

February 16, 2024

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Re: Commission Guidance Regarding the Listing of Voluntary Carbon Credit Derivative Contracts, RIN 3038–AF40 (88 Fed. Reg. 89410)

Clean Air Task Force (“CATF”) respectfully submits these comments on the Commodity Futures Trading Commission’s (“CFTC” or “Commission”) proposed guidance regarding the listing of voluntary carbon credit derivative contracts (“proposal” or “proposed guidance”), 88 Fed. Reg. 89410 (Dec. 27, 2023).

CATF is a nonprofit organization working globally to safeguard against the worst impacts of climate change by catalyzing the rapid development and deployment of low-carbon energy and other climate-protecting technologies. With more than 25 years of internationally recognized expertise on climate policy and law, and a commitment to exploring all potential solutions, CATF is a pragmatic, non-ideological advocacy group with the bold ideas needed to address climate change. CATF has offices in Boston, Washington, D.C., and Brussels, with staff working remotely around the world.

At CATF, our Land Systems program is working to enhance ecosystem-based carbon sequestration in ways that do not deter emissions reductions. There is an enormous climate mitigation potential in ecosystem-based solutions, and carbon credits can provide important financing for these activities. However, without substantial oversight, voluntary carbon credit derivatives markets have the potential to incur a large amount of risk, misinform investors, and deter emissions reductions and undermine progress on climate change. CATF applauds the Commission for issuing this guidance to provide oversight for voluntary carbon markets.

These comments offer support for and suggestions on the proposed guidance to promote the integrity of voluntary carbon markets, and foster transparency, fairness, and liquidity in those markets. Our comments focus primarily on issues related to voluntary carbon credits derived from projects that store carbon in ecosystems, particularly in trees and soils, but may have broad applicability to the guidance’s coverage. In particular, CATF recommends the final guidance include two additional commodity characteristics, durability and vintage; require transparency at the project or activity level because of the lack of sufficient crediting protocols; and strengthen criteria and factors for additionality, quantification, risk of reversal, and third-party verification.

CATF also submitted related comments to the Commission in October of 2022 in response to the Request for Information on Climate-Related Financial Risk,¹ and in August of

¹ Clean Air Task Force & NCX, Comment for Orders and Other Announcements, 87 FR 34856 (Oct. 7, 2022), <https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=70861>.

2023 in response to the Commission's Second Voluntary Carbon Markets Convening.² As in those comments, CATF urges the CFTC to continue to take action to ensure the integrity of carbon markets, including by building on this proposed guidance and issuing regulations specific to these markets.

I. Low quality carbon credits both distort markets and fail to provide meaningful climate benefits

The proposed guidance explains how the Commission's existing statutory authority and implementing regulations of the Commodity Exchange Act applies to voluntary carbon markets where contracts are made for the sale of voluntary carbon credits. Voluntary carbon markets can play a role in mitigating climate change, but only if there is confidence that contracts in those markets represent high-quality underlying voluntary carbon credit commodities. In this section, we outline the role of voluntary carbon markets and carbon credits in climate mitigation, concerns about the quality of credits, and how this guidance fits within CFTC's longstanding statutory authority and existing regulations.

Finance flowing through the sale of voluntary carbon credits can provide much needed capital for carbon reduction or removal projects. This is particularly attractive for ecosystem-based or nature-based projects, which have high climate mitigation potential, but otherwise few market-based incentives for deployment.

It is imperative that action is taken in the lands sector to address climate change. According to the International Panel on Climate Change, agriculture, forestry, and land use mitigation can provide large-scale greenhouse gas emission reductions and enhanced carbon dioxide removal to meet global targets.³ According to CATF's analysis, the most ambitious decarbonization scenarios under the Administration's current authority require measures in the forestry and agriculture sectors resulting in at least 46 million metric tons of emissions reductions and removals, as compared to 2005 levels, to meet the United States' Nationally Determined Contribution under the Paris Agreement.⁴ This target is achievable. A recent technical analysis from the Lawrence Livermore National Laboratory found that the United States can remove at least 1 billion metric tons per year of carbon dioxide and store 2.7 billion metric tons of carbon dioxide carbon storage in ecosystems by 2050.⁵ Projects or activities funded through carbon credits can contribute to this much needed carbon removal and reduction.

The total trade in voluntary carbon credits has grown significantly since the inception of the voluntary carbon market. In 2021, the total trade in voluntary carbon credits reached \$2

² Clean Air Task Force, Comment on Second Voluntary Carbon Markets Convening on July 19, 2023 (Aug. 18, 2023), <https://comments.cftc.gov/PublicComments/ViewComment.aspx?id=72913>.

³ Int'l Panel on Climate Change (IPCC), Synthesis Report of the IPCC Sixth Assessment Report (AR6): Longer Report, at 73 (2023), https://report.ipcc.ch/ar6syrr/pdf/IPCC_AR6_SYR_LongerReport.pdf.

⁴ Clean Air Task Force, Closing the Gap: Delivering on the U.S. Nationally Determined Contribution, at 11 (2023), <https://cdn.catf.us/wp-content/uploads/2023/04/21112755/ndc-gap-analysis.pdf>.

⁵ Jennifer Pett-Ridge, et al., Lawrence Livermore National Laboratory, Roads to Removal: Options for Carbon Dioxide Removal in the United States, LLNL-TR-852901, at ES-2 (2023), https://roads2removal.org/wp-content/uploads/00_RtR_FM-and-Executive-Summary.pdf.

billion.⁶ However, in recent years the market has stagnated.⁷ At the same time, interest has concentrated around higher quality—and higher price—credits, particularly for nature-based projects.⁸ The future direction of the market will depend on confidence in credits. With high trust in carbon credit quality and high demand, BloombergNEF projects that the market value could top \$1.1 trillion by 2050.⁹ However, the total market would be significantly less—no more than \$34 billion—in BNEF’s alternative scenario where credit integrity issues remain unaddressed.¹⁰

Unfortunately, the concerns about the quality of carbon credits could make contracts involving the trade of credits vulnerable to manipulation. Quantifying the net carbon reduced or removed is an inherently complex process, and there currently is a lack of any standardized protocol or methodologies to ensure the quality of carbon credits.¹¹ Our review of existing protocols for forest carbon credits shows that most of those protocols provide substantial flexibility to the project developer. Flexibility in how protocols are implemented can result in over crediting, as found in a recent study on cookstove offset methodologies¹² and another on improved forest management.¹³ The entities responsible for certifying and issuing credits also have financial incentives to inflate the number of credits issued because those entities are almost always compensated on a fee per credit basis.¹⁴ Further, there is a lack of transparency into the details of how individual projects implement protocols approved under carbon credit registries.¹⁵

At the same time, a significant demand exists for carbon credits, especially as emissions offsets to support net-zero goals and from buyers in sectors in which greenhouse gas emissions

⁶ See Ecosystem Marketplace, *VCM Reaches Towards \$2 Billion in 2021: New Market Analysis Published from Ecosystem Marketplace* (Aug. 3, 2022), <https://www.ecosystemmarketplace.com/articles/the-art-of-integrity-state-of-the-voluntary-carbon-markets-q3-2022/>.

⁷ Stephen Donofrio, et al., 2023 State of the Voluntary Carbon Markets Report, Ecosystem Marketplace, at 7 tbl.1 (Nov. 28 2023), available for download here: <https://www.ecosystemmarketplace.com/publications/state-of-the-voluntary-carbon-market-report-2023/>

⁸ See *id.* at 6.

⁹ See BloombergNEF, *Carbon Credits Face Biggest Test Yet, Could Reach \$238/Ton in 2050, According to BloombergNEF Report* (Feb. 6, 2024), <https://about.bnef.com/blog/carbon-credits-face-biggest-test-yet-could-reach-238-ton-in-2050-according-to-bloombergnef-report/>.

¹⁰ See *id.*

¹¹ 88 Fed. Reg. 89410, 89413 (Dec. 27, 2023) [hereinafter Proposal] (“current absence of a standardized methodology or protocol”).

¹² See Annelise Gill-Wiehl, Daniel M. Kammen & Barbara K. Haya, *Pervasive over-crediting from cookstove offset methodologies*, *Nature Sustainability* (Jan. 23, 2024), see attached; see also Berkeley Carbon Trading Project, A comprehensive quality assessment of cookstoves carbon credits, University of California, Berkeley, Center for Environmental Policy, <https://gspp.berkeley.edu/research-and-impact/centers/cepp/projects/berkeley-carbon-trading-project/cookstoves> (last visited Feb. 15, 2024).

¹³ See Barbara K. Haya, et al., *Comprehensive review of carbon quantification by improved forest management offset protocols*, 6 *Frontiers Forests & Global Change*, No. 958879 (2023), <https://www.frontiersin.org/articles/10.3389/ffgc.2023.958879/full>.

¹⁴ Joan Pinto, *Analysis: Do offset registry revenue models offer perverse incentives to over-credit?*, *Carbon Pulse* (Mar. 20, 2023), see attached.

¹⁵ See Proposal at 89413 (noting “opaque or inadequate calculation methodologies or protocols”); Berkeley Carbon Trading Project, *Reducing Emissions from Deforestation and Forest Degradation (REDD+) Carbon Crediting*, Berkeley Center for Environmental Public Policy, <https://gspp.berkeley.edu/research-and-impact/centers/cepp/projects/berkeley-carbon-trading-project/redd>, (providing assessment of REDD+ carbon credit quality).

are hard or expensive to abate. To date, the largest share of credits issued by registries in the voluntary carbon market have been forestry and land use carbon credits, representing > 0.75 Gt CO₂-eq and 40 percent of the total credit issuances between 2000 and 2023.¹⁶ This voluntary demand, together with a lack of regulatory oversight and shortcomings in the current approach to certification, can create a market for tranches of low-cost, low-quality, or fraudulent carbon credits with impacts on consumers, prices, and liquidity.¹⁷

Concern about the quality of voluntary carbon credits as commodities reverberates into voluntary carbon markets, as derivatives based on standardless commodities may lack actual value. Insufficient oversight creates the potential for price distortions and can discourage the purchase of more expensive, high-quality credits, thereby reducing the availability of financing for projects that can deliver real emissions reductions or removals and impeding meaningful climate action.

It should be noted that carbon credits are not a panacea for carbon emissions. It is imperative that we cut carbon pollution and other greenhouse gases as quickly as possible. The paramount need to cut greenhouse gas emissions means that it is especially important that low-quality, inexpensive voluntary carbon credits not substitute for needed pollution reduction efforts.

II. The proposed guidance is an appropriate step for the Commission

Considering the potential impact of voluntary carbon credits on climate mitigation and these concerns about the quality of credits underlying derivatives contracts, it is appropriate and necessary for the CFTC to exercise oversight of this market. The Commission has statutory authority under the Commodity Exchange Act (“CEA” or “the Act”) to promote market integrity and prevent price manipulation and other market disruptions in the derivatives markets.¹⁸ Of particular relevance here, the Commission has jurisdiction under the Act over “transactions

¹⁶ Ivy S. So et al., Voluntary Registry Offsets Database v9, Berkeley Carbon Trading Project, University of California, Berkeley (Dec. 2023), <https://gspp.berkeley.edu/research-and-impact/centers/cepp/projects/berkeley-carbon-trading-project/offsets-database>.

¹⁷ See, e.g., Ben Elgin, *This Timber Company Sold Millions of Dollars of Useless Carbon Offsets*, BNN Bloomberg (Mar. 17, 2022), [https://www.bnnbloomberg.ca/this-timber-company-sold-millions-of-dollars-of-useless-carbon-offsets-1.1738975#:~:text=This%20Timber%20Company%20Sold%20Millions%20of%20Dollars%20of%20Useless%20Carbon%20Offsets,-Ben%20Elgin%2C%20Bloomberg&text=\(Bloomberg\)%20%2D%2D%20Jim%20Hourdequin%20is,for%20the%20rapidly%20overheating%20climate](https://www.bnnbloomberg.ca/this-timber-company-sold-millions-of-dollars-of-useless-carbon-offsets-1.1738975#:~:text=This%20Timber%20Company%20Sold%20Millions%20of%20Dollars%20of%20Useless%20Carbon%20Offsets,-Ben%20Elgin%2C%20Bloomberg&text=(Bloomberg)%20%2D%2D%20Jim%20Hourdequin%20is,for%20the%20rapidly%20overheating%20climate); Ben Elgin, *A Top U.S. Seller of Carbon Offsets Starts Investigating Its Own Projects*, Bloomberg (Apr. 5, 2021), <https://www.bloomberg.com/news/features/2021-04-05/a-top-u-s-seller-of-carbon-offsets-starts-investigating-its-own-projects>; Patrick Greenfield, *Carbon offsets used by major airlines based on flawed system, warn experts*, The Guardian (May 4, 2021), <https://www.theguardian.com/environment/2021/may/04/carbon-offsets-used-by-major-airlines-based-on-flawed-system-warn-experts>; Lisa Song, *An Even More Inconvenient Truth: Why Carbon Credits for Forest Preservation May Be Worse Than Nothing*, ProPublica (May 22, 2019), <https://features.propublica.org/brazil-carbon-offsets/inconvenient-truth-carbon-credits-dont-work-deforestation-redd-acre-cambodia/>; Patrick Greenfield, *Revealed: more than 90% of rainforest carbon offsets by biggest certifier are worthless, analysis shows*, The Guardian (Jan. 18, 2023), <https://www.theguardian.com/environment/2023/jan/18/revealed-forest-carbon-offsets-biggest-provider-worthless-verra-aoe>.

¹⁸ See 7 U.S.C. § 5(b).

involving ... contracts of sale of a commodity for future delivery” traded on designated contract markets.¹⁹ Those designated contract markets must comply with twenty-three listed core principles, including for monitoring, enforcement, compliance, and, significantly, listing “only contracts that are not readily susceptible to manipulation.”²⁰

The proposed guidance is squarely within this statutory authority, and it addresses how CFTC will apply the CEA and its implementing regulations. Here, the voluntary carbon credit representing a metric ton of carbon dioxide removal or reduction by a third party is the commodity, the derivative or contract is an agreement to buy or sell that credit—or more likely, a set number of credits such as 1,000²¹—and the designated contract market (DCM) is a voluntary carbon market exchange. As the CFTC notes, a voluntary carbon credit is a “tradeable intangible instrument,”²² but the fact that the credit is intangible does not make it any less a commodity.²³ The Commission is not regulating carbon emissions or climate change—rather, the CFTC is exercising its core statutory purpose to ensure derivatives market integrity. The proposed guidance therefore appropriately addresses how the Commission’s existing statutory authority and implementing regulations of the Commodity Exchange Act apply to voluntary carbon markets where contracts are made for the sale of voluntary carbon credits.

CATF supports the CFTC taking multiple efforts related to carbon credits. The whistleblower alert issued in summer 2023, and any associated enforcement actions, has the potential to reduce fraud in the carbon credit spot market.²⁴ The CFTC’s environmental fraud task force, created in the enforcement division around the same time, should have a similar effect.²⁵ And the Commission’s multiple convenings on voluntary carbon markets shows that the Commission is diligently studying the question of how best to regulate these markets.²⁶ In addition to finalizing this guidance, CATF continues to ask the CFTC to issue regulations specific to voluntary carbon markets.

¹⁹ *Id.* § 2(a)(1)(A).

²⁰ *See id.* § 7(d).

²¹ *See* Proposal at 89414 (providing NYMEX’s CBL Global Environmental Offset futures contracts and Nodal Exchange’s Verified Emission Reduction futures and options contracts as examples).

²² Proposal at 89423.

²³ *CFTC v. McDonnell*, 287 F. Supp. 3d 213, 225 (E.D.N.Y. 2018) (“The CEA covers intangible commodities.”); *see also CFTC v. Trade Exch. Network Ltd.*, 117 F. Supp. 3d 29, 37-38 (D.D.C. 2015) (ruling that certain contracts based on questions about weather events or economic statistics were currencies within the CEA’s definition); *cf. United States v. Reed*, No. 20-cr-500, 2022 U.S. Dist. LEXIS 35089, at *10-11 (S.D.N.Y. Feb. 28, 2022) (explaining that cryptocurrency is a commodity given that contracts for future delivery are based on cryptocurrency).

²⁴ *See* Press Release, CFTC, CFTC Whistleblower Office Issues Alert Seeking Tips Relating to Carbon Markets Misconduct (June 20, 2023), <https://www.cftc.gov/PressRoom/PressReleases/8723-23>.

²⁵ *See* Press Release, CFTC, CFTC Division of Enforcement Creates Two New Task Forces: One Team Will Address Cybersecurity and Emerging Technology, Another to Combat Environmental Fraud (June 29, 2023), <https://www.cftc.gov/PressRoom/PressReleases/8736-23>.

²⁶ *See* Press Release, CFTC, CFTC Announces Second Voluntary Carbon Markets Convening on July 19, <https://www.cftc.gov/PressRoom/Events/opaeventvoluntarycarbonmarkets071923>.

III. CATF recommends the Commission strengthen standards for commodity characteristics and add principles to the proposed guidance

CATF generally supports the proposed guidance, which will provide valuable information on how the CFTC will exercise its oversight of voluntary carbon markets under existing statutory and regulatory authority. In this section, we make recommendations on additional commodity characteristics that CFTC should include in its final guidance and ways that the Commission should strengthen the description of criteria and factors for the voluntary carbon credit commodity characteristics. In particular, CATF recommends that the Commission add two more commodity characteristics, durability and vintage, to the guidance; require terms and conditions at the level of the project or activity because current crediting protocols provide insufficient information about the specific characteristics of a credit to prevent manipulation; and tighten the criteria and factors for quantification, additionality, risk of reversal, and third-party verification. The remainder of this section is organized by questions posed by the Commission in the notice for the proposal.

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?*

CATF recommends the CFTC add two additional VCC commodity characteristics to the final guidance: “durability” and “vintage.” CATF also finds the VCC commodity characteristics already identified in the proposed guidance are relevant to the listing of VCC derivative contracts and urges the Commission to finalize those characteristics with the recommended changes described in this comment. The proposal’s identified commodity characteristics align with relevant attributes for determining the quality of carbon credits raised by CATF in previous comments to CFTC and identified by leading researchers, non-governmental organizations, and corporations.²⁷ CATF applauds the Commission for identifying these commodity characteristics and supports their inclusion, with recommended revisions, in final guidance.

The first VCC commodity characteristic that CATF recommends the Commission add is “durability,” which refers to the storage of carbon dioxide removed being measured in years and creates fully delivered, verifiable long-term climate benefits.²⁸ Durability relates to but is distinct from the permanence and risk of reversal commodity characteristic included in the draft

²⁷ See CATF & NCX, *supra* note 1; CATF, *supra* note 2; see also, e.g., Meryl Richards et al., The Role of Natural Climate Solutions in Corporate Climate Commitments: A Brief for Investors, Ceres & IIGCC (May 2021) <https://www.ceres.org/sites/default/files/reports/2021-05/FINAL%20The%20Role%20of%20Natural%20Climate%20Solutions.pdf>; Myles Allen et al., Univ. of Oxford Smith School of Enterprise and the Environment, The Oxford Principles for Net Zero Aligned Carbon Offsetting (Sept. 2020), <https://www.smithschool.ox.ac.uk/sites/default/files/2022-01/Oxford-Offsetting-Principles-2020.pdf>; Microsoft & Carbon Direct, Criteria for High-Quality Carbon Dioxide Removal (2023), <https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RWGG6f>

²⁸ See Peter Woods Ellis, et al., *The principles of natural climate solutions*, 15 Nature Comms. No. 547, at 5 (2024), see attached (defining durability in the context of carbon pools).

guidance. For durability, CATF recommends that the CFTC require the terms and conditions for VCC derivative contracts include information on the period, in terms of years, that carbon is expected to be stored by the project or activity. A minimum industry standard for durability is 20 years,²⁹ and some compliance programs, such as, the California cap-and-trade program, require that projects will store carbon for 100 years for forest projects.³⁰ Some technology-based carbon removal methods such as enhanced rock weathering or direct air capture can provide durable long-term physical storage for even longer time periods. There are real differences between the quality of and suitable use cases for credits based on these time periods, but these distinctions are obscured without transparency. The terms and conditions for VCC derivative contracts should therefore disclose the durability of the carbon storage because more durable carbon storage is likely to command a price premium, while failure to include information on credit durability risks flooding the market with credits that provide only short-term carbon storage and distort the price of credits.

The second VCC commodity characteristic that CATF recommends the Commission add is “vintage,” which refers to the year in which a credit is generated and/or issued.³¹ The vintage of a carbon credit is significant both for the climate benefit, because reductions or removals should be contemporaneous with emissions for offsetting purposes, and for the price of a credit, because older vintage credits have lower economic values and may be of lower quality since some protocols have strengthened over time to reflect development of new understanding and scientific tools related to, for example, baseline setting and risk assessment.³² For VCC derivative contracts, the vintage of the credits may be included in the contract name.³³ Requiring disclosure of vintage will ensure that derivative contracts do not inappropriately deliver or bundle old carbon credits with those of a current vintage.

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. None of the existing standards are sufficient to ensure high-quality credits, particularly from nature-based ecosystems such as forests and soils, that are equivalent with a metric ton of carbon emissions. It would therefore be inappropriate for the CFTC to rely on any existing standard to incorporate into the terms and conditions of a VCC derivative contract.

²⁹ See, e.g., Verra, VCS Standard v4.5, at 28 (Dec. 11 2023), <https://verra.org/wp-content/uploads/2023/08/VCS-Standard-v4.5-updated-11-Dec-2023.pdf> (specifying 20 years as the absolute minimum crediting period for forestry offset projects).

³⁰ *Compliance Offset Protocol: U.S. Forest Projects*, Ca. Air Resources Bd. (June 25, 2015), <https://ww2.arb.ca.gov/sites/default/files/cap-and-trade/protocols/usforest/forestprotocol2015.pdf>

³¹ See Silvia Favasuli & Vandana Sebastian, *Voluntary carbon markets: how they work, how they're priced and who's involved*, S&P Global Commodity Insights (Jun.10, 2021), <https://www.spglobal.com/commodityinsights/en/market-insights/blogs/energy-transition/061021-voluntary-carbon-markets-pricing-participants-trading-corsia-credits>.

³² See Varsha Ramesh Walsh & Michael W. Toffel, *What Every Leader Needs to Know About Carbon Credits*, Harv. Business R. (Dec. 15, 2023), see attached.

³³ See, e.g., Proposal at 89414, nn.49 & 50 (listing VCC contracts with vintage year in the contract title).

However, standards for carbon credits are evolving and may improve through ongoing and future initiatives. In collaboration with independent experts, CATF is currently conducting research and analysis of carbon credit protocols. CATF intends to share our research findings with the Commission when they are ready, and we urge the CFTC to incorporate those findings in its oversight and future regulation of voluntary carbon credits.

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?*

Transparency at the level of the individual project or activity—rather than at the level of the protocol or crediting program—is essential because the crediting programs and protocols are themselves flawed or allow so much flexibility to project developers regarding the quantification of credits that the quality of the underlying credit is obscured. Simply indicating which crediting protocol was used to issue a credit is insufficient for transparency because there is a high degree of flexibility in most existing protocols.³⁴ CATF therefore recommends the Commission require that the terms and conditions for a VCC derivative contract must allow buyers to access specific information about how crediting protocols from a specific registry were implemented for a given project or activity generating credits.

Specifically, key information on the project implementation plans, including baseline scenario assumptions and quantification metrics (e.g. biomass estimation approaches and their justification), verification reports, annual reports, risk rating and justification, and the location of projects should be made available. For quality standards purposes, the information should include sufficient specificity to ascertain generally specific attributes such as the “origin,” “originator,” or “source” of the underlying commodity.³⁵ Transparency provisions for inspection purposes at delivery should allow the buyer to access more detailed documentation on the credits provided from a registry to verify that credits delivered under a contract have been described accurately and meet the quality standards described in the contract's terms and conditions.³⁶ While some of the largest voluntary carbon market registries do make elements of this information nominally available through their online registry access portals, the key information enumerated above for enabling trust in the market may be buried in long, highly technical documents, not consistently reported across projects, out of date, or only available to registered users.

Project-level information should be delivered in a standardized and accessible manner, ideally managed at the level of the credit-issuing entity, for example in a machine-readable or

³⁴ See Gill-Wiehl, *supra* note 12; Haya, et al., *supra* note 13.

³⁵ 17 C.F.R. Appx. C to Pt. 38 (b)(2)(i)(A).

³⁶ See *id.* § (b)(2)(i)(G).

digitally searchable format where possible.³⁷ Most of the existing credit-issuing entities already have some version of this digital infrastructure built, and could be encouraged to expand and improve their existing tools to ensure that all needed information is made available in a timely and user-friendly manner. For example, the independent database assembled by researchers from the Berkeley Carbon Trading Project attempts to aggregate key information from the four largest voluntary carbon credit registries into a more usable format and to fill in gaps that exist in how data is reported.³⁸ Registries can build off this work to move towards a more standardized approach to reporting key information on the credits they issue. Voluntary carbon credit derivatives contracts should include terms and conditions that require this level of data transparency.

Furthermore, the CFTC should consider requiring information on a voluntary carbon credit's vintage under the transparency commodity characteristic if the Commission does not include "vintage" as its own quality standard as recommended above. The price and quality of a credit is often related to its vintage. Because the years for emissions reductions or removals should ideally match the emissions a buyer intends to offset and many protocols have improved over time—although many are still insufficient—more recent or current credits are likely to command a higher price than older credits. Terms and conditions should be transparent about carbon credit vintage to avoid manipulation and flooding of markets with low-quality, old credits.

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?*

CATF supports the proposed characterization included in the guidance that additionality should be defined as covering projects or activities that would not have been developed absent the monetary incentive created by the revenue from carbon credits.³⁹ The alternative definition, which would describe projects or activities that are not already required by law, regulation, or any other legally binding mandate, is a necessary but not sufficient aspect of the additionality definition proposed in the guidance. Evidence that a project or activity is not legally required will support a finding that the standard is satisfied, but a voluntary carbon credit is additional only if

³⁷ For an example of the often-opaque manner that information may be provided on credits that obscures information, see Grayson Badgley, *To know if an offset project is burning, first you have to find it*, (carbon)plan (Oct. 2, 2023), <https://carbonplan.org/blog/bigcoast-project-boundary>.

³⁸ See *supra* note 16.

³⁹ See Proposal at 89417.

it provides carbon removals or reductions above and beyond what would happen in a baseline scenario absent the revenue from the credit.⁴⁰

There is broad consensus for defining additionality as demonstrating that the project or activity would not have taken place without the monetary incentive of a carbon credit, especially for voluntary carbon credits.⁴¹ Even where regulatory requirements focus on the legal minimum to determine additionality, such as in the California program, demonstration of additionality requires a comparison to a conservative business-as-usual scenario.⁴² To determine quality of credits—and therefore their value—it is essential that additionality be stringently defined in comparison to a counterfactual without the revenue provided from the credit.

Additionality is also likely to change over time given the dynamic policy, economic, and environmental influences on the extent to which a project is additional. Therefore, the assumptions related to the counterfactual should be reassessed at regular intervals over the lifetime of a carbon project or activity, with shorter intervals of 1 to 5 years preferable, as programs issue new credits. This is particularly important for project or activities that involve ongoing practices spread over decades where assumptions about additionality at the start of the practice may no longer be accurate when subsequent credits are issued. Some crediting protocols have moved toward novel approaches that rely on using an ongoing, empirically observed baseline to demonstrate additionality, which may reduce uncertainty in estimating carbon credits based on a purely counterfactual scenario.⁴³ While an ongoing empirical approach to an observed baseline may not always be feasible, reassessing baseline assumptions over the lifespan of a project over shorter intervals should be standard. The terms and conditions around additionality should therefore require that any assumptions about policies, economics, and environmental factors reflect current information at the time the credit is issued.

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*

⁴⁰ The comparison of carbon dioxide removed or reduced relative to what would happen in a business-as-usual counterfactual is therefore essential both to determine the additionality of the project or activity and to quantify the amount of carbon reduced or removed. The quantification aspect of this question is discussed further in response to question 11, *infra*.

⁴¹ See, e.g., Integrity Council for the Voluntary Carbon Market (ICVCM), *The Core Carbon Principles* (2022), <https://icvcm.org/the-core-carbon-principles/> (defining additionality); Env't Def. Fund, World Wildlife Fund & Oko-Institut, What makes a high-quality carbon credit? Phase 1 of the "Carbon Credit Guidance for Buyers" project: Definition of criteria for assessing the quality of carbon credits, at 9 (June 2020), https://files.worldwildlife.org/wwfcmprod/files/Publication/file/54su0gjupo_What_Makes_a_High_quality_Carbon_Credit.pdf?_ga=2.267590790.961721074.1708113565-1885449575.1708113565; World Bank Group & Partnership for Market Readiness, Technical Note 13, Carbon Credits and Additionality: Past, Present, and Future 3 (May 2016), <https://documents1.worldbank.org/curated/en/407021467995626915/pdf/105804-NWP-PUBLIC-PUB-DATE-5-19-2016-ADD-SERIES.pdf>.

⁴² See Cal. Code Regs. Tit. 17, § 95802(a)(definition of "additional").

⁴³ See, e.g., Verra, VM0045: Methodology for Improved Forest Management Using Dynamic Matched Baselines from National Forest Inventories, v1.0 (Oct. 26, 2022), <https://verra.org/wp-content/uploads/2022/12/VM0045-IFM-Dynamic-Matched-Baselines-v1.0.pdf>.

where the underlying VCC is sourced from nature-based projects or activities such as agriculture, forestry or other land use initiatives?

10. *How should DCMs treat contracts where the underlying VCC relates to a project or activity whose underlying GHG emission reductions or removals are subject to reversal? Are there terms, conditions or other rules that a DCM should consider including in a VCC derivative contract in order to account for the risk of reversal?*

CATF provides this answer to questions 9 and 10 together. There will always be some risk of reversal for carbon credits, and that risk is particularly pronounced for credits based on carbon removals or reductions related to nature-based projects, agriculture, or other land use activities.⁴⁴ But the real risk to carbon sequestration for such projects as a result of natural disturbances such as wildfire, insect or disease outbreak, or drought is often severely underestimated in determining risk ratings for generated carbon credits.⁴⁵

Risk ratings for carbon credits need to be based on the best available spatially relevant data for project location and the structure of the system must account for dynamic risk over time. For example, the California cap-and-trade program protocol for issuing carbon offsets requires 4 percent of all credits generated to be set aside into the buffer pool to account for risk of wildfire, and this is consistent no matter where the project is located in the United States.⁴⁶ However, there are many locations where current risk of wildfire is much higher than 4 percent and other places where it is lower. While this discrepancy between the accounted and real risk is a problem today, the issue will become worse over the next few decades as climate change is expected to increase forest fire risk across the United States by a factor of 4 to 14 by 2090, depending on location and emissions scenarios.⁴⁷ Without a mechanism to reassess risk rating over space and time, the buffer pool system for insuring against risk of reversal will become highly insufficient.

Considering these issues, there is broad support for requirements to mitigate the risk of reversal or have mechanisms to compensate for reversals for carbon credits.⁴⁸ Where carbon crediting programs rely on buffer pools to compensate for any reversals, those pools must themselves be sufficient to cover residual risks in a changing climate.⁴⁹ Accounting for risk of reversal is particularly important for nature, forestry, agriculture, or other land-based credits; and the terms and conditions for VCC derivative contracts should include sufficient information at

⁴⁴ See, e.g., Oranuch Wongpiyabovorn, et al., *Challenges to voluntary Ag carbon markets*, 45 Applied Econ. Perspectives & Pol’y 1154, 1158-59 (2022), see attached (discussing risk of reversal in agricultural and forest carbon programs).

⁴⁵ See Grayson Badgley et al., *California’s forest carbon offsets buffer pool is severely undercapitalized*, 5 Frontiers for Glob. Change (Aug. 2022). <https://www.frontiersin.org/articles/10.3389/ffgc.2022.930426/full>

⁴⁶ Cal. Air Resources Bd., *supra* note 30, at 135.

⁴⁷ See William R. L. Anderegg, et al., *Future climate risks from stress, insects and fire across US forests*, 25 Ecology Letters 1510 (Apr. 9, 2022), see attached.

⁴⁸ See, e.g., Badgley et al., *supra* note 45; Frances Seymour & Paige Langer, *Consideration of Nature-Based Solutions as Offsets in Corporate Climate Change Mitigation Strategies*, at 14 (World Res. Inst., Working Paper, Feb. 2021), <https://www.wri.org/research/consideration-nature-based-solutions-offsets-corporate-climate-change-mitigation>; ICVCM, *Core Carbon Principles 2023 – Section 4: Assessment Framework*, at 82-83 (July 2023), <https://icvcm.org/wp-content/uploads/2023/07/CCP-Section-4-R2-FINAL-26Jul23.pdf>.

⁴⁹ See, e.g., Aijing Li, et al., *Can We Count on Forest Carbon Credits?*, RMI (Oct. 10, 2022), <https://rmi.org/can-we-count-on-forest-carbon-credits/> (noting elimination of carbon trading buffer pool in California by wildfire).

the project level to determine that the risk of reversal has been mitigated or otherwise accounted for.

Specifically, CATF recommends the Commission require terms and conditions to account for and mitigate the risk of reversal based on the length of the monitoring period; structure of risk mitigation; if relying on a buffer pool, a determination of buffer pool contribution to fire risk, insect or disease risk, and data sources used and degree of flexibility; and the process for reassessing risk over time. Again, this information is generally not available at the level of a protocol and further underscores the need for project-level information to inspect the quality of a credit.

11. 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 a crediting program applies a quantification methodology or protocol for calculating the level of GHG reductions or removals associated with credited projects or activities that is robust, conservative and transparent?

Robust, conservative, and transparent quantification is essential for high-quality voluntary carbon credits, and terms and conditions for VCC derivative contracts must disclose relevant information on quantification. CATF recommends that the Commission should specifically require two factors related to quantification: leakage avoidance and appropriate quantitative comparison of project or activity's carbon removals or reductions compared to a business-as-usual baseline.

Carbon leakage, which occurs when a reduction or removal project results in increased emissions elsewhere, typically as the result of shifting land-use activities beyond the project's borders, has long been a concern for carbon credit programs.⁵⁰ Although this problem has been long apparent, avoidance of leakage remains essential for carbon credit quality, especially in the context of voluntary carbon credits where emissions are not capped elsewhere in a system. The importance of addressing leakage has been identified, for instance, within the context of Article 6.4 of the Paris Agreement.⁵¹

CFTC should require that terms and conditions for VCC derivative contracts include provisions related to leakage avoidance or leakage estimation, either through specific governance

⁵⁰ See, e.g., IPCC, Working Group III: Mitigation, 4.6.2 Carbon Offsets, Tradable Permits, and Leakage (2001), <https://archive.ipcc.ch/ipccreports/tar/wg3/index.php?idp=174>; Ben Filewod & Geoff McCarney, *Avoiding carbon leakage from nature-based offsets by design*, 6 *One Earth* 790, 790 (2023), see attached (describing perception of leakage as “old news”).

⁵¹ See UN Framework Convention on Climate Change, Article 6 of the Paris Agreement: Informal Technical Expert Dialogues, Baselines and additionality for the 6.4 mechanism (Sept. & Oct. 2021), https://unfccc.int/sites/default/files/resource/Art.%206%20presentation_ITEDs_Baseline%20and%20additionality.pdf; Env't Def. Fund, et al., *Recommendations to the Article 6.4 Supervisory Body on Activities Involving Removals* (2023), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202303141631---Joint%20Submission%20on%20Removals_March%202015.pdf; Submission by Sweden and the European Commission on behalf of the European Union and its Member States (Stockholm, Mar. 6, 2023), <https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202303151603---SE-2023-03-15%20EU%206.4%20Supervisory%20Body%20submission%20Para%2019.pdf>.

measures that avoid leakage or by including unavoidable leakage in the quantification of the amount of carbon removed or emissions reduced. When accounting for leakage, crediting systems should be conservative in their estimates of expected leakage, erring to overestimate rather than underestimate leakage, and therefore more likely to avoid over crediting. Failure to include terms and conditions related to avoiding and estimating leakage could result in overestimates of carbon removed or emissions reduced and distort the price of voluntary carbon credit derivative contracts.

Carbon credit quantification should also include a robust comparison to a business-as-usual baseline. This requirement is essential to determine that the reductions or removals represented by a carbon credit are truly additional, especially in the context of nature-based carbon removal projects or activities.⁵² Comparison to a business-as-usual baseline is necessary to account for the fact that even in the absence of a carbon-related project or activity, a natural system may sequester more carbon over time and that carbon should not be included in the quantification of carbon newly removed by the project.⁵³

Therefore, the Commission should require that terms and conditions for VCC derivative contracts include information about the approach to establishing a baseline scenario, forecasting the baseline through the crediting period, baseline reassessments, disclosure of uncertainty provisions for the baseline, and how those factors are included in the crediting program's approach to demonstrating the additionality of the carbon removed or emissions reduced by the project or activity covered by the carbon credit. The terms and conditions for quantification should also recognize that the additional carbon sequestration compared to a business-as-usual baseline is dynamic and will change over time, should include information on how the crediting program will address that dynamic accounting to ensure quantification represents real carbon removal, and should disclose quantitative risk ratings for transparency.

12. In addition to a crediting program's decision-making, reporting, disclosure, public and stakeholder engagement, and risk management policies, are there other 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 the crediting program can demonstrate that it has a governance framework that effectively supports the program's transparency and accountability?

To avoid contract manipulation by self-interested parties, it is essential that the governance framework for carbon credits includes terms and conditions that ensure the independence of third-party verifiers and requirements to use independent data sources. Absent these provisions, there may be a client relationship between verifiers and project developers that does not assure sufficient independence to create confidence in credit information since project developers are responsible for contracting accredited validation and verification bodies. While these validation and verification bodies are not compensated based on the number of credits ultimately issued to the project, there is an incentive to remain attractive to project developers for

⁵² As noted in our response to question 8, *supra*, the comparison to a business-as-usual baseline is also necessary to determine additionality.

⁵³ See Woods Ellis, et al., *supra* note 28, at 4-5.

future project contracts, thus creating potential pressure on the validation and verification body to approve projects as presented. The ICVCM calls for “program-level requirements for robust independent third-party validation and verification of mitigation activities”⁵⁴ that includes use of accredited validation and verification bodies.⁵⁵ The Commission should follow that approach in its guidance and require that terms and conditions identify the independent, third-party verification body and its methodology, and also confirm that the third-party verifier will have access to the information needed to conduct its verification.

Conclusion

CATF’s position is that, with the recommendations included in this comment, the proposed guidance will provide valuable information on how the Commission will exercise its oversight authority over voluntary carbon markets. This oversight will ensure that investors have confidence in the underlying carbon credit commodities and, as a result, will facilitate liquidity for projects with real emission reductions or removals and avoid price distortions that could hamper important investments. We applaud CFTC for issuing this guidance and taking other actions related to carbon credits, such as through its whistleblower alert and the environmental fraud task force, and we encourage the Commission to build on this guidance through future regulations that are specific to carbon markets.

Respectfully submitted,

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⁵⁴ ICVCM, *The Core Carbon Principles*, <https://icvcm.org/the-core-carbon-principles/>.

⁵⁵ See ICVCM, *supra* note 48, at 57.