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Christopher Kirkpatrick, Secretary of the Commission
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street NW
Washington, DC 20581

RE: Request for Comment on Commission Guidance Regarding the Listing of Voluntary Carbon Credit Derivative Contracts (Questions 1, 2, 6-9, 14, and 16)

Dear Mr. Kirkpatrick,

Thank you for the opportunity to comment on the proposed guidance regarding the listing of voluntary carbon credit (“VCC”) derivative contracts (hereinafter, “Proposed Guidance”).¹

CarbonPlan is a nonprofit research organization dedicated to improving the transparency and scientific integrity of climate solutions through open data and tools. Our comments are informed by extensive research on quality standards and disclosure practices in the voluntary carbon market.² We previously commented on the quality and transparency of VCCs in response to the Commission's Request for Information on climate-related financial risks in 2022.³ We commend the Commission's multi-year effort to advance the standardization and

¹ U.S. Commodity Futures Trading Commission, Commission Guidance Regarding the Listing of Voluntary Carbon Credit Derivative Contracts; Request for Comment, 88 FR 89410 (December 27, 2023) (hereinafter, “Proposed Guidance”).

² On market quality standards: Danny Cullenward et al., Carbon Offsets are Incompatible with the Paris Agreement, *One Earth* (2023); Grayson Badgley et al., Systematic over-crediting in California's forest carbon offsets program, *Global Change Biology* 28: 1433-45 (2022); Freya Chay et al., Verification Confidence Levels for carbon dioxide removal, CarbonPlan (2022); CarbonPlan, Soil carbon protocols database (2021). On disclosure practices: Grayson Badgley, To know if an offset project is burning, first you have to find it, CarbonPlan (2023); Sadie Frank et al., Why carbon offset disclosure matters, CarbonPlan (2022).

³ Danny Cullenward and Sadie Frank, Comments to the CFTC (October 6, 2022); U.S. Commodity Futures Trading Commission, Request for Information on Climate-Related Financial Risk, 87 Fed. Reg. 34,856 (June 8, 2022).

quality of the voluntary carbon market, and appreciate the opportunity to further engage by commenting on the Proposed Guidance.

Before turning to the specific questions regarding the Proposed Guidance, we wanted to provide a direct response to the request from Commissioner Goldsmith Romero to comment on the sufficiency of performing diligence at the level of a crediting program, as opposed to categories of VCCs, protocols, or projects.⁴

Doing diligence at the level of a crediting program provides little insight into the quality of the VCCs issued by that program.⁵ What matters from a programmatic standpoint is whether or not the program relies on a rigorous protocol to control quality at the project level.⁶ Ultimately, discerning the quality of VCCs requires project-level diligence as protocols usually provide projects with significant optionality around implementation of project activities and quantification of project outcomes. We therefore recommend that at a minimum, the Commission provides guidance that promotes protocol-level diligence in combination with (1) expanding its guidance as to the quality standards required to characterize economically significant attributes at the credit level and (2) providing more direct guidance that project-level data be made available under permissive terms of use that facilitate market oversight.

Below, we address questions 1, 2, 6-9, 14, and 16.

⁴ Proposed Guidance, *supra* note 1 at Appendix 4 (“I am also interested in hearing more from commenters about whether market integrity can be improved by exchanges relying on a crediting program’s processes and diligence, as assumed in the proposed guidance, or if there is a benefit to exchanges conducting additional due diligence into specific categories, protocols, or projects.”).

⁵ Cullenward et al., Verra’s roadside against the Integrity Council props up the status quo, CarbonPlan (2022) at Figure 1 (illustrating the carbon credit hierarchy).

⁶ There is significant evidence that protocols implementing overarching program standards such as additionality, permanence, and independent verification often fall short. See, e.g., Lisa Song and James Temple, The Climate Solution Actually Adding Millions of Tons of CO₂ Into the Atmosphere, *ProPublica* and *MIT Technology Review* (April 29, 2021) (discussing a project located in New Mexico and enrolled in California’s compliance forest carbon offset program where the program’s additionality screen assumed trees “contain no carbon whatsoever.”); Barbara K. Haya et al., Quality Assessment of REDD+ Carbon Credit Projects, Berkeley Carbon Trading Project (2023) (finding “widespread and significant over-crediting [for] REDD+ crediting methodologies across all quality factors.”).

1. In addition to the VCC commodity characteristics identified in this proposed guidance, are there other characteristics informing the integrity of carbon credits that are relevant to the listing of VCC derivative contracts? Are there VCC commodity characteristics identified in this proposed guidance that are not relevant to the listing of VCC derivative contracts, and if so, why not?

Yes, there are other characteristics informing the integrity of carbon credits that are relevant to the listing of VCC derivative contracts. Specifically, the Commission should consider expanding its list of quality standards to include information about (1) whether or not the VCC removes carbon dioxide from the atmosphere (a binary variable), and (2) the duration of the climate benefits promised by the VCC (quantified in years). We advocated for disclosure of these characteristics in our comments submitted to the Commission as part of its 2022 Request for Information (hereinafter, “RFI comment”).⁷ Information about these attributes is essential to ensuring contracts are properly priced and that position-holders can accurately anticipate the type and quality of the VCCs that back any given derivative contract.

The importance of distinguishing removals from other types of climate services provided by VCCs, such as avoided emissions or emissions reductions, is thoroughly covered in our RFI comment.⁸ These distinctions are increasingly important to voluntary carbon market actors and credit prices.⁹ Since some protocols allow an individual project to produce a mix of carbon removal and avoided emissions, this attribute must be determined at the level of individual VCCs.¹⁰ Accordingly, we recommend that the Commission provide guidance about how to properly distinguish removals among the quality standards that inform the terms and conditions of VCC derivative contracts.

Similarly, the Commission should include the duration of the climate services represented by a VCC among the quality standards that are considered in the terms and conditions of a VCC derivative contract. While the Proposed Guidance mentions permanence when discussing

⁷ Cullenward and Frank, *supra* note 3.

⁸ *Id.* at page 5.

⁹ Large buyers, such as Microsoft and Frontier, run procurement programs dedicated exclusively to buying carbon removal. Other market actors, such as credit marketplaces and corporate consultants also differentiate credits on this basis. This market trend aligns with the prevailing scientific understanding that avoided emissions and carbon removals have different roles to play in reaching and sustaining temperature stabilization. Furthermore, it is reflected in credit prices. See, e.g., Lucas Joppa et al., Microsoft’s million-tonne CO₂-removal purchase — lessons for net zero, *Nature* 597: 629-32 (2021) (describing a procurement process focused on carbon removals; “At current prices, credits for avoided emissions are the cheapest (as low as \$3 per tCO₂). Nature-based carbon-removal costs more (\$5–50 per tCO₂), although it is much less expensive than geo-based removal.”).

¹⁰ As we previously highlighted in our RFI comment, distinguishing removals at the credit level should not impose an additional burden on crediting programs. Many programs, including American Carbon Registry and Climate Action Reserve, already report removal attributes at the credit level.

quality standards, the text itself focuses almost entirely on (1) risk of reversal and (2) mechanisms, like buffer pools, for compensating reversals. It makes sense to provide guidance about how contracts should handle the worst case scenario where reversals take place. However, it is equally important that the Commission provide guidance about assessing the duration of climate benefits in the best case scenario, where no reversals occur.

The duration of climate benefits represented by a VCC can vary dramatically.¹¹ At one end of the spectrum, VCCs can represent carbon stored in a physically durable form that is expected to persist for thousands of years, such as carbon that is mineralized in geologic formations. At the other end of the spectrum are VCCs that are only contractually obligated to operate for a set amount of time – usually a matter of decades – and derive from project activities that are potentially reversible. This includes the storage of carbon dioxide in forests and soils. Some of these types of VCCs can derive from projects that only last a single year.¹² Delivering on this contractual durability term relies on insurance mechanisms like buffer pools. Once the contractual durability term expires, however, there are often no assurances that the climate benefits generated by the project’s activities will be maintained. The scientific community, prominent net-zero standards, and leading corporate buyers already differentiate the value of VCCs based on their durability.¹³ As such, the duration of the climate benefits promised by VCCs is an economically significant attribute both through the lens of market activity and in relation to the climate.

One complication to assessing durability is that the contractual duration of climate benefits represented by VCCs can even vary between credit vintages generated by a single offset project. This results from the practice of specifying project duration relative to a project’s start date, as opposed to requiring that projects continue for a fixed duration relative to the last VCC issuance. As a result, VCCs generated later in the project period secure climate benefits for a shorter duration than VCCs generated earlier in the project period. To account for this variation

¹¹ CarbonPlan, Soil Carbon Protocols (2021) (comparing the minimum permanence claim for soil carbon projects developed under various protocols, which span 10 to 110 years); Barbara Haya et al. , Comprehensive review of carbon quantification by improved forest management offset protocols, *Frontier in Forests and Global Change* 6: 958879 (2023) at 10 (Table 4, comparing the minimum project term of various improved forest management protocols across the voluntary and compliance carbon market).

¹² See, e.g., the Climate Action Reserve’s Soil Enrichment Protocol (at §3.5.5) and Mexico Forest Protocol (at Appendix F), which allow projects to make carbon storage commitments as short as a single year using ton-year accounting.

¹³ Science-Based Targets initiative, SBTi Corporate Net-Zero Standard, Version 1.1 (April 2023) at 11 (“Companies must neutralize any [residual] emissions by permanently removing carbon from the atmosphere.”); Danny Cullenward, A framework for assessing the climate value of temporary carbon storage Carbon Market Watch (September 2023) (describing a science-based approach for evaluating the value of temporary carbon storage).

within projects, we recommend that the durability attribute be considered at the level of individual VCCs.

In response to the second part of Question 1, the four VCC commodity characteristics identified in the Proposed Guidance – transparency, additionality, permanence and risk of reversal, and robust quantification – are all relevant to the listing of VCC derivative contracts.

2. Are there standards for VCCs recognized by private sector or multilateral initiatives that a DCM should incorporate into the terms and conditions of a VCC derivative contract, to ensure the underlying VCCs meet or exceed certain attributes expected for a high-integrity carbon credit?

No, existing standards cannot be fully relied upon to ensure VCCs meet or exceed certain attributes expected for a high-integrity carbon credit.

Currently, the dominant effort to resolve carbon market quality concerns is the Integrity Council for the Voluntary Carbon Markets (ICVCM). The ICVCM is focused on the development of market quality standards, which consist of a set of “Core Carbon Principles” (CCPs) and a process for assessing crediting programs that voluntarily seek to label their VCCs as CCP-approved.¹⁴ Although the CCPs meaningfully raise the bar around common market shortcomings, credits that are CCP approved may still exhibit significant variation across economically significant attributes, requiring additional due diligence to ascertain their quality.

Compliance with the current version of the CCPs would indicate a number of meaningful improvements over the status quo in the voluntary carbon market. For example, the CCPs require that crediting programs disclose the individuals and corporations that are retiring VCCs as well as the composition of the buffer pool that is used to insure against reversal risks.¹⁵ In addition, some problematic credit types are not eligible for CCP approval, including credits that are issued in anticipation of the actual climate benefit (i.e. ex-ante credits) and credits for practices that are clearly incompatible with a net zero transition.¹⁶

Despite these improvements over the status quo, CCP-approved credits will likely vary across economically significant attributes given the current rules. For example, the initial public draft of the CCPs required that all CCP-eligible credits be tagged as either an emission reduction or a

¹⁴ ICVCM, Core Carbon Principles, Assessment Framework, and Assessment Procedure, Version 2 (January 2024).

¹⁵ *Id.* at Table 2.1(a)(1) and Table 9.4(a)(5)(ii).

¹⁶ *Id.* at Table 5.3 and Table 13.1.

removal, but that requirement does not appear in the latest draft of the standard.¹⁷ And although the standard ostensibly requires that credits represent “permanent” climate benefits, the CCP defines that term as a minimum of only 40 years for mitigation activities involving storage of carbon in biogenic reservoirs like forests or soils.¹⁸ (See Question 1 for discussion on why activity type and durability should be considered economically significant VCC attributes.) We therefore recommend that the CCPs be relied upon as a minimum indication of good practices rather than a guarantee that CCP-approved VCCs provide sufficient information to promote effective price discovery and overall confidence in VCC derivative contracts.

It remains to be seen how the CCPs will be implemented, adopted, and updated. The rigor of the standard will ultimately be dictated by subjective decisions made during the assessment process, which has not yet taken place. Given this state of uncertainty, we’re encouraged that “[t]he Commission recognizes that VCCs and voluntary carbon markets are evolving and that it may therefore be appropriate for the Commission to revisit this guidance or to issue additional guidance in the future.”

6. Is there particular information that DCMs should take into account when considering, and/or addressing in a VCC derivative contract's terms and conditions, whether a crediting program is providing sufficient access to information about the projects or activities that it credits? Are there particular criteria or factors that a DCM should take into account when considering, and/or addressing in a contract's terms and conditions, whether there is sufficient transparency about credited projects or activities?

Yes, the Proposed Guidance should take into account whether or not crediting programs share information about VCCs underpinning derivative contracts, and whether they do so under a license that explicitly allows for reuse and incorporation into derived products.

We’re encouraged that the Proposed Guidance already anticipates the importance of public data and instructs DCMs to “consider whether the crediting program for the underlying VCCs is making detailed information about the crediting program's policies and procedures and the projects or activities that it credits, such as relevant project documentation, publicly available in a searchable and comparable manner.” Although most offset registries make information about protocols, project documents, and individual VCCs freely available through their websites, there is no assurance that these data will remain openly available in the future, or that the data

¹⁷ ICVCM, Core Carbon Principles, Assessment Framework and Assessment Procedure: Draft for public consultation (July 2022) at Annex A (outlining attribute tags to apply to CCP-eligible credits, including the “type of mitigation activity”).

¹⁸ ICVCM, *supra* note 14, at Table 9.1(b)(1) and Table 9.3(a)(1).

can be reused. In fact, the terms and conditions of various registries indicate that critical VCC data are publicly accessible only under limited, revocable licenses.¹⁹

A commitment to forms of public access that include the right to reuse data would ensure the possibility of a public regulatory apparatus, both within and outside of the government. That kind of market oversight requires the ability to harmonize, analyze, and share results. VCC derivative contract terms and conditions could navigate this market shortcoming by considering whether or not data about VCCs are shared under terms that support both public access and reuse.²⁰ These access and reuse rights should specifically apply to: (1) details of the crediting program protocols used to generate VCCs, (2) documentation about how specific projects implement the requirements of crediting program protocols, and (3) information about the number and status (e.g., has the credit been issued, canceled, or retired) of all VCCs underlying derivative contracts.

In addition, we recommend that any VCC underlying a derivative contract be associated with public data on the precise boundaries of the project activity. Knowing the location of a project is critical for monitoring reversals (as resulting from wildfire, for example), assessing baseline and additionality, and checking across crediting programs to ensure no double-counting has occurred. However, most VCCs today are not associated with this data.²¹

Note that it is our understanding that these two transparency considerations are not currently addressed by ICVCM's CCPs.²²

7. Are there particular criteria or factors that DCMs should take into account when considering, and/or addressing in a VCC derivative contract's terms and conditions, whether the procedures that a crediting program has in place to assess or test for additionality provide a reasonable assurance that GHG emission reductions or removals will be credited only if they are additional?

¹⁹ See, e.g., Gold Standard, Terms and Conditions (May 25, 2018) (stating that “GSF grants you a limited, revocable, nonexclusive, nontransferable license to view, store, bookmark, download and print the pages within this Site[.]”)

²⁰ See, e.g., the Creative Commons CC-BY license, which requires attribution but otherwise freely permits sharing and reuse for any purpose.

²¹ Grayson Badgley, To know if an offset project is burning, first you have to find it, CarbonPlan (2023) (describing the general pattern where offset projects fail to disclose precise project boundaries).

²² ICVCM *supra* note 14. To the best of our understanding, the CCPs do not require that public information is shared under a license that allows for the right to reuse data. In fact, the standard explicitly acknowledges the possibility that project data may be subject to proprietary restrictions (see Table 3.1(b)). The ICVCM CCP's do present program-level requirements around transparency, including a requirement that the location of the mitigation activity is publicly disclosed (see Table 3.1(a)(2)(ii)). However, this requirement does not guarantee that information about the project location includes data on precise project boundaries in a form that enables analysis.

Yes. Please see our response to Question 23 in our RFI comment for a more detailed discussion of the challenges involved in substantiating additionality, including a discussion of the subjectivity involved in establishing additionality and how financial incentives exacerbate the challenge.

Recognizing these challenges, the Commission might also consider the following criteria when evaluating the suitability of the procedures that crediting programs employ to determine additionality:

- Whether or not crediting programs regularly determine that project activities have not become required by law or mandate.
- Whether or not crediting programs make information about project documentation, project location, and project crediting activity publicly accessible and reusable so as to facilitate academic and neutral third-party study of project-level additionality (see response to Question 6).²³

8. In this proposed guidance, the Commission recognizes VCCs as additional where they are credited for projects or activities that would not have been developed and implemented in the absence of the added monetary incentive created by the revenue from carbon credits. Is this the appropriate way to characterize additionality for purposes of this guidance, or would another characterization be more appropriate? For example, should additionality be recognized as the reduction or removal of GHG emissions resulting from projects or activities that are not already required by law, regulation, or any other legally binding mandate applicable in the project's or activity's jurisdiction?

Yes, it is appropriate to consider both financial additionality and regulatory/legal additionality. While some crediting programs might only screen for certain subsets of additionality, passing multiple screens for additionality could represent economically significant information about VCCs. However, it is worth reiterating that confidently ascertaining additionality requires examination of project-specific characteristics. Please see discussion about the challenges of discerning additionality from our RFI comment.

²³ See, e.g., Thales P. West et al., Action needed to make carbon offsets from forest conservation work for climate change mitigation, *Science* 381: 6660 (2023) (examining the additionality of tropical REDD+ projects) at Supplementary Materials page 2 (explaining how public data availability limited the study scope; “While we intended to examine all VCS-certified projects in our focal countries, we removed projects lacking geospatial data or with corrupted KML files on their boundaries”).

9. Are there particular criteria or factors that DCMs should take into account when considering, and/or addressing in a VCC derivative contract's terms and conditions, a crediting program's measures to avoid or mitigate the risk of reversal, particularly where the underlying VCC is sourced from nature-based projects or activities such as agriculture, forestry or other land use initiatives?

Yes. We're encouraged that the Proposed Guidance already mentions that crediting programs “regularly [review] the methodology by which the size of its buffer pool is calculated in order to address evolving climate risks [...] and whether there is a mechanism in place to audit the continuing sufficiency of the buffer pool.” The Commission should also consider mentioning the following criteria:

- Whether or not the crediting program publicly discloses the process by which buffer pool contributions are determined.
- Whether or not the crediting program’s buffer pool provisions take into account how the risk of reversal might change with climate change. Especially in the case of forest-based projects, which generate a substantial fraction of the VCCs available today, climate change is expected to increase disturbance risks, such as wildfire, drought, and disease.²⁴
- Whether or not the crediting program assigns reversal risk factors that vary from location to location.
- Whether or not the crediting program requires disclosure of project boundaries, which allow independent verification of risk factors and identification of projects that have undergone reversal.
- Whether or not the crediting program requires projects to contribute their own credits to the buffer pool.
- Whether or not the crediting program discloses the contents of its buffer pool.

14. Are there particular criteria or factors that a DCM should take into account when considering, and/or addressing in a VCC derivative contract's terms and conditions, whether it can be demonstrated that the registry operated or utilized by a crediting program has in place measures that provide reasonable assurance that credited emission reductions or removals are not double-counted?

Yes. Ensuring that the claimed climate benefits embodied by VCCs are not double-counted requires the ability to compare information about credit issuances and retirements across carbon crediting programs. The Proposed Guidance refers to “procedures for conducting

²⁴ William R.L. Anderegg et al., Climate-driven risks to the climate mitigation potential of forests, *Science* 368: eaaz7005 (2020).

cross-checks across multiple carbon credit registries.” Such comparisons are only possible when carbon crediting programs continue to make their data publicly available under terms and conditions that allow for such comparisons. Furthermore, imposing a requirement that crediting programs disclose the precise location and boundaries of projects that generate VCCs can help prevent double-counting. Such a requirement would allow third-party analysts to identify instances where project areas overlap, a potential warning sign of double-counting. Please see our response to Question 6 for more details.

16. Certain private sector and multilateral initiatives recognize the implementation by a crediting program of measures to help ensure that credited mitigation projects or activities meet or exceed best practices on social and environmental safeguards, as a characteristic that helps to inform the integrity of VCCs issued by the crediting program. When designing a VCC derivative contract, should a DCM consider whether a crediting program has implemented such measures?

Yes. VCC derivative contracts should consider whether a crediting program implements social and environmental safeguards. Such a requirement is especially important given the frequency with which investigative reports by nonprofits and journalists document instances where local communities are adversely affected by voluntary carbon offset projects.²⁵ At a minimum, VCC derivative contracts should require that crediting programs incorporate some sort of public dispute mechanism, whereby local communities and other actors can raise concerns. It is especially critical that both complaints and the resolution of these complaints be publicly available.

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²⁵ Daisy Dunne and Yanine Quiroz, [Mapped: The impacts of carbon-offset projects around the world](#), Carbon Brief (2023) (compiling news stories and studies that document specific instances of the negative impacts of carbon offset projects on local communities).

Thank you for the opportunity to submit comments.



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