time for slow-growing species, but for fast-growing annual tracking is also possible (Ravindranath and Ostwald 2008).	If projects wish to track carbon changes in carbon stocks on a more frequent basis, they are free to do so. This update simply requires that reductions of carbon stocks do not exceed a threshold of 20% starting when the first reduction occurs.
96	Trees' growth depends on the type of forest and geography. Thus, we consider that having a globally applicable conservative level of carbon reductions might be simplistic and not represent reality. Similarly, having a 20% level of carbon	The threshold of 20% represents a conservative level of carbon stock reduction that can be recovered through continued growth. If projects require greater

	reduction for IFM or ARR might not represent the diversity of the projects and the reasons behind the reduction of carbon stocks. We do not have a recommendation on a more appropriate level, but we consider having two levels more appropriate. In addition, we consider that the 5-year period is appropriate.	reductions for forest health, they may be implemented (per a forest management plan), but the long-term average would be applied.
97	A 20% reduction over 5 years is significant, so period is indeed adequate. Moreover, 5 years makes sense as this timeframe is in line with the standard verification period.	We appreciate your comment, and it is acknowledged.
98	Yes, a percentage allowance for forest management makes sense, but specific rules on how the carbon loss should be accounted for in ex ante growth rate calculations, nonetheless, and should be made clear in the updated guidance.	Comprehensive changes to how the long-term average is applied are being considered for future updates.
99	IETA is supportive of the exception included for forest management activities intended to improve forest health. However, there are some challenges with defining one globally applicable and adequately conservative level of carbon stock reductions, due to the unique considerations in each forest, tree species, and geographic region. It is important to consider the average annual increment of biomass for each forest type and its specific context. In some countries (i.e., Brazil), it is not common practice to harvest a percentage of the trees to improve the health of the forest. Some initial studies are being developed (Oliveira et al., 2021), but it is not yet comment practice for ecological restoration plantations or the recovery of degraded areas. Instead, intervention is more commonly carries out in cases where the purpose of planting is logging (with cycles of species with higher wood density and slow growth, exceeding 50 years). Therefore, care must be taken when allowing projects to propose the harvesting of individuals in forest restoration plantations.	In cases where reductions greater than 20% are required, the long-term average shall be applied. This will be the case for most plantations on harvesting cycles. We assume that thinning activities occur at a cost to project proponents, particularly when the wood volume return is capped. Therefore, we would not expect projects to use this exception unless they do so to improve forest health conditions. We will monitor how adding this definition is applied across a variety of projects and make updates as needed.
161	Some plantations can have about 30% reduction on trees depending on the applied management and species type, so it is difficult to say whether a 20% reduction rate will indeed allow for improved forest health. Therefore, implementing a prescribed reduction rate, regardless of the situation at hand, will neglect to consider potentially meaningful variables. A five-year time interval gives too much space between actions and changes (e.g., SBTi FLAG will require yearly changes to be tracked). Similar to the percent reduction requirement, a lot depends on the type of tree and situation. For	In cases where reductions greater than 20% over a five-year period are necessary, the long-term average shall be applied. This does not prohibit activities that thin at high rates for forest health or economic reasons. Rather, it sets a level of risk that Verra is willing to bear.

	example, Melina like grown in India and South America with shorter periods like 9-11 years been tracked twice would not make sense, while teak is 20 years...	

1.4.2 Projects that are managing or planting commercial species would be required to use the LTA unless they can demonstrate a need for using non-native commercial species when harvesting activities are not project plans.

a. What additional scientific, peer-reviewed publications, databases or international reports should be included as source material for defining commercial species?

b. Is (1) requiring a forest management plan and (2) limiting non-native commercial species to less than 50% of the project area sufficient to encourage the planting and management of native forests for projects that do not have to apply the LTA? Should the proponent have to provide additional proof or assurances if they are planting or managing forests with commercial species?

c. Alternatively, are requirements (1) and (2) above too restrictive? What would be an acceptable alternative?

Comment #	Issue Raised	Verra Response
100	How does this affect IFM projects that are planting native commercial species? As proposed, 3.2.21 indicates that IFM projects planting native commercial species will be required to apply LTA, but those planting non-native commercial species have a potential exception in 3.2.23. If the concern is around "non-native" commercial species, why is there a potential exemption for projects planting non-native commercial species and not for projects planting native commercial species?	We appreciate your comment, and it is acknowledged. Based on public comment feedback and internal dialogue, we have decided to forego making this change at this time.
101	All types of ARR project activities that are managing or planting commercial or non-commercial species, either native or introduced species, should be required to use the LTA. No exceptions. The LTA is necessary to preserve the environmental integrity of the credited GHG benefits of the project. In this case, "integrity" = "permanence". See recommendations in the attached ppt.	We appreciate your comment, and it is acknowledged. Based on public comment feedback and internal dialogue, we have decided to forego making this change at this time.
102	- 2a): We suggest to include the following databases for commercial species: - i) Wood Species Database: https://www.trada.co.uk/wood-species/ - ii) The Wood Explorer: https://thewoodexplorer.net/ - iii) GlobalTreeSearch: https://tools.bgci.org/global_tree_search.php - Forest Management Plan/Forest Working Plan is used as a management tool, which also includes the regular	We appreciate your comment, and it is acknowledged. Based on public comment feedback and internal dialogue, we have decided to forego

	resource inventories, so their use is not restrictive. - The non-native commercial species are often invasive which adversely affects the regeneration of native forests, therefore adverse effects of the non-native commercial species in such an arrangement also need to be considered as 50% is a considerable number (Dyderski and Jagodziński 2020). - 2b): the requirement of <50% of area used for non-native comm. species leaves room for (non-) usage of the remaining area. We suggest to include requirement(s) on how the remaining > 50% of area are to be cultivated.	making this change. As we consider this issue in the future, we will review the resource you provided.
103	a. We are supportive of providing more detailed guidance on the LTA rule and its applicability. We consider that Verra could alternatively recommend the consultation of lists from regional wood trade associations. For example, some governments provide a list (https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/silviculture/tree-species-selection/tree-species-compendium-index). b. We are supportive of requiring a forest management plan. Particularly, for IFM projects, we consider requiring the comparison of the proposed forest management plan versus the previous forest management plan will enhance the quality of projects. We consider that limiting the planting of non-native tree species to 50% is slightly generous, particularly, for ARR projects in tropical and subtropical countries where varieties of native trees are enormous and several of them are suitable for commercial wood production. Another alternative could be adding a minimum number of tree species in addition to the 50%. For instance, the World Resource Institute has recommended the number of species in reforestation projects. c. No, they are not too restrictive.	We appreciate your comment, and it is acknowledged. Based on public comment feedback and internal dialogue, we have decided to forego making this change at this time. As we consider this issue in the future, we will review the resource you provided.
104	a) The current reference used to define and identify commercial tree species (Mark et al., 2014) lacks specific insight into the variation of commercial tree definitions by country. A definition that emcompassses country-specific commercial species, as defined by national authorities, is needed. National databases on wood trade/commercial tree species are a useful source. For example, Land Life works in nature restoration, using mixed species to plant native forests, but some countries, such as Spain require the planting of dominant native species, like oak, which is also classified as a commercial species. b) We support option (2) as sufficient encouragement for the planting and native forests for projects that do not have to apply the LTA. With regard to option (1),	We appreciate your comment, and it is acknowledged. Based on public comment feedback and internal dialogue, we have decided to forego making this change at this time. As we consider this issue in the future, we will keep this feedback in mind.

	we believe that the projects planting native species forests should not have to create a forest management plan. A forest management plan is too restrictive and should be applicable only to non-native species. Emphasizing our answer to question (a) above, the definition of native/commercial species is not yet clearly defined in the proposed text. What constitutes native species should be further defined by the local forestry authorities, as in some cases, international sources are less clear. For instance, Iceland's historical forests were widely cleared 1000 years ago, and current restoration activities require importing similar species to those that are now extinct. With this, a selection protocol has been implemented to promote an ecologically desirable species pool. Land Life as an ecosystem restoration company strongly supports the increased focus on the implementation of native species plantings. However, we view forest management plans in the context of the proposal as onerous. Moreover, the proposed updates would benefit from more definitive references to local classifications, which are integral source material for defining commercial species. c) See the answer above.	
105	o Verra should clarify whether the LTA rules apply only to non-native commercial species, or commercial species in general. o 2.a Rather than making reference to peer-reviewed studies, I would encourage Verra to have their own list and of course reference where they got the species from. o 2.b § (1) conservation easement (recorded on the land), or other contractual agreement that restricts harvesting of the trees could be used as an alternative or in combination with the forest management plan. § (2) Rules should be clearer in what 'limiting to 50% of the project area' includes. An area that is 50% planting native, but commercial species, in a monoculture fashion, as the rules are written, may be excluded from the rules Is it 50% of the carbon content? Of the number of trees, or in hectares?. A determining factor for whether LTA rules apply is whether the planting will be monoculture/limited species type, and should be clearly indicated in the new updated rules. o 2.c. An alternative to requirement 1 and 2 can be be requiring the landowner to submit simple reports on land cover over time, even after crediting ends. After crediting, the project owner could be required to continue submitting simplified reports (not to be verified) only to demonstrate the maintenance of the tree cover. If the landowner fails to submit the reports, then a reversal should be assumed.	We appreciate your comment, and it is acknowledged. Based on public comment feedback and internal dialogue, we have decided to forego making this change at this time. As we consider this issue in the future, we will keep this feedback in mind.

106	b) A proper management plan, as well as limiting non-native species to 50% are sufficient to encourage the planting and managing forests with commercial species. IETA also encourages Verra to assure that the management plans follow the most sustainable management methods possible. IETA does have some questions for clarification. Does Verra intend for any project that has species listed in Mark et al (2014) present a management plan? Many of the listed species are species of timber/commercial interest, but are also planted in ecological restoration areas, precisely because they are native species. In this case (for projects with ecological restoration purposes), would the description of the planting arrangement and species diversity, normally presented in the PDD, continue to be sufficient? In the Forest Management Plan, who would be the "professional forester-approved", mentioned in item 3.2.23? Would they be professionals accredited by Verra? And would the attestation have any legal value ("attestation that harvesting activity is not planned or expected for the project")? In general, what would be the implication for the professional, the proponent or the landowner in the event of a false declaration of no intention to cut the wood? c) The two requirements are not too restrictive, however it is important to guarantee that any scientific paper or studies used for the project represent the local reality as precisely as possible.	We appreciate your comment, and it is acknowledged. Based on public comment feedback and internal dialogue, we have decided to forego making this change at this time. As we consider this issue in the future, we will keep this feedback in mind.
162	a. Different countries have their own national tree repositories, in which information can be found. SBTi for Timber and Wood fiber could also be a starting point for a more a global approach and alignment with upcoming standards (https://sciencebasedtargets.org/resources/files/FLAG-methods-addendum.pdf). b. Forest management plans should be required for all projects, with no room for negotiation. Similarly, additional proof and/or assurance are other ways that can protect the full integrity of a project, but the efficacy of such largely depend on what type of assurance is gathered, at what frequency, when, etc. The use of technology plus assurance would be the best way to support the accuracy and completeness of the information.	We appreciate your comment, and it is acknowledged. Based on public comment feedback and internal dialogue, we have decided to forego making this change at this time. As we consider this issue in the future, we will keep this feedback in mind.

1.4.3 Would extending the crediting period to 100 years for projects with plans to harvest incentivize compliance with requirements to replant after harvest? What could some of the unintended consequences be? What would be an acceptable alternative?

Comment #	Issue Raised	Verra Response
107	We believe this hard number eliminates confusion that is inherent with the project proponant needing to select a period. 100 years seems like a reasonable time period to us and should effectively capture all planned harvests.	We appreciate your comment, and it is acknowledged. We will not be changing the requirements for the crediting period at this time. The time period for assessing the long-term average will be reviewed as part of the next program update, and this feedback will be considered.
108	There is no interest in extending the crediting period beyond the period of time during which GHG credits can be issued. This is challenging because the LTA should be calculated for a time period of (at least) 100 years in all cases, and no one will be interested (and can provide certainty) that the projected carbon stocks and emissions of the project will be measured, verified and reported beyond the crediting period. Therefore, in the last year in which GHG credits are generated, there should be an assessment of the probability that the project area will remain a forest in the long term (see the recommendations made in the attached ppt). If the project proponent cannot demonstrate that the project area will remain a well managed forest after the crediting period, return to the baseline condition should be assumed in the calculation of the 100+ year LTA. This is because the project is supposed to be "additional", meaning it would not be viable without carbon incentives. If the project can demonstrate that the forest will persist after the crediting period (i.e. because it is legally protected or managed in a financially sustainable manner), then the LTA should be calculated considering the projected carbon stocks and GHG emissions at least up to the 100th year of the project. This projection must be independently verified in the last year in which the GHG credits are generated.	We appreciate your comment, and it is acknowledged. We will not be changing the requirements for the crediting period at this time. The time period for assessing the long-term average will be reviewed as part of the next program update, and this feedback will be considered.
109	- Yes, extending the crediting period seems like a suitable option for replanting.	We appreciate your comment, and it is acknowledged.
110	ACT recognizes the importance of ensuring permanence in AFOLU projects and understands the logic behind extending the 100 years crediting period. However, we consider that the crediting period of ARR projects should not be extended to	We appreciate your comment, and it is acknowledged. We will not be changing the requirements for the crediting period at this time.

	100 years. The main reasons are the following: • Risks for project developers and investors are high in ARR projects, having a crediting period of 100 years increases the risks of reversals and decreases the attractiveness of financing these projects that contribute to carbon removals and our natural world restoration. We consider the 30-year crediting period more practical and viable in reality. • A 100-year crediting period for ARR projects will complex project governance and successful achievement due to potential change of landowners. This is more relevant for ARR projects in the Global South, where there is a need for resources that enable restoration, address root causes of deforestation and where a diverse type of owners is involved. Plus, having the 100 years crediting period might incentivise people from the Global North to buy lands in the Global South to reduce risks and simplify governance. We consider that to ensure permanence VERRA can require ARR projects with LTA to design a forest management system that re-plants harvested trees (or a fraction of them) before the end of the crediting period and provide evidence of this. With the current prices of carbon credits from ARR projects, developers can explore budgeting for this.	The time period for assessing the long-term average will be reviewed as part of the next program update, and this feedback will be considered.
111	We support a longer crediting period of up to 100 years. Beyond having a fixed period, a option of having a renewal period should be considered, with a 40/40 or 50/50 renewable period, as it can incentivize long-term permanence and management of the forest.	We appreciate your comment, and it is acknowledged. We will not be changing the requirements for the crediting period at this time. The time period for assessing the long-term average will be reviewed as part of the next program update, and this feedback will be considered.
112	3. Long term crediting periods recognize the long-term benefit of emission reductions. However, landowners don't always want to enter such long term agreements- especially for projects that include small-holder farmers. An alternative can be to allow a shorter crediting period but add a permanence monitoring period after the crediting ends. For example, a project could have a 30 year crediting period with a 100 year permanence period. In the crediting period, intensive monitoring and reporting activities would need to be implemented. In a permanence period, simple monitoring and reporting (using remote sensing), and long periodicity (every 30 years) could be acceptable. A party should be made responsible for permanence monitoring if a permanence period is required.	We appreciate your comment, and it is acknowledged.
113	While we recognise the reasons for the proposal to extend the crediting period to 100 years for projects with plans to harvest, IETA does have some concerns.	We are moving away from changing the length of crediting period for the reasons that you have

	Specifically, that it may unintentionally increase the non-permanence risk, and that it may dampen interest in developing these projects as the 100-year requirement may be too difficult to manage. It may also prevent projects that only aim for one thinning cycle to finance activities (or even that aim for one or few short harvesting cycle(s)) from failing to execute the project because they must commit to a very long project period. Again, if the problem is to ensure that there is a planting after the last cycle, would a legal contract/commitment be a viable alternative?	suggested. We will review the time period over which the long-term average is assessed independently from changes to the crediting period.
163	Extending the crediting period to 100 years for projects with plans to harvest makes sense from a conservation standpoint; however, if plantations are in scope, it would be hard to imagine that a business would want to work with a crediting period of 100 years, which could become an unintended consequence.	We appreciate your comment, and it is acknowledged.

1.4.4 What other changes can be made to help clarify when the LTA applies?

Comment #	Issue Raised	Verra Response
114	The LTA should always apply and be calculated in the same way in all cases, for all AFOLU project categories that generate GHG credits from removals. The LTA should be estimated ex ante and updated every 5 years or so. However, as proposed in the attached ppt, the year for which the LTA is estimated should be the project year in which the last GHG credit is generated, and not project year 1.	We appreciate your comment, and it is acknowledged.
115	Particularly, this text is not clear. We suggest either editing the text or adding an example in LTA guide. “Where ARR and IFM projects that do not plan harvesting activities but generate reduction in carbon stocks of aboveground tree biomass that meets or exceeds the harvesting activities threshold, the long-term average shall be applied.”	We are planning to conduct a more comprehensive review of the long-term average and will take this into consideration.
116	We suggest that any new forest that will be planted for carbon credits and for harvesting should apply a LTA, not only the “commercial species”. A summary table listing the “commercial species” and the LTA quantities could be included; the table may contain secondary managed forest and/or the most important forest types harvested in the different biomes.	We appreciate your comment, and it is acknowledged.

117	o In our view, the determining factor is not whether the species is non native commercial but in general, commercial species that are planted in monoculture/limited mixed species stands. o An opportunity of improvement for section 3.2.22. is to reword the paragraph because it is difficult to understand it as it is right now. o 3.2.23: references 'non native' commercial species, is at odds with the list of 'a working list of commercial timber species'. It seems that the 'non native' was added as a means to address eucalyptus – if this is the case, the guidelines should explicitly state separate rules for this species.	We appreciate your comment, and it is acknowledged.
118	IETA finds that the exception cases where LTA does not apply are clear enough.	We appreciate your comment, and it is acknowledged.
164	Providing examples of ARR and IFM projects that are eligible vs. not eligible to apply the long-term average would help clarify when and how it can be leveraged in a project. Additionally, this language should be incorporated into specific ARR and IFM methodologies, rather than just the VCS standard.	We will consider the use of methodology specific long-term average calculations.

1.4.5 Please provide any suggestions for how to standardize the LTA calculations.

Comment #	Issue Raised	Verra Response
119	Please provide an IFM example of an LTA calculation (not just ARR) as an update to the March 8, 2011 VCS Guidance Document. A baseline of grasses (with equal GHG removals every year) makes it difficult to determine how total VCUs are calculated for each year.	We appreciate your comment, and it is acknowledged.
120	See attached ppt. Happy to discuss further.	Recommendations received.
121	We consider that to standardize the LTA calculations, Verra could help the market to have more clarity on the linkages of LTA and FSC certification, and how are they increasing sustainability. This could be through a	We appreciate your comment, and it is acknowledged.
122	Yes, reported in the General Comments sheet	We appreciate your comment, and it is acknowledged.

123	5. An issue that we have come across is incentive for permanence. LTA would work better as an incentive for project implementation through the end of the crediting period if the LTA was distributed equally throughout all the years in the crediting period, or at least, not as front loaded. The maximum achievable emission reductions should be spread throughout the length of the crediting period, with credits being issued upon proof of replanting. That way an ARR or IFM project would have an inherent incentive to continue operating until the end of the crediting period. This is also an incentive to ensure permanence.	These points will be considered as a comprehensive change to the long-term average is developed.
124	IETA cautions Verra against overly standardising the LTA calculations, since it varies between species and location. Although, some overall guidelines are needed, it is important to consider their local characteristics and surrounding environment (forest regeneration, weather, etc.) to define a proper LTA. Peer reviewed literature and official national studies should be considered to assess local data and characteristics.	We agree this is a difficult balance to strike. We will continue to develop frameworks that can use locally specific information when available.
165	There are a couple of things that could be done to help standardize the LTA calculations. To start, all standards must be aligned globally to reduce the complexity burden for companies and help scale adoption. Specifically, if SBTi and the GHG Removals Land Sector & Removals Guidance provides more direction on this topic, it would be prudent to ensure that the calculations, methods, and understandings outlined in each align with VCS guidance.	We appreciate your comment, and it is acknowledged.

1.4.6 General comments

Comment #	Issue Raised	Verra Response
125	IETA is generally supportive of the proposal to specify when the long-term average (LTA) is applied. We do encourage Verra to reconsider the use of the term crediting period when referring to the proposed 100-year extension. The VCS Standard defines crediting period as the time during which a project is eligible for issuance of VCUs. However, in these cases, the project will no longer be eligible for issuance of VCUs once the LTA is reached, so the crediting period is over at that point. Since this LTA approach is a unique feature of the VCS program, it would be helpful to use more specific language to describe this period of time. The supplemental document to define commercial species is extremely	The first suggestion will be considered during the review of the long-term average. The definition of commercial species is being dropped from this update.

	extensive, including many species with low commercial value. IETA encourages Verra to consider creating a more targeted list, or perhaps making the list of species one aspect of the evaluation, along with commercial value, to better account for the true financial risk of harvest. IETA also urges Verra to ensure that commercial species are not being conflated with non-native species, and to ensure there is consideration of native commercial species in these proposed updates. As currently proposed, the new update seems to provide a way for some projects with non-native commercial species to get around the LTA requirement if they can justify the use of the species, but no way for a project planting native commercial species to make this same justification.	