
FROM GUIDANCE TO GOVERNANCE: EMPOWERING THE CFTC TO REGULATE VOLUNTARY CARBON MARKETS

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The voluntary carbon market (VCM) has emerged as a critical mechanism for channeling private capital into emissions-reducing projects, yet its potential remains largely unrealized. Pervasive fragmentation, opacity, and fraud have deterred investment. Disclosure-focused initiatives by the Securities and Exchange Commission (SEC) address only one dimension of the problem, leaving the structural flaws that enable the proliferation of low-quality and fraudulent credits unresolved.

This Note argues that the Commodity Futures Trading Commission (CFTC) is best positioned to fill the resulting regulatory void. The CFTC's most recent guidance on the listing of voluntary carbon credit (VCC) derivatives, though now rescinded, was already too deferential to be effective. It delegated standard-setting authority to private actors and stopped short of prescribing the enforceable rules necessary to ensure market integrity. Drawing on case law establishing virtual currencies as commodities under the Commodity Exchange Act (CEA), this Note contends that VCCs satisfy the CEA's broad commodity definition, which confers upon the CFTC anti-fraud and anti-manipulation jurisdiction over the VCC spot market. It then proposes that the CFTC repurpose the regulatory template it successfully deployed in the virtual currency space to govern the VCM. By adopting this proactive, multi-pronged approach, the CFTC can establish uniform standards, deter fraudulent conduct, and cultivate the market integrity necessary to unlock the VCM's potential as a tool for large-scale climate change mitigation.

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INTRODUCTION

Financial markets and their participants have become major players in the story of climate change. As the threat of global warming becomes more severe, so too do the risks thrust upon the U.S. financial system.¹ Commodity and derivatives markets increasingly suffer the crippling effects of climate events, bolstering the case for a radical rethink of climate risk mitigation strategies.² In response to this evolving threat, market participants have waded

¹ See Press Release, Ceres, *New Scorecard Demonstrates Federal Financial Regulators' Progress in Addressing Climate Risk* (Dec. 14, 2023), <https://www.ceres.org/resources/news/new-scorecard-demonstrates-federal-financial-regulators-progress-in-addressing-climate-risk> [<https://perma.cc/B2HW-WWER>].

² Jeffrey Fralick & Elle Stephens, *An Opportunity to Strengthen Climate Risk Management in the Derivatives Market*, ENV'T DEF. FUND: CLIMATE 411 (Dec. 18, 2023), <https://blogs.edf.org/climate411/2023/12/18/an-opportunity-to-strengthen-climate-risk-management-in-the-derivatives-market/> [<https://perma.cc/39FH-VWLG>].

into the sustainability realm, within which the voluntary carbon market (VCM) plays a critical role.³

The VCM offers a market-based approach to reducing greenhouse gas (GHG) emissions.⁴ Voluntary carbon credits (VCCs)—instruments that embody a reduction in GHG emissions or a removal of GHG from the atmosphere—function as carrots rather than prohibitive sticks.⁵ Crediting programs streamline their issuance, deploying their respective methodologies to evaluate the quantity of emissions reduced or removed from the atmosphere by a particular mitigation activity.⁶ Upon concluding their assessments, these programs contract with third-party verifiers to ensure the correctness of their calculations.⁷ Through their purchase of credits, companies offset otherwise unavoidable emissions,⁸ fulfilling their net-zero pledges while signaling their commitment to environmental stewardship.⁹ By engaging stakeholders on environmental issues, companies can develop the favorable

³ See Robert O. Mendelsohn, Robert E. Litan & John Fleming, *A Framework to Ensure That Voluntary Carbon Markets Will Truly Help Combat Climate Change*, BROOKINGS INST. (Sep. 16, 2021), <https://www.brookings.edu/articles/a-framework-to-ensure-that-voluntary-carbon-markets-will-truly-help-combat-climate-change/> [https://perma.cc/TH4X-KS2Z].

⁴ Charlotte Streck, *How Voluntary Carbon Markets Can Drive Climate Ambition*, 39 J. ENERGY & NAT. RES. L. 367, 367–74 (2021).

⁵ See Silvia Favasuli et al., *Voluntary Carbon Markets: How They Work, How They're Priced and Who's Involved*, S&P GLOBAL (Dec. 3, 2025), <https://www.spglobal.com/energy/en/news-research/blog/energy-transition/120325-how-does-the-voluntary-carbon-market-work> (on file with Columbia Business Law Review); see also Sam Headon, *Offsets in the International Emissions Market: Do Buyers Get What They Pay For?*, 2 CARBON & CLIMATE L. REV. 406, 406–07 (2008) (analyzing “the use of markets to address environmental problems” more generally and through an empirical lens).

⁶ See *The Lifecycle of a Voluntary Carbon Credit*, MORRISON FOERSTER (Aug. 26, 2022), <https://www.mofo.com/resources/insights/220826-lifecycle-of-a-voluntary-carbon-credit> [https://perma.cc/Q77P-63W7].

⁷ *Id.*

⁸ ANJA KOLLMUSS, HELGE ZINK & CLIFFORD POLYCARP, STOCKHOLM ENV'T INST., MAKING SENSE OF THE VOLUNTARY CARBON MARKET: A COMPARISON OF CARBON OFFSET STANDARDS (2008), <https://www.sei.org/mediamanager/documents/Publications/SEI-Report-WWF-ComparisonCarbonOffset-08.pdf> [https://perma.cc/FAZ6-S4BV].

⁹ Danick Trouwloon et al., *Understanding the Use of Carbon Credits by Companies: A Review of the Defining Elements of Corporate Climate Claims*, 7 GLOB. CHALLENGES, Apr. 2023, at 3.

associations needed to grow their clientele and cultivate trust in their brands.¹⁰ The offset model also enables companies to tap into new revenue streams as they endeavor to reduce their carbon footprint.¹¹

The benefits of willing engagement in carbon markets extend beyond the reputational and monetary perks enjoyed by credit purchasers. VCCs, in contrast to allowances issued by governmental and regulatory entities, “direct private financing to climate-action [sic] projects that would not otherwise get off the ground.”¹² Investment in these low-carbon projects expedites the development of clean energy technologies, on which the launch of clean energy and emissions-reducing initiatives depends.¹³ Increasing participation in the VCM and growing demand for the credits whose trade it facilitates suggest its ability to support large-scale climate action.¹⁴

Despite having evinced significant potential, this market faces significant obstacles.¹⁵ Like the climate risks it strives to address, the VCM is comparatively new and rapidly evolving.¹⁶ It remains largely unregulated, fueling concerns about transparency

¹⁰ *Id.*

¹¹ Dong-Ho Lee, Dong-hwan Kim & Seong-il Kim, *Characteristics of Forest Carbon Credit Transactions in the Voluntary Carbon Market*, 18 CLIMATE POL’Y 235, 236 (2018) (“Payments for ecosystem services (PES) is a valuable means of unlocking new investment opportunities . . .”).

¹² Christopher Blaufelder et al., *A Blueprint for Scaling Voluntary Carbon Markets to Meet the Climate Challenge*, MCKINSEY SUSTAINABILITY (Jan. 29, 2021), <https://www.mckinsey.com/capabilities/sustainability/our-insights/a-blueprint-for-scaling-voluntary-carbon-markets-to-meet-the-climate-challenge#/> (on file with Columbia Business Law Review).

¹³ See INT’L ENERGY AGENCY, *THE ROLE OF CARBON CREDITS IN SCALING UP INNOVATIVE CLEAN ENERGY TECHNOLOGIES* 11 (2024), <https://iea.blob.core.windows.net/assets/56184317-b6a8-4e68-8201-f7ad27beaefd/TheRoleofCarbonCreditsinScalingUpInnovativeCleanEnergyTechnologies.pdf> [<https://perma.cc/M6WK-4CRN>].

¹⁴ KATHERINE HAMILTON ET AL., *STATE OF THE VOLUNTARY CARBON MARKETS 2007: PICKING UP STEAM* 5 (2007), https://www.fao.org/fileadmin/user_upload/rome2007/docs/State%20of%20the%20Voluntary%20Carbon%20Market.pdf [<https://perma.cc/V56A-DUF9>].

¹⁵ See Vittoria Battocletti, Luca Enriques & Alessandro Romano, *The Voluntary Carbon Market: Market Failures and Policy Implications*, 95 U. COLO. L. REV. 519, 527 (2024).

¹⁶ HAMILTON ET AL., *supra* note 14, at 5.

and credit quality.¹⁷ Challenges to the credibility of credits invite investigation into the validity of claims made by companies using offsets to achieve their net-zero targets.¹⁸ Accordingly, a lack of oversight has led potential investors to exercise caution in embracing the VCM as a tool for achieving their sustainability goals.¹⁹

Among the issues that plague the VCM, the lack of uniform standards for measuring, reporting, and verifying (MRV) emissions reductions takes center stage.²⁰ Carbon registries enjoy virtually unbridled freedom when formulating methodologies and registering credits.²¹ Credits are issued using proprietary MRV methods, which need not be disclosed and vary widely across registries.²² The opacity bred by fragmentation prevents users from assessing whether the credits they buy represent genuine carbon offsets.²³ Inconsistencies in MRV processes abound, enhancing the VCM's vulnerability to fraud by permitting project developers'

¹⁷ Oliver Miltenberger, Christophe Jospe & James Pittman, *The Good Is Never Perfect: Why the Current Flaws of Voluntary Carbon Markets Are Services, Not Barriers to Successful Climate Change Action*, 3 FRONTIERS CLIMATE, Oct. 2021, at 2–3.

¹⁸ Trouwloon et al., *supra* note 9, at 9–10.

¹⁹ See Dieter Holger, *Many Companies Are Shying Away from Carbon Credits*, WALL ST. J. (Jan. 17, 2023), <https://www.wsj.com/articles/many-companies-are-shying-away-from-carbon-credits-11673900838> [<https://perma.cc/5V49-4972>].

²⁰ Nicholas Espenan, *A Promise Made Is Not a Promise Kept: Scaling Voluntary Carbon Markets Accountability with Federal Agency Collaboration*, 54 TEX. ENV'T L.J. 66, 79 (2024).

²¹ See, e.g., Julian Gonzalo & Bong Thi Le, *Integrity First: Why Carbon Registries Matter for Carbon Markets*, BIOCARBON FUND (Feb. 5, 2026), <https://www.biocarbonfund-isfl.org/result-stories/integrity-first-why-carbon-registries-matter-carbon-markets> [<https://perma.cc/2WRU-E69N>] (discussing measures to support countries developing their own carbon registries).

²² AXEL MICHAELOWA ET AL., PERSPECTIVES CLIMATE GROUP, OVERVIEW AND COMPARISON OF EXISTING CARBON CREDITING SCHEMES 28–30 (2019).

²³ See, e.g., Battocletti et al., *supra* note 15, at 549 (“Similarly, a report prepared by the Guardian, the German weekly Die Zeit, and SourceMaterial (a non-profit investigative journalism organization) found that more than 90 percent of Verra’s rainforest offset credits are likely “phantom credits” rather than genuine carbon reductions. Moreover, peer-reviewed studies have also cast doubt on the quality of carbon offsets.”) (internal citations omitted).

selective application of GHG protocols.²⁴ These inconsistencies, coupled with a permissive attitude toward credit allocation based on misrepresentations of environmental impact, have created an environment conducive to mistrust.²⁵

When contemplating how best to promote investment in sustainable projects through the VCM, the need for a robust regulatory framework becomes apparent.²⁶ For finance to effect environmentally beneficial outcomes, “investors must be able to discern which investments are in fact ‘sustainable.’”²⁷ Simply, the marker of a well-functioning market system is trust.²⁸ And in compliance markets, the enforcement of public regulations through sanctions bolsters trust.²⁹ Because voluntary participation renders the imposition of sanctions for misbehavior less practical, enlisting the help of a referee to cultivate trust and mete out discipline when appropriate could prove useful in scaling the VCM.³⁰

But which actor is best suited to referee the VCM? Much of the focus on climate-related financial regulation has centered on efforts by the Securities and Exchange Commission (SEC) to

²⁴ Robert Kaplan, Karthik Ramanna & Marc Roston, *Accounting for Carbon Offsets*, HARV. BUS. REV., July-Aug. 2023, <https://hbr.org/2023/07/accounting-for-carbon-offsets> (on file with Columbia Business Law Review).

²⁵ See Raymond Song, Aijing Li & Caroline Ott, *How to Build a Trusted Voluntary Carbon Market*, ROCKY MOUNTAIN INST. (Sep. 2, 2022), <https://rmi.org/how-to-build-a-trusted-voluntary-carbon-market/> [<https://perma.cc/FW42-73VQ>].

²⁶ INT’L SWAPS & DERIVATIVES ASS’N, ROLE OF DERIVATIVES IN CARBON MARKETS 4 (2021), <https://www.isda.org/a/soigE/Role-of-Derivatives-in-Carbon-Markets.pdf> (“As these markets function outside of compliance markets, proper monitoring and vetting is key to ensuring credibility.”).

²⁷ CTR. ON THE LEGAL PRO., HARV. L. SCH., *ESG and Lawyers: Critical Topics in ESG*, THE PRACTICE, Jan-Feb. 2023, <https://clp.law.harvard.edu/knowledge-hub/magazine/issues/esg-and-lawyers/critical-topics-in-esg/> [<https://perma.cc/Z5MH-QUSQ>].

²⁸ JAN CORNELLE ET AL., WHAT FUTURE FOR VOLUNTARY CARBON MARKETS? 4 (Eur. Univ. Inst. 2021), https://cadmus.eui.eu/bitstream/handle/1814/70936/PB_2021_08_STG.pdf?sequence=1&isAllowed=y (on file with Columbia Business Law Review).

²⁹ *Id.*

³⁰ See *id.* (“[The UN-created oversight system] failed to act as an independent and neutral referee with the capability to guarantee the environmental integrity of its credits.”).

streamline climate risk disclosures and enhance transparency for investors.³¹ However, the Commodity Futures Trading Commission (CFTC) plays an equally important and often overlooked role. The agency's anti-fraud authority and jurisdiction over derivatives place it at the forefront of the "now global nexus between financial markets and decarbonization efforts."³² Recently, the CFTC has begun to assert itself as a major player in the climate risk mitigation realm. Empowered by its responsibility to safeguard market participants, the agency established the Environmental Fraud Task Force,³³ issued whistleblower alerts,³⁴ and provided guidance on the listing of VCM derivatives.³⁵ These actions signaled a shift in the CFTC's priorities toward ensuring VCM participants adhere to accountability-maximizing policies. More importantly, they communicated the agency's openness to new applications of

³¹ See Madison Condon et al., *Mandating Disclosure of Climate-Related Financial Risk*, 23 N.Y.U. J. LEGIS. & PUB. POL'Y 745, 760–62. https://scholarship.law.bu.edu/cgi/viewcontent.cgi?article=3337&context=faculty_scholarship (on file with the Columbia Business Law Review).

³² Rostin Benham, Chairman, Commodity Futures Trading Comm'n, Statement of Support on the Commission's Final Guidance Regarding the Listing of Voluntary Carbon Credit Derivatives Contracts (Sep. 20, 2004), <https://www.cftc.gov/PressRoom/SpeechesTestimony/behnamstatement092024> (on file with Columbia Business Law Review).

³³ Press Release, Commodity Futures Trading Comm'n, CFTC Division of Enforcement Creates Two New Task Forces (June 23, 2023), <https://www.cftc.gov/PressRoom/PressReleases/8736-23> (on file with Columbia Business Law Review).

³⁴ Press Release, Commodity Futures Trading Comm'n, CFTC Whistleblower Office Issues Alert Seeking Tips Relating to Carbon Markets Misconduct (June 20, 2023), <https://www.cftc.gov/PressRoom/PressReleases/8723-23> (on file with Columbia Business Law Review).

³⁵ Press Release, Commodity Futures Trading Comm'n, CFTC Approves Final Guidance Regarding the Listing of Voluntary Carbon Credit Derivative Contracts (Sep. 20, 2024), <https://www.cftc.gov/PressRoom/PressReleases/8969-24> (on file with the Columbia Business Law Review). While this guidance has since been rescinded, it shows the CFTC's ability to regulate VCMs, even if the desire to do so may change with a given administration. See Press Release, Commodity Futures Trading Comm'n, CFTC Withdraws Guidance Regarding Listing Voluntary Carbon Credit Derivative Contracts (Sep. 10, 2025), <https://www.cftc.gov/PressRoom/PressReleases/9119-25> (on file with Columbia Business Law Review).

its general authority to conduct investigations and undertake fact-finding.³⁶

Although it was an essential step (when still in effect) to eliminating carbon credit-related fraud, the CFTC's most recent guidance did not go far enough. During the drafting process, policymakers called upon the CFTC to reach beyond carbon credit-based derivatives and regulate carbon credits.³⁷ Instead, the CFTC largely restated and encouraged compliance with the carbon accounting best practices articulated by the Integrity Council for the Voluntary Carbon Market (ICVCM).³⁸ There are two major problems with this approach. First, the guidance was too deferential to be effective. In delegating standard-making authority to the ICVCM, the CFTC missed an opportunity to redefine the breadth of its anti-fraud mandate.³⁹ Second, existing protocols lack the infrastructure needed to ensure against fraudulent practices.⁴⁰ Absent assurances that inadequate protocols will be revamped to ensure credit legitimacy, the VCM's potential to produce equitable and effective climate benefits will likely remain untapped.

³⁶ *Division of Enforcement*, COMMODITY FUTURES TRADING COMM'N, <https://www.cftc.gov/About/CFTCOrganization/DOE> (on file with Columbia Business Law Review) (last visited Feb. 15, 2025).

³⁷ See Letter from Cory Booker et al. to Rostin Behnam, Chair, Commodity Futures Trading Comm'n (Oct. 13, 2022), https://www.booker.senate.gov/imo/media/doc/matsui_comment_letter_on_cftc_carbon_markets_guidance.pdf (on file with Columbia Business Law Review).

³⁸ Joseph Winters, *A Federal Attempt to Foster 'High-Integrity Voluntary Carbon Markets' Falls Short, Experts Say*, GRIST (Sep. 30, 2024), <https://grist.org/regulation/cftc-guidance-carbon-credit-offsets-derivatives/> [<https://perma.cc/PV4V-L6UV>] ("These best practices involve transparent calculations of greenhouse gas emissions, third-party verification, and reporting on whether credits represent emissions reductions that would not have otherwise taken place.").

³⁹ See Erin Shortell, Op-Ed., *Before Anyone Gets Too Excited about the CFTC Guidance on Carbon Credit Derivatives . . .*, MEDIUM: POL'Y INTEGRITY INSIGHTS (Sep. 25, 2024), <https://medium.com/policy-integrity-blog/before-anyone-gets-too-excited-about-the-cftc-guidance-on-carbon-credit-derivatives-46ea911d12a3> (on file with Columbia Business Law Review).

⁴⁰ Press Release, Clean Air Task Force, CFTC Takes Step to Improve Carbon Markets, but Major Gaps Remain (Sep. 20, 2024), <https://www.catf.us/2024/09/cftc-takes-step-improve-carbon-markets-major-gaps-remain/> [<https://perma.cc/WN5J-ENQ4>].

The CFTC's release of its final guidance on the trading of carbon derivatives arrived at an inflection point for the voluntary market. Whether to invest in the VCM will remain a choice that is informed by perceptions of market integrity. Moving forward, guidance that clarifies responsibilities and structures transactions can raise the bar for carbon credit quality—a critical predictor of investor confidence.⁴¹ By designating itself the primary overseer of the VCM, the CFTC can spearhead the enactment of a VCM framework that confronts doubts and delivers verifiable environmental benefits. Given that a mere sixteen percent of climate financing needs are presently being satisfied, optimizing all available mechanisms for channeling funds into impactful initiatives is imperative.⁴²

The answer to the question of how best to promote climate risk resilience through strategic regulation has seemingly evaded VCM stakeholders. Nonetheless, the SEC's climate-related disclosure initiatives and the CFTC's risk mitigation ambitions elucidate a common goal: prioritizing climate and environmental, social, and corporate governance (ESG) policy for the foreseeable future. The time is ripe for the CFTC to adapt its capabilities to fulfill its statutory mandate. By calibrating its efforts to regulate derivatives markets with global initiatives to promote climate mitigation and decarbonization, the CFTC can expedite the realization of sustainable outcomes in the financing and lending markets.

The CFTC should adopt a proactive regulatory approach to carbon credits that borrows from its approach to regulating virtual currencies. Heeding lessons learned from digital currencies, the

⁴¹ Alex Rau, Marc Hafstead & Matt Fleck, *Verification Standards for Carbon Offsets: Breaking Down the New Proposed Guidance*, RESOURCES FOR THE FUTURE (Feb. 2, 2024), <https://www.resources.org/common-resources/verification-standards-for-carbon-offsets-breaking-down-the-new-proposed-guidance/> [<https://perma.cc/FB32-GVAA>] (“Well-designed futures contracts, which specify clear requirements and transparent procedures for delivery, could help promote the confidence of corporate buyers in using these contracts to procure high-quality offsets for their climate commitments.”).

⁴² Press Release, The Rockefeller Foundation, New Rockefeller Foundation and BCG Research Reveals Size of Gap in Climate Finance (Nov. 24, 2022), <https://www.rockefellerfoundation.org/news/new-rockefeller-foundation-and-bcg-research-reveals-size-of-gap-in-climate-finance/> [<https://perma.cc/7F9G-MB44>].

CFTC should (1) lean on its anti-fraud mandate to redefine the scope of its enforcement powers; and (2) champion the implementation of clear standards for climate-related financial products. Through this two-pronged approach, the CFTC can enhance the financial system's ability to manage climate risk while complementing broader ESG initiatives.

This Note proceeds as follows. Part I explores both the promise and limitations of the VCM, analyzing how fragmentation and opacity have hindered its development and contributed to pervasive fraud. After acknowledging gaps in the current VCM framework, Part II details the CFTC's anti-fraud mandate and advocates for the agency to assert jurisdiction over the spot market for VCCs. This Part catalogs the inadequacies of the CFTC's most recent VCM-related guidance and analogizes to a type of intangible commodity recently drawn into the CFTC's regulatory ambit—virtual currencies. In so doing, it seeks to define VCCs as commodities whose trading may trigger CFTC oversight. Part III proposes a comprehensive approach to VCM regulation that builds upon the CFTC's model for the responsible regulation of virtual currencies. This approach blends consumer-facing initiatives, heightened surveillance, standardized requirements, strategic enforcement actions, and inter-agency coordination to maximize the VCM's potential as a tool for climate change mitigation.

I. EXPLORING THE POTENTIAL AND SHORTCOMINGS OF THE VCM

The attractiveness of voluntary emissions programs relative to their mandatory counterparts stems from their ability to achieve well-defined climate goals at considerably lower costs.⁴³ Market efficiency is inextricably linked to the effective functioning of VCMs, which must function as a forum within which all participants contemplating investment in carbon credits can freely transact.⁴⁴ In its Report on the Oversight of Existing and Prospective Carbon Markets, the CFTC identified access to

⁴³ THOMAS TIETENBERG, EMISSIONS TRADING: PRINCIPLES AND PRACTICE 6–7 (2d. ed 2006).

⁴⁴ See INT'L CARBON ACTION P'SHIP, CARBON MARKET OVERSIGHT PRIMER 5 (2013), https://icapcarbonaction.com/system/files/document/carbon_market_oversight_primer_web.pdf [https://perma.cc/5YDT-6PZK].

“transparent and timely information about current and future market clearing prices associated with meeting the aggregate environmental goals” as a condition for its success.⁴⁵ To the extent that the VCM satisfies this condition, VCCs deemed credible can assist in mitigating climate change. However, the cumulative volume of carbon credits traded on designated contract markets (DCMs) and regulated futures exchanges (in both compliance and voluntary markets) represents less than ten percent of issuances or retirements in the VCM—a reality attributable to the market’s heterogeneity.⁴⁶ While a differentiated market can provide incentives to scale up high-quality projects, sifting through a diverse supply of VCCs is a cumbersome task from which potential buyers might shy away.⁴⁷

A thriving VCM can deliver the tools needed to fight global warming.⁴⁸ Carbon dioxide removals are crucial to tackling hard-to-abate emissions, yet projects designed to effectuate such removals are costly.⁴⁹ The VCM turns to companies confronted with demands from the public and shareholders to address climate change, particularly those whose reliance on carbon-intensive activities is substantial, to proffer the requisite funding.⁵⁰ Its

⁴⁵ INTERAGENCY WORKING GRP. FOR THE STUDY ON OVERSIGHT OF CARBON MKTS., REPORT OF THE OVERSIGHT OF EXISTING AND PROSPECTIVE CARBON MARKETS 7 (2011), https://www.cftc.gov/sites/default/files/idc/groups/public/@swaps/documents/file/dfstudy_carbon_011811.pdf (on file with Columbia Business Law Review).

⁴⁶ Rau et. al, *supra* note 41.

⁴⁷ See Axel Michaelowa, *Fragmentation of International Climate Policy: Doom or Boon for Carbon Markets?*, in PROGRESSING TOWARDS POST-2012 CARBON MKTS. 13, 14–16 (2011).

⁴⁸ See *The Voluntary Carbon Market Explained*, THE INTEGRITY COUNCIL FOR THE VOLUNTARY CARBON MKT., <https://icvcm.org/knowledge-resources/voluntary-carbon-market-explained/> [https://perma.cc/DJ4X-MYFC] (last visited May 15, 2026) (“Mobilising [sic] private capital is critical to channel investment towards the economic transformation needed to limit warming to 1.5°C.”).

⁴⁹ Battocletti et al., *supra* note 15, at 526.

⁵⁰ See Josh Gabbatiss, *Analysis: How Some of the World’s Largest Companies Rely on Carbon Offsets to ‘Reach Net-Zero’*, CARBON BRIEF (Sep. 27, 2023), <https://interactive.carbonbrief.org/carbon-offsets-2023/companies.html> [https://perma.cc/JWS5-331T].

operation as a “pre-compliance market”⁵¹ appeals to those not yet ready to make the legal obligations that arise under mandatory schemes.⁵² By channeling capital into the countries hit hardest by climate events, the VCM can reverse carbon-intensive development patterns and foster progress on social justice initiatives.⁵³ Moreover, the VCM’s internalization of externalities via its payment structure is intended to ensure that economically disadvantaged communities do not shoulder the financial burden associated with realizing environmental benefits.⁵⁴

A. *Implications of Self-Regulation*

In theory, the VCM maximizes resource allocation by aligning supply with demand. There exists an abundance of carbon projects seeking finance, and both large and small companies present as active buyers of carbon credits.⁵⁵ Nevertheless, the VCM suffers from internal deficiencies that could jeopardize its ability to mitigate climate change, many which flow from the diverse standards established by standard-setting organizations.⁵⁶ Four registries dominate the VCM: Verra (VCS), Gold Standard (GS), Climate Action Reserve (CAR), and American Carbon Registry

⁵¹ Nasim Pour & Leila Toplic, *Why the Voluntary Carbon Market Is Key to Scaling Carbon Dioxide Removal and Delivering Net-Zero*, WORLD ECON. F. (Sep. 6, 2024), <https://www.weforum.org/stories/2024/09/voluntary-carbon-market-carbon-dioxide-removal-net-zero/> [https://perma.cc/6YQE-DDCV].

⁵² See Nicolas Kreibich & Lukas Hermwille, *Caught in Between: Credibility & Feasibility of the Voluntary Carbon Market Post-2020*, 21 CLIMATE POL’Y 939, 939–42 (2021).

⁵³ CHARLOTTE STRECK, VCM GLOB. DIALOGUE, THE VOLUNTARY CARBON MARKET AS A CATALYST OF CLIMATE AMBITION IN DEVELOPING COUNTRIES 4 (2021), https://vcm-gd.org/wp-content/uploads/2024/01/VCM_Consolidated_final.pdf [https://perma.cc/M4ZD-LLDE].

⁵⁴ Matthias Honegger et al., *Who Is Paying for Carbon Dioxide Removal? Designing Policy Instruments for Mobilizing Negative Emissions Technologies*, 3 FRONTIERS CLIMATE, June 2021, at 1–2.

⁵⁵ Adrian Rimmer, *Infrastructure, Integrity and Innovation: How to Bring the Voluntary Carbon Market to Scale*, LSEG INSIGHTS (June 5, 2024), <https://www.lseg.com/en/insights/infrastructure-integrity-innovation-how-to-bring-voluntary-carbon-market-to-scale> [https://perma.cc/R8U7-FYJA].

⁵⁶ See Rebecca Joy Howard et al., *Unraveling the Notion of “Fair Carbon”: Key Challenges for Standards Development*, 70 WORLD DEV. 343, 343–56 (2015).

(ACR).⁵⁷ While these registries share the fundamental goal of certifying high-quality carbon credits, they differ in their approaches to key concepts, methodological requirements, and project evaluation criteria.⁵⁸ Depending on the MRV processes employed, the amount of carbon sequestration⁵⁹ that an individual project can permissibly claim as an offset will vary.⁶⁰ Put differently, VCCs represent different offset values across the registries. These differences breed market inefficiencies and credibility issues, against which third-party verifiers cannot completely insure.

These divergences begin with foundational definitions. The four standards have not reached a consensus on how best to measure “additionality.”⁶¹ To be deemed additional, a project must have an effect on emissions reductions that exceeds the baseline scenario—i.e., but for the sale of carbon credits, the reduction would not have been achieved.⁶² Both VCS and GS evaluate individual projects’ characteristics on a case-by-case basis, yet their analyses do not converge on common criteria.⁶³ VCS endeavors to

⁵⁷ INT’L SWAPS & DERIVATIVES ASS’N, VOLUNTARY CARBON MARKETS: ANALYSIS OF REGULATORY OVERSIGHT IN THE US 26 (2022), <https://www.isda.org/a/93WgE/Voluntary-Carbon-Markets-Analysis-of-Regulatory-Oversight-in-the-US.pdf> [https://perma.cc/6BJF-3FLK].

⁵⁸ See Ivy S. So et al., *Voluntary Registry Offsets Database*, GOLDMAN SCH. OF PUB. POL’Y: BERKELEY CARBON TRADING PROJECT (2024), <https://gspp.berkeley.edu/research-and-impact/centers/cepp/projects/berkeley-carbon-trading-project/offsets-database> [https://perma.cc/9VLR-T8Z6].

⁵⁹ *Carbon Sequestration*, BRITANNICA, <https://www.britannica.com/technology/carbon-sequestration> (on file with Columbia Business Law Review) (last visited Jan. 16, 2025).

⁶⁰ CHELSEA ELYSE ET AL., FOREST CARBON CREDITS: A GUIDEBOOK TO SELLING YOUR CREDITS ON THE CARBON MARKET 5–6 (2018), <https://www.bu.edu/rccp/files/2009/11/Guidebook.pdf> (on file with Columbia Business Law Review).

⁶¹ See Annalise Downey, *Additionality Explained*, SYLVERA, <https://www.sylvera.com/blog/additionality-carbon-offsets> [https://perma.cc/T4WC-PX44] (last visited Feb. 1, 2025) (describing the difficulty of measuring additionality).

⁶² See *id.*

⁶³ See Verra *VCS vs. Gold Standard: Choosing the Right Carbon Offset Standard*, CARBONIBUS (Aug. 20, 2023), <https://www.carbonibus.org/post/verra-vcs-vs-gold-standard-choosing-the-right-carbon-offset-standard> [https://perma.cc/HU53-XUFY] (“Verra VCS focuses on projects that reduce greenhouse gas emissions, while Gold Standard

assess a project's feasibility without carbon finance, taking into account viable alternatives, barriers to investment and implementation, and common industry practices.⁶⁴ Conversely, GS equates demonstration of financial additionality and ongoing financial need with provision of a qualitative narrative containing mere references to project finances.⁶⁵ GS's "deemed additionality" provision allows certain projects to bypass extensive assessments if they meet predefined criteria; VCS offers no such carveout.⁶⁶ ACR borrows from VCS's barriers and common practice language, though it embeds in its methodology an additional criterion—that the project must "exceed currently effective and enforced laws and regulation."⁶⁷ CAR distinguishes itself from VCS and GS, which champion the "project-specific" approach, by utilizing standardized performance benchmarks that establish specific eligibility thresholds for each project type.⁶⁸ Although successful in removing subjectivity from additionality assessments, CAR has adopted a smaller number of methodologies (several of which are for the same project type), constraining its application to new settings.⁶⁹

Permanence requirements and risk management strategies also reveal stark differences among the registries. Whether a project

emphasizes projects that not only reduce emissions but also deliver additional benefits to local communities and the environment.”).

⁶⁴ VERIFIED CARBON STANDARD, VT0008: ADDITIONALITY ASSESSMENT 7 (2024), <https://verra.org/wp-content/uploads/2024/10/VT0008-Additionality-Assessment-v1.0.pdf> [https://perma.cc/NP3P-8U2D].

⁶⁵ GOLD STANDARD FOR THE GLOBAL GOALS, REQUIREMENTS FOR ADDITIONALITY DEMONSTRATION 15 (2024), https://goldstandard.cdn.prismic.io/goldstandard/Zx-tWq8jQArTz5-F_StandardAdditionalitydemonstrationPublicConsultation.pdf [https://perma.cc/SD5Y-NTV2].

⁶⁶ *Id.* at 6.

⁶⁷ ACR, THE ACR STANDARD: REQUIREMENTS AND SPECIFICATIONS FOR THE QUANTIFICATION, MONITORING, REPORTING, VERIFICATION, AND REGISTRATION OF PROJECT-BASED GHG EMISSIONS REDUCTIONS AND REMOVALS 24 (2023), <https://acrcarbon.org/wp-content/uploads/2023/10/ACR-Standard-v8.0.pdf> [https://perma.cc/PD29-ZQVY].

⁶⁸ *How Crediting Programs Address Additionality*, CARBON OFFSET GUIDE, <https://offsetguide.org/high-quality-offsets/additionality/high-quality-offsets-additionality-how-carbon-offset-programs-address-additionality/> [https://perma.cc/NX52-GZW2] (last visited Dec. 30, 2024).

⁶⁹ *See id.*

is considered “permanent” hinges on standard-setters’ confidence that it will keep the carbon it removes from the atmosphere sequestered.⁷⁰ ACR defines permanence as the maintenance of carbon sequestration for at least one hundred years, distinguishing between unavoidable and avoidable reversals by assigning liability to project developers for the latter. CAR establishes permanence through extended commitment periods approaching one hundred years, though critiques regarding the strength of its risk management measures abound.⁷¹ VCS supplements its more moderate approach to permanence, which requires only forty years of sustained emission avoidance or removal, with a risk-based buffer pool to insure against potential reversals.⁷² While specific monitoring periods are not detailed in its measurement tools, GS also mandates the use of risk assessments and buffer reserves to mitigate potential carbon reversals.⁷³ Rather than eliminating barriers to participation in the VCM, this definitional variation increases uncertainty.⁷⁴ Buyers’ and sellers’ adherence to different standards precludes their development of shared understanding, elevating the transaction costs associated with VCC exchange. These costs delay project implementation and reduce the number of projects ultimately developed—a highly inefficient outcome.⁷⁵

⁷⁰ *Permanence in Carbon Credits: Why It Matters, and How to Evaluate It*, SYLVERA <https://www.sylvera.com/blog/permanence-carbon-credits> [https://perma.cc/YA83-RWPT] (last visited Feb. 1, 2025).

⁷¹ Jane Zelikova et al., *A Buyer’s Guide to Soil Carbon Offsets*, CARBONPLAN (July 15, 2021), <https://carbonplan.org/research/soil-protocols-explainer> [https://perma.cc/NL6B-Z262].

⁷² VERIFIED CARBON STANDARD, AFOLU NON-PERMANENCE RISK TOOL 11, 25–26 (2024), <https://verra.org/wp-content/uploads/2023/10/AFOLU-Non-Permanence-Risk-Tool-v4.2-last-updated-May-3-2024.pdf> [https://perma.cc/VLM8-YUM5].

⁷³ THE GOLD STANDARD, TRANSITION GUIDELINE FOR PROJECTS CERTIFIED UNDER CDM A/R AND JI A/R 6 (2015), <https://globalgoals.goldstandard.org/standards/PRE-GS4GG-AF/ar-guidelines-transition-cdm-ar-ji-ar.pdf> [https://perma.cc/2JGW-BUT2].

⁷⁴ CIRCULAR ACTION HUB, CIRCULAR CREDITS MECHANISM GUIDANCE NOTES: ADDITIONALITY AND POSITIVE LISTS 5 (2020), https://www.circularactionhub.org/wp-content/uploads/2021/10/Circular_Credits_Mechanism_Additionality_and_Positive_Lists_Guidance_Note_2.pdf [https://perma.cc/63XL-WFAX].

⁷⁵ *Id.* at 6; see also Richard A. Posner, *Nobel Laureate: Ronald Coase and Methodology*, 7 J. OF ECON. PERSPECTIVES 195, 195–96 (1993) (“The major

B. *The Risk of Fraud*

Independent studies and media investigations reveal widespread fraud in environmental commodity markets, particularly in the spot markets for VCCs. Research documenting over-crediting has found that forest conservation projects routinely inflate baseline deforestation rates, overstate carbon reductions by up to thirty percent, and understate emissions leakage despite clear displacement risks.⁷⁶ Third-party auditors frequently fail to correct these distortions, approving dubious claims about underlying risks and leakage.⁷⁷ Investigative reports corroborate these concerns, shedding light on cases in which organizations sold illegitimate credits to combat exaggerated or nonexistent deforestation threats.⁷⁸ When confronted with evidence that the environmental outcomes they sought to deter were unlikely to manifest, developers responded by citing their compliance with guidelines established by one of the four dominant registries.⁷⁹ But despite developers' claims of regulatory compliance, allegations that flawed methodologies were used to calculate baseline deforestation rates have prompted investors to withdraw from projects, hindering efforts to bolster the VCM's credibility.⁸⁰

As the preceding discussion suggests, increasingly large quantities of VCCs fail to reflect genuine reductions or removals.

significance of the theorem has been to focus economists' attention on a neglected but very important facet of the economic system, the costs of market transacting.”).

⁷⁶ BERKELEY CARBON TRADING PROJECT, QUALITY ASSESSMENT OF REDD+ CARBON CREDIT PROJECTS 2–4, 8 (2023), <https://gspp.berkeley.edu/assets/uploads/page/Quality-Assessment-of-REDD+-Carbon-Crediting.pdf> [<https://perma.cc/2QE4-CW34>].

⁷⁷ *Id.* at 7.

⁷⁸ See, e.g., Ben Elgin, *These Trees Are Not What They Seem*, BLOOMBERG (Dec. 19, 2020), <https://www.maforests.org/TNCCarbonCreditScam.pdf> [<https://perma.cc/7V4E-CM29>].

⁷⁹ *Id.*; see, e.g., 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> [<https://perma.cc/YP4M-V6W4>].

⁸⁰ See, e.g., Jennifer L, *South Pole Cuts Ties with Zimbabwe Carbon Offset Project Kariba*, CARBON CREDITS (Nov. 2, 2023), <https://carboncredits.com/south-pole-cuts-ties-with-zimbabwe-carbon-offset-project-kariba/> [<https://perma.cc/XVJ3-47TG>].

The relative ease with which these offsets pass through screening mechanisms evinces a fundamental breakdown of governance. These market failures do not manifest solely in the forest-management realm and instead reflect broader structural problems. For example, several industrial gas abatement projects exploited a lack of oversight under the Kyoto Protocol's Clean Development Mechanism by intentionally generating excess GHG to increase credit sales.⁸¹ The United Nations' suspension of several third-party verifiers for negligence or fraud shines additional light on the vulnerabilities inherent in self-regulated systems.⁸² Given the pervasiveness of over-crediting, fueled by buyers' tendency to opt for the lowest-cost credits, "[w]e can't count on the offset market to be fixed or be trustworthy."⁸³ Addressing this deep-seated mistrust requires a more robust regulatory regime.

C. *Obstacles to Scaling the VCM*

The reality on the ground carries significant risks for market integrity. At the heart of these risks lie two primary culprits: fragmentation and opacity. In the absence of standardized regulations, the diverse methodologies currently used to calculate emissions reductions are susceptible to manipulation. Without safeguards ensuring that MRV processes are insulated from bad faith actors, undeserving projects will secure the requisite approvals, further denigrating the fungibility of VCCs.

1. *Fragmentation*

Differences in MRV requirements have contributed to a fragmented market. Inconsistencies in methodologies for calculating carbon emissions and issuing credits call into question

⁸¹ MICHAEL GILLENWATER & STEVEN SERES, THE CLEAN DEVELOPMENT PROGRAM: A REVIEW OF THE FIRST INTERNATIONAL OFFSET PROGRAM 32 (2011), <https://www.c2es.org/wp-content/uploads/2011/03/clean-development-mechanism-review-of-first-international-offset-program.pdf> [<https://perma.cc/NBR5-9QKB>].

⁸² Michael Szabo, *U.N. Panel Suspends Two More Carbon Emissions Auditors*, REUTERS (Oct. 9, 2007), <https://www.reuters.com/article/idUSTRE62P5E4/> [<https://perma.cc/S56V-YQZ4>].

⁸³ Martha Muir, *Sylvera Aims to Bring More Rigour to Carbon Offset Market*, FIN. TIMES (Nov. 15, 2023), <https://www.ft.com/content/43e32615-5681-417f-b513-7dd08532a670> [<https://perma.cc/Y83J-UUB5>].

the equivalence of credits, complicating trading across systems.⁸⁴ As previously noted, buyers incur increased transaction costs as they navigate the complex and often conflicting requirements of multiple standards.⁸⁵ Allowing project developers to self-select from the myriad approaches to certification increases the likelihood that defective credits will survive muster and evade detection by buyers, who lack the means to independently ensure projects' credibility.⁸⁶

Fragmentation also undermines attempts to assess the fair value of a VCC, as differing methodologies mandate varying levels of rigor and accord different weights to factors informing credit price.⁸⁷ Carbon registries are not required to exclusively issue VCCs with complete certainty about permanent sequestration, despite persistent concerns about the longevity of carbon projects.⁸⁸ Where registries can validate and distribute VCCs based on forecasted outcomes and blanket statements about presumed efficiency, projects with suspect goals will fly under the radar.⁸⁹ In the absence

⁸⁴ Wim Carlton, Jens Friis Lund & Kate Dooley, *Undoing Equivalence: Rethinking Carbon Accounting for Just Carbon Removal*, 3 FRONTIERS IN CLIMATE, 1, 2 (2021).

⁸⁵ CIRCULAR ACTION HUB, *supra* note 74, at 4–5.

⁸⁶ Nicole Franki, Note, *Regulation of the Voluntary Carbon Offset Market: Shifting the Burden of Climate Change Mitigation from Individual to Collective Action*, 48 COLUM. J. OF ENV'T L. 177, 197 (2022) (“Consumers cannot independently verify whether a carbon offset truly reduces the promised amount of GHG emissions.”).

⁸⁷ ERIC NOWAK ET AL., VOLUNTARY CARBON MARKETS: A SIX WHITE PAPER 3, 12 (2022), <https://www.six-group.com/dam/download/company/report/whitepapers/six-whitepaper-voluntary-carbon-markets-en.pdf> [<https://perma.cc/SC8Z-GMR3>].

⁸⁸ Gavin Mair, *Integrity Council's Rulebook Sets Minimum Threshold Instead of High Bar for Carbon Markets*, CARBON MKT. WATCH (July 27, 2023), <https://carbonmarketwatch.org/2023/07/27/integrity-councils-rulebook-sets-minimum-threshold-instead-of-high-bar-for-carbon-markets/> [<https://perma.cc/4WT9-KUHJ>].

⁸⁹ Battocletti et al., *supra* note 15, at 554 (“Validation and monitoring of offsets entail a very complex process for which there is a shortage of skills . . . It appears unreasonable to expect that firms engaged in completely different activities have the in-house skills to assess the quality of offsets.”).

of standardized procedures, some credits will inevitably lack sufficient quality assurance.⁹⁰

The fragmentation and lack of standardization in the VCM pose legal and operational challenges that underscore the need for a universal carbon calculation standard. The current regulatory landscape is characterized by a decentralized framework of oversight, with regulatory authority spanning federal agencies and multiple jurisdictions.⁹¹ This creates considerable uncertainty, particularly in terms of potential civil liability. Although buyers may look to both state and federal consumer protection laws for legal recourse,⁹² such remedies are difficult to pursue when litigators are unable to point to a single, golden standard.⁹³ A universal carbon calculation standard would obviate these challenges by consolidating the MRV methodologies used to assess VCC credibility.⁹⁴ Clarifying the criteria to which projects must adhere will streamline the overcrowded VCM space, increasing regulators' bandwidth to identify and prosecute fraud.

2. *Opacity*

The VCM also suffers from a pervasive lack of transparency. This problem is tethered to the fragmentation issue, as carbon registries operate without mandatory disclosure requirements governing their MRV methodologies.⁹⁵ While some registries require verification by accredited auditors or public entities, others do not mandate verification at all.⁹⁶ The absence of standardized reporting requirements permits registries to use

⁹⁰ Eduard Merger & Till Pistorius, *Effectiveness and Legitimacy of Forest Carbon Standards in the OTC Voluntary Carbon Market*, 6 CARBON BALANCE & MGMT., no. 4, 2011, at 3.

⁹¹ U.S. GOV'T ACCOUNTABILITY OFF., GAO-08-1048, CARBON OFFSETS 2 (2008) ("The federal government plays a small role in the voluntary market, and no single regulatory body has oversight responsibilities.").

⁹² Trevor Salter, Note, *Carbon Cowboys: How to Rein in Deceptive Sellers in the Carbon Offset Market*, 1 GEO. WASH. J. ENERGY & ENV'T L. 59, 66 (2010).

⁹³ Perrin Cooke, Note, *Green Guide Gaps: Expanding FTC Authority Over Low-Carbon Marketing Claims*, 39 COLUM. J. ENV'T L. 105, 139 (2014).

⁹⁴ Salter, *supra* note 92, at 62.

⁹⁵ Junghoon Woo et al., *Applying Blockchain Technology for Building Energy Performance Measurement, Reporting, and Verification (MRV) and the Carbon Credit Market: A Review of the Literature*, 205 BLDG. & ENV'T, Nov. 2021, at 6–10 (2021).

⁹⁶ MICHAELOWA ET AL., *supra* note 22, at 4.

conflicting MRV processes from which inconsistencies flow, compounding the challenges associated with proper due diligence.⁹⁷ Limited access to project-level data and performance metrics only widens the transparency gap. Allowing standard-setters to keep their internal processes for verifying credits confidential breeds information asymmetries,⁹⁸ which allow substandard or fraudulent credits—so called “hot air” credits—to enter the market.⁹⁹ The failure to provide information that is digestible by the general public impacts the verification of additionality and permanence claims—two crucial determinants of credit quality.¹⁰⁰ In other words, the opacity stemming from nondisclosure leaves buyers ill-equipped to conduct meaningful comparisons among VCCs.

Transparency deficiencies give rise to market-distorting consequences. Buyers’ inability to distinguish between high- and low-quality credits creates a “lemons problem,” which leads to reduced market confidence and suppressed demand.¹⁰¹ Failure to incorporate transparency-boosting mechanisms into the existing governance framework has created an environment conducive to deception, as evidenced by investigations revealing the issuance of VCCs for non-additional forest carbon projects.¹⁰² Well-documented cases of fraud lend support to the argument that the VCM operates solely to “[allow] polluting firms to avoid making changes to their business models.”¹⁰³ Without clear MRV approaches, companies seeking to make legitimate carbon neutrality claims will struggle to determine how to accurately represent the impact of their VCC purchases.

⁹⁷ *Id.*

⁹⁸ Gary Marchant, Zachary Cooper & Philip J. Gough-Stone VI, *Bringing Technological Transparency to Tenebrous Markets: The Case for Using Blockchain to Validate Carbon Credit Trading Markets*, 62 NAT. RES. J. 159, 167 (2022).

⁹⁹ Katherine Watts, *Avoiding Hot Air in the 2015 Paris Agreement*, CARBON MARKET WATCH (Nov. 2015), https://carbonmarketwatch.org/wp-content/uploads/2015/11/International-hot-air_final.pdf [<https://perma.cc/796Z-LS6R>].

¹⁰⁰ Marchant et al., *supra* note 98, at 170.

¹⁰¹ See Winand Emons, *Warranties, Moral Hazard, and the Lemons Problem*, 46 J. ECON. THEORY 16, 16–33 (1988).

¹⁰² Grayson Badgley et al., *Systematic Over-Crediting in California’s Forest Carbon Offsets Program*, 28 GLOB. CHANGE BIOLOGY 1433, 1435–37 (2021).

¹⁰³ Philippe Delacote et al., *Strong Transparency Required for Carbon Credit Mechanisms*, 7 NATURE SUSTAINABILITY 706, 706 (2024).

The Federal Trade Commission's (FTC) Green Guides, which apprise marketers of environmental marketing claims that would be considered unfair or deceptive under the Federal Trade Commission Act, provide some guidance on environmental marketing claims, though they lack teeth.¹⁰⁴ There exists no definitive federal standard establishing what constitutes "competent and reliable scientific and accounting methods,"¹⁰⁵ leaving good faith actors unable to differentiate themselves.¹⁰⁶ This regulatory uncertainty, combined with the broader opacity of carbon credit markets, creates a chilling effect on well-intentioned actors who may fear unintended noncompliance or public backlash. As a result, the very entities that could bring credibility to the VCM may refrain from engaging.

Fragmentation and opacity combine to create an urgent need for standardized regulations and greater accountability in the VCM. Daunting as the problems flowing from a lack of consensus may be, the benefits that the VCM can generate justify a reworking of the existing regime. Reflection on these shortcomings should consider which actors have skin in the game. On the one hand, market participants lack the incentive to invest time and resources in detecting low-quality credits.¹⁰⁷ Conversely, market regulators have a vested interest in overcoming fragmentation and maximizing

¹⁰⁴ 16 C.F.R. § 260.5 (2025); see *The Future of Green Marketing: Anticipated Changes to the FTC's Green Guides*, Latham & Watkins LLP (June 27, 2023), <https://www.lw.com/admin/upload/SiteAttachments/The-Future-of-Green-Marketing-Anticipated-Changes-to-the-FTCs-Green-Guides.pdf> [<https://perma.cc/98YX-NJ5Y>] (noting that the FTC may be "under pressure to provide additional guidance" on claims relating to carbon offsets and climate change due to the "large differences in transparency" between different carbon offset marketing strategies).

¹⁰⁵ See 16 C.F.R. § 260.5 (2025).

¹⁰⁶ MICHAELOWA ET AL., *supra* note 22, at 14–16.

¹⁰⁷ FRÉDÉRIC HACHE, 50 SHADES OF GREEN: THE RISE OF NATURAL CAPITAL MARKETS AND SUSTAINABLE FINANCE 43 (2019), <https://greenfinanceobservatory.org/wp-content/uploads/2019/03/50-shades-carbon-final.pdf> [<https://perma.cc/2PR6-3HF7>] ("As investors find themselves unable to calculate additionality and distinguish adequately between good and bad offset projects, they are implicitly incentivised to arbitrage the rules instead and favour the cheapest-to-deliver projects.").

transparency.¹⁰⁸ Tapping a federal agency to develop streamlined MRV procedures would facilitate the identification and speedy elimination of low-quality credits, paving the way for market integrity.

D. *Regulatory Gaps*

Cracking down on manipulation in the VCM dovetails neatly with government-wide efforts to advance ESG objectives.¹⁰⁹ In 2021, then-President Biden called upon federal agencies to “incorporate climate-related financial risk into regulatory and supervisory practices” through multi-stakeholder initiatives.¹¹⁰ New rules promulgated by regulators to promote high-integrity markets embody the spirit of the administration’s “Principals for Responsible Participation in VCMs.” For instance, the SEC adopted final rules in March 2024 to foster integrity and maximize transparency on the demand side of the VCM.¹¹¹ Through these rules, the SEC seeks to provide investors with consistent and comparable data regarding public companies’ climate risks, emissions, and reliance on carbon offsets.¹¹²

¹⁰⁸ INT’L ORG. OF SECS. COMM’NS, TRANSPARENCY AND MARKET FRAGMENTATION 4–5 (2001), <https://www.iosco.org/library/pubdocs/pdf/ioscopd124.pdf> (on file with Columbia Business Law Review).

¹⁰⁹ Jayni Hein, *Biden Administration Publishes Voluntary Carbon Markets Joint Policy Statement and Principles*, COVINGTON: INSIDE ENERGY & ENVIRONMENT (May 31, 2024), <https://www.insideenergyandenvironment.com/2024/05/biden-administration-publishes-voluntary-carbon-markets-joint-policy-statement-and-principles/> [https://perma.cc/JBL5-N8ZE] (“A key takeaway is that ‘clearer rules of the road would enhance market certainty for credit buyers and businesses and individuals undertaking activities to supply this market.’”).

¹¹⁰ *Fact Sheet: President Biden to Catalyze Global Climate Action Through the Major Economics Forum on Energy and Climate*, THE AM. PRESIDENCY PROJECT (Apr. 20, 2023), <https://www.presidency.ucsb.edu/node/350021> [https://perma.cc/SMY5-LNSC].

¹¹¹ Varnika Chawla et al., *The Role of the Voluntary Carbon Market in Scaling Impact Globally - An Analysis of Recent Trends*, 9 NAT’L L. SCH. BUS. L. REV. 109, 117 (2023).

¹¹² The Enhancement and Standardization of Climate-Related Disclosures for Investors, 89 Fed. Reg. 21668, 21671–73 (Mar. 8, 2024) (to be codified at 17 C.F.R. pts. 210, 229, 230, 232, 239, 249).

Albeit central to “promoting better-informed investment, credit, and insurance underwriting decisions,”¹¹³ these rules fail to band-aid the structural flaw—the absence of uniform standards—that hampers efforts to scale the VCM. Mandating disclosure incentivizes companies to consider how their activities might interact with the environment;¹¹⁴ it does not prevent risky products like VCCs from being placed on the market. At the top of the VCM power hierarchy sit private actors with the power to develop the standards by which market participants play.¹¹⁵ Incorporating mandatory disclosure requirements into the VCM framework without accompanying standards does little to change this reality.

The SEC’s mandatory disclosure rules underscore the agency’s limited ability to demystify the complexities inherent in the VCM framework. The rules primarily target corporate transparency, leaving such issues as the standardization and market dynamics of carbon credits inadequately regulated.¹¹⁶ Transparency is one piece of the puzzle; subjecting issuers of offsets to a uniform public disclosure regime (so as to enable buyers’ informed decision-making regarding the purchase of credits) cultivates trust in the VCM only if there are clear-cut criteria for high-quality carbon offsets.¹¹⁷ Establishing new standards—upon which investors and buyers can jointly rely—that recognize an offset “as representing a verifiable and unique claim to carbon that is permanently removed

¹¹³ *Id.* at 21673.

¹¹⁴ Hillary A. Sale, *Disclosure’s Purpose*, 107 GEO. L.J. 1045, 1045–46 (2019).

¹¹⁵ INT’L SWAPS & DERIVATIVES ASS’N, *supra* note 57, at 4 (“There are no legal, regulatory or other third-party restrictions on entities setting the standards or on how the standards are set and maintained for any particular type of [carbon offset].”).

¹¹⁶ See Laura Buenaventura, Jamie Saunders, & Ben St. Laurent, *Transparency is King When Using Carbon Credits*, MORGAN STANLEY CAP. INT’L (May 28, 2024), <https://www.msci.com/research-and-insights/blog-post/transparency-is-king-when-using-carbon-credits> [<https://perma.cc/T4QB-2ZWH>] (describing the need for additional disclosures relating to project type, location, and the certification used for the carbon credits involved).

¹¹⁷ Alex Fredman & Todd Phillips, *The CFTC Should Raise Standards and Mitigate Fraud in the Carbon Offsets Market*, CTR. AM. PROGRESS (Oct. 7, 2022), <https://www.americanprogress.org/article/the-%20cftc-should-%20raise-standards-and-mitigate-fraud-in-the-carbon-offsets-market/> (on file with Columbia Business Law Review).

from the atmosphere [i.e., is permanent] and that would not have been removed absent the intention to create and sell an offset [i.e., is additional]” is crucial.¹¹⁸

As the demand for verifiable and impactful carbon reduction projects intensifies, gaps in regulatory enforcement become increasingly apparent.¹¹⁹ Nevertheless, the SEC’s foray into the climate disclosure realm reveals the importance of streamlined and specialized oversight of the VCM. So long as clear standards remain absent from the voluntary carbon marketplace, its players will lack incentives to ensure quality.¹²⁰ Hence, authority over the VCM should be vested in a single regulator with the capacity to ensure uniform standards and enforce accountability. The CFTC’s expertise in derivatives markets and fraud prevention makes clear its suitability for the job.¹²¹ By centralizing oversight under the CFTC, the government can establish credible benchmarks for offset quality and direct responsible engagement with the VCM—prerequisites for the development of a more reliable VCM structure.

II. SHIFTING THE BURDEN OF OVERSIGHT TO THE CFTC

The CFTC defends the economy against threats to its sound functioning by regulating markets in derivatives¹²²—financial contracts that “derive” their value by reference to an underlying asset.¹²³ In so doing, it strives to foster open, competitive derivatives markets that operate transparently and free of systemic risk.¹²⁴ Policing these markets enables the agency to protect the public

¹¹⁸ *Id.*

¹¹⁹ Streck, *supra* note 4, at 374.

¹²⁰ HACHE, *supra* note 107, at 33, 39.

¹²¹ *CFTC Organization*, COMMODITY FUTURES TRADING COMM’N, <https://www.cftc.gov/About/CFTCOrganization/index.html> (on file with Columbia Business Law Review) (last visited Dec. 26, 2025).

¹²² *Summary of CFTC Mission Statement, Strategic Goals & Outcomes*, COMMODITY FUTURES TRADING COMM’N, <https://www.cftc.gov/sites/default/files/reports/presbudget/2012/2012presidentsbudget0405.html> (on file with Columbia Business Law Review) (last visited Dec. 26, 2025).

¹²³ See RENA S. MILLER, CONG. RSCH. SERV., IF10117, INTRODUCTION TO FINANCIAL SERVICES: DERIVATIVES 1 (2025).

¹²⁴ *Summary of CFTC Mission Statement, Strategic Goals & Outcomes*, *supra* note 122.

from fraud, manipulation, and abusive practices” related to the sale of commodity futures, commodity options, and (more recently) swaps.¹²⁵ The CFTC derives its jurisdiction from the Commodity Exchange Act (CEA), which confers upon the agency complete regulatory control over derivatives markets.¹²⁶ Included in this grant of authority is the responsibility to register exchanges and platforms for trading in certain derivatives.¹²⁷ It bears mentioning that the CFTC generally does not have oversight authority over spot trading, as opposed to derivatives trading, in commodities.¹²⁸

A. *The CFTC’s Anti-Fraud Mandate*

Often overlooked is the breadth of the CFTC’s enforcement authority to combat fraud and manipulation, including the use of deceptive or manipulative devices, in the sale of futures, swaps, and commodities.¹²⁹ This power is considerably broader than the CFTC’s general oversight authority over derivatives, as it extends beyond derivative contracts to “any contract of sale of any *commodity* in interstate commerce”—a definition that includes VCCs so long as they qualify as commodities.¹³⁰

To insulate the commodity spot markets from fraud, the CEA grants the CFTC a sword. Section 6(b) invites the CFTC to target behaviors that cheat market players by establishing its authority to investigate fraud, manipulation, and abusive practices in commodity markets.¹³¹ Section 6(c) builds upon this grant by

¹²⁵ See *About the CFTC and Enforcement*, COMMODITY FUTURES TRADING COMMISSION WHISTLEBLOWER PROGRAM, <https://www.whistleblower.gov/aboutcftc> (last visited Feb. 14, 2025).

¹²⁶ Commodity Exchange Act of 1936, Pub. L. No. 74–675, 49 Stat. 1491 (1936) (codified as amended in scattered sections of 7 U.S.C.).

¹²⁷ *Id.*

¹²⁸ NICOLE VANATKO, CONG. RSCH. SERV., LSB10227, CFTC AND VIRTUAL CURRENCIES: NEW COURT RULINGS AND IMPLICATIONS FOR CONGRESS 1 (2018), <https://crsreports.congress.gov/product/pdf/LSB/LSB10227> [<https://perma.cc/SWA4-C66T>].

¹²⁹ 7 U.S.C. § 6b.

¹³⁰ The CEA defines interstate commerce as encompassing commerce both between and within states. Because VCCs are traded in markets across state borders, the CFTC need only prove their status as commodities to demonstrate that their exchange meets the definition of a transaction in interstate commerce. 7 U.S.C. § 1a(9).

¹³¹ 7 U.S.C. § 6b.

prohibiting the use of manipulative or deceptive devices in commodity transactions.¹³² Further, section 9 makes it unlawful “to manipulate or attempt to manipulate the price” of commodities.¹³³ Section 13, which establishes liability for individuals who procure “false or misleading or knowingly inaccurate reports” as part of fraudulent schemes, complements the aforementioned enforcement powers by clarifying the behaviors that might give rise to a finding of fraud or manipulation.¹³⁴ Together, these provisions create a formidable statutory framework enabling the CFTC to take decisive action against fraud and manipulation in both derivatives and spot markets.

The CFTC can also promulgate regulations that define actionable activities. The Dodd-Frank Wall Street Consumer and Protection Act (Dodd-Frank) augmented the CFTC’s fraud and manipulation enforcement powers under section 6(c), making it easier for the agency to prevail on claims alleging misconduct while permitting its intervention before market harm occurs.¹³⁵ Rules 180.1 and 180.2, enacted pursuant to section 753, go beyond completed schemes to explicitly address attempted fraud and manipulation.¹³⁶ In so doing, they create disincentives for behavior previously construed as carrying minimal risk and considerable reward. Rule 180.1 eliminates the requirement that fraud be directly related to a specific transaction, giving the CFTC free license to pursue virtually any conduct that bears some relation to—i.e., occurs “in connection with”—swaps, futures, or cash contracts,¹³⁷ and lowers the scienter standard to recklessness for fraud-based

¹³² See *id.* § 6c.

¹³³ *Id.* § 9.

¹³⁴ *Id.* § 13.

¹³⁵ Yoon-Young Lee & Elizabeth L. Mitchell, *The Commodity Futures Trading Commission Issues Sweeping New Rules to Prohibit Fraud and Manipulation in the Swaps, Cash, and Futures Markets*, WILMER HALE (July 28, 2011), <https://www.wilmerhale.com/en/insights/publications/the-commodity-futures-trading-commission-issues-sweeping-new-rules-to-prohibit-fraud-july-28-2011> [<https://perma.cc/J836-9LHA>].

¹³⁶ COMMODITY FUTURES TRADING COMM’N, FACT SHEET: ANTI-MANIPULATION AND ANTI-FRAUD FINAL RULES 1 (2011), https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/file/amaf_factsheet_final.pdf [<https://perma.cc/KZ67-JZVY>].

¹³⁷ Prohibition on the Employment, or Attempted Employment, of Manipulative and Deceptive Devices and Prohibition on Price Manipulation, 76 Fed. Reg. 41398, 41399 (July 14, 2011) (to be codified at 17 C.F.R. pt. 180).

manipulations.¹³⁸ Rule 180.2, in turn, explicitly prohibits indirect price manipulation and invites regulation of the previously opaque swaps markets.¹³⁹

Although it lacks regulatory authority over the spot trading of VCCs, the CFTC has enforcement authority over fraud and manipulation in the spot VCC market.¹⁴⁰ The argument that CFTC regulation of the VCM is a natural extension of the agency's anti-fraud mandate rests on three premises: markets offer opportunities to hedge financial exposure; the forward-looking nature of derivatives markets enables their provision of pricing information useful for identifying areas of accumulating risk; and the spot price of VCCs determines the prices at which derivative contracts tied to VCCs trade.¹⁴¹ Fraud and manipulation in the spot markets prevent price convergence, precluding derivatives markets from fulfilling their price discovery function.¹⁴² The suboptimal functioning of these markets implies the non-reduction of risk and, by extension, the CFTC's failure to realize its mission.¹⁴³ Thus, the potential for spot market activity to adversely impact the derivatives markets on which VCCs trade provides the CFTC a jurisdictional hook upon which to hang its case for more comprehensive supervision of the VCM.

Congressional leaders have urged the CFTC to "use its anti-fraud and anti-manipulation enforcement authorities to the fullest extent possible."¹⁴⁴ The CFTC's announcement of its plan to leverage powers conferred by Dodd-Frank to crack down on "every effort . . . to interfere with the legitimate forces of supply and

¹³⁸ *Id.*

¹³⁹ *Id.* at 41407.

¹⁴⁰ See 7 U.S.C. § 9; 17 C.F.R. § 180.1 (2025).

¹⁴¹ See Christy Goldsmith Romero, Comm'r, *Promoting Market Resilience*, COMMODITY FUTURES TRADING COMM'N (Sep. 28, 2022), <https://www.cftc.gov/PressRoom/SpeechesTestimony/romerostatement092822> [<https://perma.cc/U7C7-ENAQ>].

¹⁴² See Kristin N. Johnson, Comm'r, *Commission Guidance Regarding Listing of Voluntary Carbon Credit Derivative Contracts*, COMMODITY FUTURES TRADING COMM'N (Dec. 4, 2023), <https://www.cftc.gov/PressRoom/SpeechesTestimony/johnsonstatement120423> (on file with Columbia Business Law Review).

¹⁴³ *Summary of CFTC Mission Statement, Strategic Goals & Outcomes*, *supra* note 122.

¹⁴⁴ See Cory Booker et al., *supra* note 37.

demand in the marketplace” comports with this request.¹⁴⁵ Having flexed its regulatory muscle through recent rulemaking initiatives, the CFTC appears poised to address fraud in the spot market, within which the majority of carbon offset transactions are conducted.¹⁴⁶

B. *History of Regulation and Recent Guidance*

The CFTC’s role in ensuring financial markets’ stability and integrity is long-standing. Following the 2008 financial crisis, the agency spearheaded the implementation of reforms under Dodd-Frank.¹⁴⁷ The Act mandated enhanced oversight of over-the-counter (OTC) derivatives—namely credit default swaps, which do not trade on CFTC-regulated asset exchanges—and integrated transparency measures into OTC trading and reporting requirements.¹⁴⁸ Additionally, the CFTC’s previous exercise of limited authority over the now-defunct Chicago Climate Exchange, a voluntary carbon credit platform, highlights its experience in managing complex markets on which nascent products are listed.¹⁴⁹

More recent CFTC action evidences the agency’s embrace of a shift in the conversation surrounding its management of climate risk through carbon derivatives. The CFTC strongly signaled its interest in the VCM in 2020, when its Climate-Related Market Risk Subcommittee issued a report identifying climate change as a significant threat to financial stability.¹⁵⁰ Tapping into

¹⁴⁵ 76 Fed. Reg. at 41407.

¹⁴⁶ Rau et. al, *supra* note 41.

¹⁴⁷ See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376, 1388–89 (2010).

¹⁴⁸ See COMMODITY FUTURES TRADING COMM’N, Q & A: FINAL RULEMAKING: PART 43 (REAL-TIME PUBLIC REPORTING) (2012), https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/file/rtpr_qa_final.pdf [<https://perma.cc/F4PJ-TG24>].

¹⁴⁹ U.S. GOV’T ACCOUNTABILITY OFF., GAO-08-1048, CARBON OFFSETS: THE U.S. VOLUNTARY MARKET IS GROWING, BUT QUALITY ASSURANCE POSES CHALLENGES FOR MARKET PARTICIPANTS 5 (2008), <https://www.gao.gov/assets/gao-08-1048.pdf> [<https://perma.cc/KMW2-PH5Y>].

¹⁵⁰ CLIMATE-RELATED MKT. RISK SUBCOMM., COMMODITY FUTURES TRADING COMM’N, MANAGING CLIMATE RISK IN THE U.S. FINANCIAL SYSTEM 25–30 (2020) <https://www.cftc.gov/sites/default/files/2020-09/9-9->

the momentum created by the report's recommendations, Chairman Rostin Benham established the Climate Risk Unit to explore the role derivatives might play in facilitating the transition to a low-carbon economy.¹⁵¹ To ascertain public trust in the carbon market, the CFTC subsequently hosted the "Voluntary Carbon Markets Convening" in 2022.¹⁵² The convening underscored the CFTC's dual approach to VCM oversight—leveraging enforcement tools to combat fraud and manipulation while evaluating potential measures to structure the trading of environmental products.¹⁵³

Most indicative of the CFTC's contemplation of a comprehensive regulatory framework for the VCM is its request for comment on proposed guidance concerning the trading of DCC derivative contracts. This guidance, first introduced in December 2023, embodied a desire to "advance the standardization" of evolving VCC derivatives through the implementation of robust quality standards and enforcement of transparency measures.¹⁵⁴ In expressing her support for the CFTC's adoption of an expanded role in the climate market, Commissioner Christy Goldsmith Romero described greenwashing—a company's "act of making false or misleading statements about the environmental benefits of

Report of the Subcommittee on Climate-Related Market Risk—Managing Climate Risk in the U.S. Financial System for posting.pdf.
[<https://perma.cc/QCQ9-RTS7>].

¹⁵¹ Press Release, Commodity Futures Trading Comm'n, CFTC Acting Chairman Behnam Establishes New Climate Risk Unit (Mar. 17, 2021), <https://www.cftc.gov/PressRoom/PressReleases/8368-21>
[<https://perma.cc/YTD5-WZGQ>].

¹⁵² Pamela T. Wu & Levi McCallister, *CFTC to Hold Second Voluntary Carbon Markets Convening on July 19*, MORGAN LEWIS: POWER & PIPES (June 27, 2023), <https://www.morganlewis.com/blogs/powerandpipes/2023/06/cftc-to-hold-second-voluntary-carbon-markets-convening-on-july-19>
[<https://perma.cc/YW9H-QCXU>].

¹⁵³ *The CFTC's Second Voluntary Carbon Markets Convening Provides Insight Into the CFTC's Views on Its Regulatory and Enforcement Role in the Carbon Markets*, CLEARLY GOTTLIEB (July 19, 2023), <https://www.clearlygottlieb.com/news-and-insights/publication-listing/the-cftcs-second-voluntary-carbon-markets-convening> [https://perma.cc/QAE7-TESN].

¹⁵⁴ Press Release, Commodity Futures Trading Comm'n, CFTC Issues Proposed Guidance Regarding the Listing of Voluntary Carbon Credit Derivative Contracts (Dec. 4, 2023), <https://www.cftc.gov/PressRoom/PressReleases/8829-23>
[<https://perma.cc/AE43-WUZ9>].

a product or practice”¹⁵⁵—as a type of fraud.¹⁵⁶ Implicit in her logic is the recognition that CFTC oversight need not be confined to CFTC-regulated exchanges when fraud is at issue.

1. *Overview*

The finalized guidance, issued in September 2024 before its rescission in September 2025, represented the CFTC’s latest effort in its push to regulate the VCM. Directed at DCMs, which are presently subject to CFTC regulation, the guidance outlined factors that exchanges should consider to ensure participants’ compliance with “Core Principles” under section 5(d) of the CEA.¹⁵⁷ It primarily focused on ensuring compliance with Core Principles 3, which requires exchanges to “only list for trading derivative contracts that are not readily susceptible to manipulation.”¹⁵⁸ Core Principle 4, under which DCMs would have required implementation of measures to “prevent manipulation, price distortion, and disruption of the physical delivery or cash-settlement process,” was also addressed.¹⁵⁹ Notably, the guidance

¹⁵⁵ Greenwashing can manifest in the following ways: peppering advertisements with nature-based imagery, using environmental buzzwords like “eco-friendly” in company communications, stating “please recycle” on plastic products, and making ambitious company climate pledges. Courtney Lindwall, *What Is Greenwashing?*, NAT’L RES. DEF. COUNCIL (Feb. 9, 2023), <https://www.nrdc.org/stories/what-greenwashing> [<https://perma.cc/KE79-KLW7>].

¹⁵⁶ Christy Goldsmith, Comm’r, Commodity Futures Trading Comm’n, Keynote Address at FIA & SIFMA Asset Management Derivatives Forum: Adjusting the Sails for Cyber and Climate Resilience (Feb. 10, 2023), <https://www.cftc.gov/PressRoom/SpeechesTestimony/oparomero6> [<https://perma.cc/AM2E-MC6X>].

¹⁵⁷ The regulations in Part 40, which implement Section 5c(c) of the CEA, govern how registered entities submit self-certifications and requests for approval of their rules, rule amendments, and new products for trading and clearing. Press Release, Commodity Futures Trading Comm’n, The CFTC Approves Part 40 Final Rule to Simplify and Enhance Rule and Product Submission Processes (Sep. 12, 2024), <https://www.cftc.gov/PressRoom/PressReleases/8966-24> [<https://perma.cc/56AT-7J4S>].

¹⁵⁸ 89 Fed. Reg. 83378, 83379 (Oct. 15, 2024) (to be codified at 17 C.F.R. pt. 38).

¹⁵⁹ *Id.* at 83384.

neither modified nor superseded existing CFTC rules and regulations.

The CFTC's guidance articulated three goals central to curbing fragmentation and opacity: maximizing transparency with respect to underlying project specifics; developing robust systems for tracking the issuance, transfer, and retirement of VCCs; and incorporating independent third-party validation and verification into inspection provisions.¹⁶⁰ In describing the importance of accurate pricing, the guidance listed "[q]uality standards[,] [d]elivery points and facilities[,] [and i]nspection provisions" as integral to the design of a VCC contract.¹⁶¹ Moreover, the guidance directed DCMs to continuously monitor contract terms and conditions to ensure their alignment with current certification standards.¹⁶² In addition, the guidance noted the Chicago Mercantile Exchange (CME)'s view that rather than proffering criteria for assessing crediting programs' governance and transparency mechanisms, exchanges should "render their own judgment."¹⁶³ In essence, the CFTC spelled out high-level considerations that exchanges should (but need not) bear in mind.

2. *Inadequacies*

Rather than prescribing new rules that assist participants in navigating the VCM, the CFTC advocates reliance on various private sector initiatives, among which the ICVCM figures prominently.¹⁶⁴ The ICVCM, which endeavors to allay concerns about the VCM's viability by establishing "a definitive global threshold standard for high-quality carbon credits," has developed draft core carbon principles and an assessment framework to identify those credits "that create real, additional, and verifiable

¹⁶⁰ See *id.* at 83387, 83395–97.

¹⁶¹ *Id.* at 83384, 83386.

¹⁶² *Id.* at 83384.

¹⁶³ See *id.* at 83386.

¹⁶⁴ Christy Goldsmith Romero, Comm'r, Commodity Futures Trading Comm'n, The CFTC's Role with Voluntary Carbon Credit Markets (July 19, 2023), <https://www.cftc.gov/PressRoom/SpeechesTestimony/romerostatement071923b> [<https://perma.cc/F42V-Z86R>].

climate impact[.]”¹⁶⁵ Because terms used in formulating these principles lack an agreed-upon definition, the framework remains incomplete. Unless supplemented with standardized language, the phrases “robust independent third-party validation and verification” and “sustainable development impacts” will denote mere aspirations.¹⁶⁶

Albeit promising at first glance, the CFTC’s guidance failed to close major gaps. Notably missing from the guidance was language delineating specific steps the CFTC will take to combat “inadequate standards, inconsistent implementation, and weak governance”—the seeds from which concerns about credit quality spring.¹⁶⁷ By calling upon exchanges to police crediting programs, the guidance subtly shifted the burden of oversight away from the CFTC. This delegation of monitoring power would have shrunk rather than expanded the agency’s enforcement authority. A deferential stance toward industry-wide standards, while perhaps politically expedient, fails to establish the clear, enforceable rules needed to ensure market integrity. Absent instruction on how to weigh the highlighted factors, the guidance stopped short of ensuring standardization across different types of credits. These inadequacies were ultimately a large reason behind the rescission of the September 2024 guidance.¹⁶⁸

¹⁶⁵ *Revised Timeline for Public Consultation*, INTEGRITY COUNCIL FOR THE VOLUNTARY CARBON MKT. (May 20, 2022), <https://icvcm.org/revised-timeline-for-public-consultation/> [<https://perma.cc/6U8U-NS7V>]; *The Core Carbon Principles*, INTEGRITY COUNCIL FOR THE VOLUNTARY CARBON MKT., <https://icvcm.org/the-core-carbon-principles/> [<https://perma.cc/5EW5-GT5Z>] (last visited Feb. 9, 2026).

¹⁶⁶ *The Core Carbon Principles*, INTEGRITY COUNCIL FOR THE VOLUNTARY CARBON MKT., <https://icvcm.org/the-core-carbon-principles/> [<https://perma.cc/5EW5-GT5Z>] (last visited Feb. 9, 2026).

¹⁶⁷ *CFTC Takes Step to Improve Carbon Markets, but Major Gaps Remain*, CLEAN AIR TASK FORCE (Sep. 20, 2024), <https://www.catf.us/2024/09/cftc-takes-step-improve-carbon-markets-major-gaps-remain/> [<https://perma.cc/4WAC-8KK7>].

¹⁶⁸ *See* Withdrawal of Commission Guidance, 90 Fed. Reg. 44321, 44321 (Sep. 15, 2025) (“The VCC Guidance, which is explicitly nonbinding . . . has not provided DCMs with any new regulatory structure or standards that resulted in the advancement of market transparency or liquidity for VCC derivatives contracts.”) (internal citations omitted).

C. *VCCs as Commodities*

By virtue of their status as derivatives, VCC contracts fall squarely within the CFTC's jurisdiction.¹⁶⁹ Less readily embraced is the idea that VCCs—the assets underlying such contracts—are susceptible to CFTC regulation as commodities.¹⁷⁰ Opponents of this reading argue that “the CFTC was never designed to be a climate watchdog for the federal government.”¹⁷¹ To support a redefinition of its responsibilities with respect to VCC regulation, the CFTC can leverage the latitude offered by the term “commodity.” The CEA defines commodities expansively, enumerating specific agricultural products while featuring the following catch-all language: “and all services, rights, and interests . . . in which contracts for future delivery are presently or in the future dealt in.”¹⁷² Captured by the latter half of this definition are “environmental commodities,” a subset of intangible commodities for which a standard definition has not yet been proposed.¹⁷³ To qualify as a nonfinancial (intangible) commodity, a product need only be conveyable and consumable.¹⁷⁴ The umbrella term “intangible” can be readily affixed to compliance carbon credits, the consumption of which is evidenced by a buyer's emission of the amount of pollutant specified in the allowance.¹⁷⁵ VCCs' issuance to and retirement by buyers for the purpose of substantiating carbon removal claims demonstrate their ability to be conveyed and consumed, placing them on equal footing with physical goods like agricultural products.

Case law suggests that the boundaries of the CFTC's authority over commodities remain flexible. Federal courts have validated the CFTC's reliance on the CEA's anti-fraud provision to address fraudulent conduct in connection with sales of goods not traditionally recognized as commodities, creating precedent on

¹⁶⁹ 7 U.S.C. § 2(a)(1)(C).

¹⁷⁰ See Winters, *supra* note 38.

¹⁷¹ *Id.*

¹⁷² 7 U.S.C. § 1a(9).

¹⁷³ Further Definition of “Swap,” “Security-Based Swap,” and “Security-Based Swap Agreement”; Mixed Swaps; Security-Based Swap Agreement Recordkeeping, 77 Fed. Reg. 48208, 48233–35 (to be codified at 17 C.F.R. pt. 1).

¹⁷⁴ *Id.* at 48233.

¹⁷⁵ *Id.*

which the agency might lean to justify its involvement in carbon mitigation initiatives.¹⁷⁶ Two recent cases bringing virtual commodities within the CFTC's purview prove illustrative. The reasoning in these decisions elucidates the necessity of regulatory oversight in emerging markets, particularly those prone to fraud and manipulation. By applying this logic to VCCs, the CFTC can regulate fraud in the growing but inadequately regulated VCM space.

1. *Virtual Currency Cases*

In *CFTC v. My Big Coin Pay, Inc.*, the CFTC alleged fraudulent practices in connection with the sale of the virtual currency "My Big Coin" (MBC).¹⁷⁷ The defendants moved to dismiss the complaint, contending that the CFTC lacked jurisdiction because MBC did not qualify as a "commodity" under the CEA.¹⁷⁸ Rather than adopting a narrow view of the CFTC's regulatory authority, the court issued a two-pronged holding that laid the groundwork for the agency's prosecution of fraudulent activity in the spot markets for nascent assets. The court first determined that an asset need not "itself underlie a futures contract" to be considered a commodity.¹⁷⁹ If an asset is sufficiently similar to another asset for which a futures market exists, the commodity label may be affixed to it.¹⁸⁰ Because it was undisputed that Bitcoin futures are actively traded on futures exchanges and MBC was alleged to be a virtual currency in the same class as Bitcoin, the court held it sufficiently pleaded that MBC constituted a commodity subject to CFTC oversight.¹⁸¹

Beyond defining virtual currencies as commodities, the *My Big Coin* decision fortified the CFTC's anti-fraud mandate. In delineating its reasoning, the court explained that an expansive

¹⁷⁶ See VANATKO, *supra* note 128, at 1–2.

¹⁷⁷ *Commodity Futures Trading Comm'n v. My Big Coin Pay, Inc.*, 334 F. Supp. 3d 492, 494 (D. Mass. 2018).

¹⁷⁸ *Id.*

¹⁷⁹ *Id.* at 496–97.

¹⁸⁰ *Id.* at 498 ("Taken together, these" decisions align with plaintiff's argument that the CEA only requires the existence of futures trading within a certain class (e.g. 'natural gas') in order for all items within that class (e.g. 'West Coast' natural gas) to be considered commodities.").

¹⁸¹ *Id.*

interpretation of “commodity” ensures that “the CEA’s regulatory scheme and enforcement provisions [] comprehensively protect and police the markets.”¹⁸² When “construing the term ‘commodity’... as it functions within the CEA’s anti-fraud enforcement provision of Section 6(c)(1),” the means that best insure against deceptive practices—here, making misrepresentations to investors—must be adopted.¹⁸³ Thus, fraudulent conduct alone, even absent traditional market manipulation, is sufficient to trigger CFTC enforcement authority.¹⁸⁴

The court presiding over *CFTC v. McDonnell* reached a similar conclusion. The defendant operated a fraudulent investment scheme involving Bitcoin and other cryptocurrencies, falsely promising investors expert trading services before disappearing with their funds.¹⁸⁵ Like the defendants in *My Big Coin*, McDonnell asserted that the CFTC lacked the requisite jurisdiction because his activities involved cash transactions rather than derivatives trading.¹⁸⁶ The court rejected this argument on the grounds that virtual currencies are commodities under the CEA.¹⁸⁷ It then surveyed the development of online marketplaces for trading and investing in virtual currencies, whose opacity and decentralized nature breed criminal activity.¹⁸⁸ In so doing, it cited three reasons commonly given for defining virtual currencies as commodities: “based on common usage,” “because virtual currencies provide a ‘store of value,’” and “because they serve as a type of monetary exchange.”¹⁸⁹ Critically, the court declined to confine the CFTC’s enforcement powers to the realm of futures contracts, concluding that such powers reach “fraud related to spot markets underlying the (already regulated) derivative markets.”¹⁹⁰ This ruling confirmed that the CFTC’s jurisdiction over fraud is not contingent on a direct link between the defendant’s conduct and market manipulation.

¹⁸² *Id.* at 497.

¹⁸³ *Id.*

¹⁸⁴ *Id.* at 498.

¹⁸⁵ *Commodity Futures Trading Comm’n v. McDonnell*, 287 F. Supp. 3d 213, 218 (E.D.N.Y. 2018).

¹⁸⁶ *See id.* at 213.

¹⁸⁷ *Id.* at 225–26.

¹⁸⁸ *Id.* at 219–20.

¹⁸⁹ *Id.* at 224–25.

¹⁹⁰ *Id.* at 227.

The CFTC's winning arguments in *McDonnell* and *My Big Coin* did not focus solely on broadening the definition of a commodity. Instead, they endeavored to exploit a feature common to both cases—the existence of facts elucidating the defendant's fraudulent intent—to strengthen the agency's case for intervention.¹⁹¹ Three principles underlie these cases: Congress intended for the CFTC to exercise broad oversight with respect to fraud; virtual currencies are susceptible to fraud; and market manipulation is not a prerequisite for finding fraud. When traded as financial instruments or derivatives, virtual currencies are subject to regulation by the CFTC.¹⁹² The bundling of these assets into traditional products is sufficient to trigger CFTC oversight but not necessary, as the CFTC's powers with respect to fraud mitigation extend the boundaries within which it may permissibly regulate trading activity.¹⁹³ Neither *McDonnell* nor *My Big Coin* involved trading in derivatives, though both courts recognized the need to fortify markets weakened by fraud and a lack of standardized enforcement as a basis for expanded CFTC oversight.

2. *Application to VCCs*

Like virtual currencies, VCCs meet the CEA's broad definition of a commodity. The common thread binding materials leveraged to assert jurisdiction over digital assets—the classification of virtual currencies as “goods sold in the market with a quality and value uniform throughout the world”—can be woven into arguments premised on increasing the CFTC's oversight of the

¹⁹¹ The *My Big Coin Pay* court found that the CFTC sufficiently alleged fraud on the basis of the defendant's misstatements regarding his currency's backing. *See* *Commodity Futures Trading Comm'n v. My Big Coin Pay, Inc.*, 334 F. Supp. 3d 492, 493 (D. Mass. 2018). Similarly, the *McDonnell* court found that the defendant's misappropriation of customer funds evidenced outright fraud. *See McDonnell*, 287 F. Supp. 3d at 215. Upon so finding, these courts condoned the CFTC's weaponization of its anti-fraud mandate, implicitly equating stronger enforcement with a heightened probability of cracking down on spot market fraud.

¹⁹² *See* 7 U.S.C. § 2a(1); *McDonnell*, 287 F. Supp. 3d at 229 (noting that this view also carries the support of the CME, the world's leading derivative marketplace).

¹⁹³ 7 U.S.C. §§ 6, 9.

VCM.¹⁹⁴ VCCs' representation of tradable rights linked to environmental activities is analogous to virtual currencies' embodiment of monetary value. Their common (intangible) form and shared purpose—to “provide a ‘store of value’”—suggest their belonging to a common class of assets.¹⁹⁵ *My Big Coin* made clear that an asset qualifies as a regulatable commodity if it belongs to a class for which futures trading is allowed.¹⁹⁶ Accordingly, the trading of Bitcoin futures on certain major exchanges renders the extension of the *My Big Coin* court's logic possible. Moreover, futures contracts already exist for certain carbon allowances, the functional equivalent of VCCs in compliance markets, strengthening the case for extending this logic.¹⁹⁷

Recognizing VCCs as sufficiently comparable to CFTC-regulated virtual currencies would empower the agency to address mounting concerns over misrepresentation in the VCM. As is the case with virtual currency markets, the VCM is susceptible to deceptive claims regarding the legitimacy and valuation of traded products.¹⁹⁸ At the heart of *McDonnell* lie the twin aims of protecting investors and promoting market integrity, upon which the success of broader climate initiatives depends.¹⁹⁹ By asserting its jurisdiction over VCCs, the CFTC can prevent the VCM from becoming a vehicle for financial misconduct, maximizing the likelihood that carbon trading will function solely to mitigate climate change.

3. *Note on Swaps*

The CFTC can also position VCC regulation as a necessary complement to its effective supervision of swaps markets. Swaps—whose definition was broadened by Dodd-Frank—are agreements through which two parties transfer financial risk related to an

¹⁹⁴ Mitchell Prentis, *Digital Metal: Regulating Bitcoin As A Commodity*, 66 CASE WES. L. REV. 609, 626 (2015).

¹⁹⁵ *McDonnell*, 287 F. Supp. 3d at 224.

¹⁹⁶ Thus, “[w]here a futures market exists for a good, service, right, or interest, it may be regulated by CFTC, as a commodity, without regard to whether the dispute involves futures contracts.” *Id.* at 227.

¹⁹⁷ *Voluntary Carbon Emissions Offset Futures*, CME Group, <https://www.cmegroup.com/markets/energy/emissions/voluntary-carbon-emissions-offset-futures-product-group.html> [https://perma.cc/VH2F-JAU5] (last visited Jan. 23, 2025).

¹⁹⁸ See BERKELEY CARBON TRADING PROJECT, *supra* note 76, at 1.

¹⁹⁹ Song et al., *supra* note 25.

underlying asset.²⁰⁰ Carbon products, the demand for which has tracked the increase in climate-focused financial instruments,²⁰¹ regularly serve as the underlying assets for swaps.²⁰² For example, offset-allowance swaps transactions maximize efficiency by streamlining a normally two-step process; companies in possession of surplus allowances can enter into swaps to obtain the offsets they seek.²⁰³ Beyond facilitating mutually beneficial exchanges, carbon-based swaps enable market participants to hedge against the risks associated with VCC price volatility.²⁰⁴ If a transaction involves a swap, CFTC regulation will apply unless an exemption is granted.²⁰⁵

One significant drawback of classifying environmental commodity transactions as swaps is the risk that they may fall within the “forward exclusion” and consequently escape CFTC oversight.²⁰⁶ This limited exemption removes certain transactions from the agency’s jurisdiction, provided that they meet certain criteria—notably, that they involve a nonfinancial commodity intended for physical settlement.²⁰⁷ In the context of environmental commodities, parties can manifest intent to deliver through electronic settlement or contractual attestations.²⁰⁸ The active “trading” of an environmental commodity contradicts the concept of delivery and precludes reliance on the exemption.²⁰⁹

The trading dynamics of VCCs suggest that many market participants flunk the intent prong. VCCs are frequently bought and sold in secondary transactions, where purchasers do not intend to retire the credits for compliance purposes and instead seek to profit

²⁰⁰ *Fact Sheet: Final Rules and Interpretations i) Further Defining “Swap,” “Security-Based Swap,” and “Security-Based Swap Agreement”; ii) Regarding “Mixed Swaps”; and iii) Governing Books and Records for “Security-Based Swap Agreements,”* COMMODITY FUTURES TRADING COMM’N 1 (2012), https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/file/fd_factsheet_final.pdf [<https://perma.cc/C5PV-QFCT>].

²⁰¹ Blaufelder et al., *supra* note 12.

²⁰² See INT’L SWAPS AND DERIVATIVES ASS’N, *supra* note 26, at 8.

²⁰³ *Id.*

²⁰⁴ *Id.* at 7.

²⁰⁵ COMMODITY FUTURES TRADING COMM’N, *supra* note 199, at 6.

²⁰⁶ *Id.* at 5.

²⁰⁷ Matthew F. Kluchenek, *The Status of Environmental Commodities under the Commodity Exchange Act*, 5 HARV. BUS. L. REV. 39, 43 (2015).

²⁰⁸ *Id.* at 49.

²⁰⁹ *Id.* at 39.

from price fluctuations.²¹⁰ Indeed, in 2021, the average time between credit issuance and retirement across the four major registries was six years.²¹¹ The prolonged circulation of credits among brokers and intermediaries before reaching their final buyers resembles the trading patterns of stocks and bonds—transactions primarily motivated by a desire to speculate.²¹² Moreover, many carbon credit agreements include provisions allowing for cash settlement or cancellation rather than actual retirement of the credits, further undermining any claim that these transactions fall within the forward exclusion.²¹³ Accordingly, the likelihood that the forward exclusion will be used to categorically exempt otherwise regulatable environmental commodities from regulation is low.

The absence of genuine intent to effectuate physical delivery in secondary transactions leads to the conclusion that such transactions should remain subject to regulatory oversight. On the other hand, primary transactions, which culminate in credit retirement, may qualify for the forward exclusion. When purchasers of environmental commodities retire environmental credits to substantiate environmental claims regarding renewable energy use or carbon footprint reduction, the CFTC is not without recourse. In such instances, it may lean more heavily on the CEA's anti-fraud and anti-manipulation provisions to ensure market integrity. By invoking these provisions, the CFTC can justifiably broaden its oversight of carbon-based derivatives to include direct regulation of VCCs. In brief, the CFTC possesses the necessary jurisdictional foundation to implement systemic reforms that safeguard the credibility of the assets underlying carbon derivatives contracts.

III. REPURPOSING AN EXISTING TEMPLATE TO CHART A PATH FORWARD

One does not have to reinvent the wheel to tackle the fraud that pervades the VCM. In keynote remarks delivered at the Federal Reserve Bank of Atlanta in 2023, Commissioner Kristin Johnson

²¹⁰ 77 Fed. Reg. at 48234.

²¹¹ Micah Macfarlane, *Assessing the State of the Voluntary Carbon Market in 2022*, CARBON DIRECT (May 6, 2022), <https://www.carbon-direct.com/insights/assessing-the-state-of-the-voluntary-carbon-market-in-2022> [<https://perma.cc/44UZ-537S>].

²¹² 77 Fed. Reg. at 48233–34.

²¹³ 77 Fed. Reg. at 48235 n.292.

highlighted four parallels between the digital asset and carbon offset markets: “intangible commodities that are readily tradable; spot markets that are not comprehensively regulated; enforcement jurisdiction permitting anti-fraud and market manipulation authority over spot markets; and exclusive jurisdiction to create regulation for derivatives transactions for which crypto or environmental commodities are the underlying assets.”²¹⁴ Within the CFTC’s remit lie valuable tools for policing and providing structure to the digital asset markets. The similarities between VCCs and virtual currencies suggest that these tools can be lifted from their original context and applied to the VCM. Accordingly, the CFTC should delve deeper into and extract relevant themes from steps taken to enhance the integrity of markets on which virtual currencies are traded.

The CFTC regulates products that use virtual currencies as the underlying commodity.²¹⁵ By extension, intermediaries that advise clients regarding virtual currency commodity futures or that facilitate trading in those instruments must register with the CFTC before entering the virtual currency space.²¹⁶ Notably missing from the VCM infrastructure is a comparable registration requirement. Despite having addressed the analogous structural vulnerabilities inherent in the VCC and virtual currency markets, the CFTC has not attempted to impose mandatory obligations on parties transacting in the VCM.²¹⁷ In fact, the CFTC’s self-designation as a backseat passenger in its most recent draft guidance sharply contradicts the assertive plan of action that characterizes the agency’s framework for regulating digital assets. Five pillars comprise this framework, which are reproduced below.

²¹⁴ Kristin Johnson, Comm’r, Commodity Futures Trading Comm’n., Keynote Address at the Federal Reserve Bank of Atlanta (Nov. 23, 2023), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opajohnson8> [<https://perma.cc/EDF9-93AU>].

²¹⁵ *Be Smart: Check Registration & Backgrounds Before You Trade*, COMMODITY FUTURES TRADING COMM’N, <https://www.cftc.gov/check> [<https://perma.cc/3CD6-UB9Z>] (last visited Feb. 21, 2025).

²¹⁶ *Id.*; 17 C.F.R. § 40.2(a)(2); *see also* COMMODITY FUTURES TRADING COMM’N, CFTC BACKGROUNDER ON SELF-CERTIFIED CONTRACTS FOR BITCOIN PRODUCTS 3 (2017), https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/file/bitcoin_factsheet120117.pdf [<https://perma.cc/P4HB-RE6E>].

²¹⁷ *See* Johnson, *supra* note 214.

Consumer Education. Amidst the wild assertions, bold headlines, and shocking hyperbole, there is a need for greater public understanding.

Asserting Legal Authority. Asserting legal authority over virtual currency derivatives in support of the CFTC's anti-fraud and manipulation efforts, including in underlying spot markets, is a key component in the CFTC's ability to effectively regulate these markets.

Market Intelligence. Gaining the ability to monitor markets for virtual currency derivatives and underlying settlement reference rates through the gathering of trade and counterparty data will provide regulatory and enforcement insights into those markets.

Robust Enforcement. In addition to its general regulatory and enforcement jurisdiction over the virtual currency derivatives markets, the CFTC has jurisdiction to police fraud and manipulation in cash or spot markets. The CFTC intends to continue to exercise this jurisdiction to enforce the law and prosecute fraud, abuse, manipulation or false solicitation in markets for virtual currency derivatives and underlying spot trading.

Government-wide Coordination. The CFTC actively coordinates its approach to Bitcoin and other virtual currencies with other Federal regulators, including the Securities and Exchange Commission (SEC), Federal Bureau of Investigation (FBI), Justice Department and Financial Stability Oversight Council (FSOC). The CFTC also coordinates with state entities, including state Attorneys General, in addition to working with the White House, Congress and other policy-makers.²¹⁸

²¹⁸ COMMODITY FUTURES TRADING COMM'N, CFTC BACKGROUNDER ON OVERSIGHT OF AND APPROACH TO VIRTUAL CURRENCY FUTURES MARKETS 1-2 (2018),

A. *Improve Consumer Education*

The CFTC has implemented several consumer education initiatives to inform the public about the drawbacks of investing and speculating in virtual currencies. In line with these initiatives, the agency has issued customer advisories warning consumers about common scams and trading risks. One such advisory, “Beware Virtual Currency Pump-and-Dump Schemes,” cautions investors against organized groups’ use of social media to coordinate artificial price inflation schemes that leave unsuspecting buyers with losses.²¹⁹ Another advisory, “Understand the Risks of Virtual Currency Trading,” details the volatility and lack of regulatory oversight to which virtual currency transactions are subject.²²⁰ Both advisories, which couple clear and concise language with buzzwords like “beware,” evince the CFTC’s commitment to growing consumers’ familiarity with best practices for effective trading.

The CFTC could develop analogous materials to warn buyers about common pitfalls in the carbon credit market, namely over-crediting and the associated risk of purchasing low-quality (or even fraudulent) offsets. Consumer advisories structured in the frequently asked questions (FAQ) format could explain how the VCM operates and clarify the limitations of existing verification standards. By referencing investigative findings and academic research that address red flags in registries’ MRV processes, the CFTC could devise checklists that enable market participants to better assess the credibility of offset projects. Making such

https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/file/backgroundunder_virtualcurrency01.pdf [https://perma.cc/Y3YZ-29MQ].

²¹⁹ *Customer Advisory: Beware Virtual Currency Pump-and-Dump Schemes*, COMMODITY FUTURES TRADING COMM’N, https://www.cftc.gov/LearnAndProtect/AdvisoriesAndArticles/beware_virtual_currency_pump_dump.html [https://perma.cc/D7YH-UTVA] (last visited Jan. 13, 2025).

²²⁰ *Customer Advisory: Understand the Risks of Virtual Currency Trading*, COMMODITY FUTURES TRADING COMM’N, https://www.cftc.gov/LearnAndProtect/AdvisoriesAndArticles/understand_risks_of_virtual_currency.html [https://perma.cc/V5A6-UFL8] (last visited Jan. 13, 2025).

educational materials as FAQs available for immediate download would help those unfamiliar with the complexities of carbon markets make informed decisions.

B. *Increase Market Surveillance and Clarify Prevailing Standards*

In response to the rapid proliferation of virtual currency products, the CFTC unveiled a “heightened review” framework for listing virtual currency derivatives on DCMs.²²¹ Under this framework, the CFTC considers whether exchanges and clearinghouses have adequate risk management protocols and anti-fraud measures in place before listing virtual currency products.²²² Distinguishing this novel regulatory approach is its focus on maximizing visibility through targeted market surveillance. Heightened review demands close coordination between DCMs and CFTC surveillance staff, who may freely request trade settlement data to “identify[] anomalies and disproportionate moves” in the cash and future markets.²²³ Moreover, DCMs and spot market platforms must enter into information-sharing agreements “to allow access to trade and trader data.”²²⁴ Heightened review strikes a balance between rigidity and flexibility, as it provides a structured approach to oversight while acknowledging the evolving nature of virtual currency derivatives.

Needed to insure against the risk of fraud and market manipulation in the VCM is a comparably robust monitoring program. There exists no reason to start from scratch; transplanting the CFTC’s existing heightened review framework to the non-regulated VCM realm is a cost-effective means of strengthening surveillance. Such an application would necessarily concentrate on ensuring market integrity and consumer protection. A heightened review for VCCs would begin with the same fundamental inquiry that commences the digital asset heightened review—whether a particular contract is readily susceptible to manipulation.²²⁵ Like its predecessor, the proposed framework could mandate exchanges’ compliance with special calls for data as well as regular coordination

²²¹ COMMODITY FUTURES TRADING COMM’N, *supra* note 218, at 3.

²²² *Id.*

²²³ *Id.*

²²⁴ *Id.*

²²⁵ 17 C.F.R. pt. 38, app. B.

with CFTC staff on trade activities and project launches. This approach could also require CFTC staff to examine the convoluted certification processes and opaque pricing mechanisms contributing to the over-crediting of emissions reductions.²²⁶ By subjecting carbon credit trading platforms to stricter oversight, the CFTC can minimize deviation from rigorous verification and reporting standards.

Heightened review would likewise impact the behavior of carbon registries. As part of this review, the CFTC could gather data on the frequency with which the four dominant standard-setters allow illegitimate credits onto their registries. In addition to providing information from which the agency can extrapolate market trends, such data would bolster its enforcement strategy. Generating data linking over-crediting to lax standards would signal a lack of tolerance for MRV processes that do not conform to expectations. By making clear its willingness to critically examine compliance with quality standards, the CFTC can place pressure on registries to rework their criteria. Absent some pushback, registries will be unmotivated to ensure their standards' ability to withstand high levels of scrutiny.

Equally necessary to surveilling the VCM for fraudulent conduct is clarifying the rules that govern its players. Implementing a heightened review framework suitable for use in the VCM would help refine existing standards, inspiring confidence in the reliability of VCCs as financial instruments. According to a recent Wall Street Journal report, a survey of 137 global companies found that fewer than half plan to utilize carbon credits.²²⁷ Among the concerns cited by those surveyed, three figured prominently: the complexity of standards, inconsistent definitions of carbon credit quality, and a lack of market transparency.²²⁸ Each stems in part from the heterogeneous tests employed by the prevailing registries to assess project developers' worthiness of financing. Through heightened review, the CFTC can more readily aggregate data to review existing standards and gauge their relative efficacy. If it finds that harmonizing these standards entails significant transaction costs, the CFTC should abandon efforts to rework them and develop its own standards.

²²⁶ Badgley et al., *supra* note 102, at 1442–43.

²²⁷ Holger, *supra* note 19.

²²⁸ *Id.*

C. *Assert Legal Authority*

The CFTC may enter the commodity spot market sphere to combat fraud and manipulation.²²⁹ Thus, the CFTC's interest in policing spot markets within which intangible commodities are traded accords with the CEA. Steve Suppan summarizes the logic well: where an underlying commodity is fraudulent, the integrity of derivatives contracts based on that commodity is invariably compromised.²³⁰ So long as carbon derivatives trade on the VCM, the CFTC can permissibly apply existing rules concerning the use of manipulative and deceptive devices to crack down on VCC-related fraud. Rather than taking agency claims about purported benefits at face value, the CFTC "must reexamine the premises and design of emissions trading."²³¹

The CFTC can leverage the CEA to develop new guidance comprising standards that instruct on how best to measure credit quality. In drafting such guidance, it could elaborate on the behaviors that constitute fraud and clarify the meaning of terms not yet properly defined by registry standards—namely additionality and permanence. In a 2022 report, the Center for American Progress touted the benefits of transparent communication with market participants, to whom regulators should signal which "nature-based offsets are unlikely to deliver on their promise."²³² Creating presumptions against certain types of emissions projects that have historically failed to deliver genuine results (and making explicit the proofs needed to rebut those presumptions) would grow buyer confidence.²³³ Such a presumption might take the following form: forest-based carbon credits are non-additional and non-permanent. To further mitigate the potential that illegitimate credits will enter the markets, the CFTC could reject all carbon derivatives as invalid until presented with affirmative evidence of their non-fraudulence, though this approach would likely entail

²²⁹ 7 U.S.C. §§ 6, 9.

²³⁰ Steve Suppan, *Voluntary CO₂ Emissions Offset Trading: The CFTC Must Examine Risks of Deceptive Emissions Reduction Reporting*, INST. FOR AGRIC. & TRADE POL'Y (July 28, 2021), <https://www.iatp.org/voluntary-co2-emissions-offset-trading-cftc> [<https://perma.cc/Q9K2-MUQB>].

²³¹ *Id.*

²³² Fredman & Phillips, *supra* note 117.

²³³ *Id.*

greater administrative costs.²³⁴ Nevertheless, deeming new contracts inherently susceptible to manipulation would force issuers to satisfy a higher burden and, by extension, motivate them to ensure the reliability of the underlying VCCs.

The Department of Agriculture's (USDA) food-quality labeling system provides a model on which the CFTC can draw when drafting guidance intended to revamp existing registry standards.²³⁵ Just as the USDA devised labels to distinguish commodities based on their compliance with quality metrics, the CFTC could assign labels to different projects to indicate their performance against evaluative benchmarks. With this approach, the CFTC could classify VCCs into tiers that reflect their credibility and risk of manipulation. Projects demonstrating direct carbon removal and secure long-term storage could receive a "high-quality" designation, whereas projects tainted by additionality and permanence concerns could be dubbed "lower quality." The CFTC could then use these classifications to shape regulatory oversight, potentially by limiting derivatives contracts to high-quality credits.²³⁶

Scrutinizing private sector standards is necessary to ensure that all projects deliver their claimed emissions reductions.²³⁷ Therefore, the CFTC should be careful not to implicitly or explicitly endorse existing standards that do not produce high-quality offsets. If creating its own definition of a high-quality offset proves administratively burdensome, the agency could issue guidance identifying which registry standards inadequately protect against fraud and manipulation. Research articles and investigative reports detailing the relationship between weak protocols and over-crediting offer a starting point for developing such guidance.

²³⁴ Todd Phillips, *A Climate and Competition Agenda for the Commodity Futures Trading Commission*, CTR. AM. PROGRESS (Feb. 1, 2022), <https://www.americanprogress.org/article/a-climate-and-competition-agenda-for-the-commodity-futures-trading-commission/> [https://perma.cc/TJ7H-LCGR].

²³⁵ U.S. DEP'T OF AGRIC., UNDERSTANDING FOOD QUALITY LABELS: A GUIDE TO AMS GRADE SHIELDS, VALUE-ADDED LABELS, AND OFFICIAL SEALS (2023), <https://www.ams.usda.gov/sites/default/files/media/AMSProductLabelFactsheet.pdf> [https://perma.cc/PHH5-BXVA].

²³⁶ Fredman & Phillips, *supra* note 117.

²³⁷ Song et al., *supra* note 25.

Identifying themes common to fraudulent schemes would aid the agency's creation of evaluative criteria that market participants can use to differentiate the carbon credit supply.²³⁸

D. *Bring Enforcement Actions*

The CFTC's assertion of legal authority over the virtual currency derivatives market entailed two steps: (1) defining cryptocurrencies as commodities under the CEA, and (2) using its prosecutorial powers to crack down on fraud and manipulation. After successfully squeezing virtual currencies into the CEA's definition of "commodity," the CFTC undertook strategic enforcement.²³⁹ The *McDonnell* litigation proved particularly significant, as it validated the CFTC's authority to combat virtual currency fraud in non-derivative transactions.²⁴⁰ The *My Big Coin* decision cemented the CFTC's interpretative authority by deeming its "broad approach" to regulating virtual currencies in sync with Congress's goal of "strengthening the federal regulation of the . . . commodity futures trading industry," effectively future-proofing its anti-fraud jurisdiction.²⁴¹ This legal framework enabled the CFTC to pursue increasingly significant enforcement actions against fraudulent schemes in the virtual currency space, ranging from basic Ponzi schemes to sophisticated impersonation frauds.²⁴²

Already in the CFTC's toolkit are the statutory framework and interpretive tools needed to complete step (1) with respect to VCCs.²⁴³ Thus, the agency need only undertake step (2) to fully realize its mandate. Insights gleaned from bringing digital asset-related enforcement actions lend the CFTC a prosecutorial advantage in the VCC space. Having successfully prosecuted fraudulent conduct in cases like *McDonnell* and *My Big Coin*, the CFTC is well-positioned to prevent such behavior from manifesting in carbon markets. Through these actions, the CFTC gained practice in identifying and correcting for the absence of effective governance and customer protections—tools that "exist

²³⁸ Fredman & Phillips, *supra* note 117.

²³⁹ GLOBAL LEGAL GROUP, GLOBAL LEGAL INSIGHTS - FINTECH 2–5, 286 (Barbara Stettner & Bill Satchell eds., 2019).

²⁴⁰ *Id.* at 4.

²⁴¹ *Id.*

²⁴² *Id.* at 5.

²⁴³ *See* 7 U.S.C. § 9; 17 C.F.R. § 180.1.

to identify misconduct and ultimately prevent collapse.”²⁴⁴ Settlements reached with FTX and Binance further illustrate the CFTC’s development of expertise in spotting fraudulent schemes involving intangible assets.²⁴⁵ Integral to reaching these settlements was the CFTC’s ability to stress the importance of standardized requirements, transparent business operations, and effective risk management practices²⁴⁶—priorities equally relevant to scaling the VCM.²⁴⁷

By invoking its anti-fraud mandate, the CFTC can target projects that fail to deliver projected results. Sprouting from this mandate is the CFTC’s “authority to bring actions against individuals or entities believed to be involved in the price manipulation of . . . carbon offsets.”²⁴⁸ Rule 180.1, which broadens the definition of unlawful manipulation to include false or misleading reporting on “market information or conditions that affect or tend to affect the price of any commodity in interstate commerce,”²⁴⁹ is on point. If this rule could be construed as covering the sale of VCCs by issuers who know that the projects they green-light yield neither additional nor permanent results, it would expose those who make exaggerated or unwarranted claims or forecasts in violation of the principles of good faith and fair dealing to liability.²⁵⁰

²⁴⁴ Press Release, Commodity Futures Trading Comm’n, CFTC Obtains \$12.7 Billion Judgment Against FTX and Alameda (Aug. 8, 2024), <https://www.cftc.gov/PressRoom/PressReleases/8938-24> (on file with Columbia Business Law Review).

²⁴⁵ *Id.*; Press Release, Commodity Futures Trading Comm’n, Federal Court Enters Order Against Binance and Former CEO, Zhao, Concluding CFTC Enforcement Action (Dec. 18, 2023), <https://www.cftc.gov/PressRoom/PressReleases/8837-23> (on file with Columbia Business Law Review).

²⁴⁶ Rostin Benham, Chairman, Commodity Futures Trading Comm’n., Keynote Address at the ABA Business Law Section Derivatives & Futures Law Committee Winter Meeting (Feb. 3, 2023), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opabehnam31> (on file with Columbia Business Law Review).

²⁴⁷ Song et al., *supra* note 25.

²⁴⁸ INTERAGENCY WORKING GRP. FOR THE STUDY ON OVERSIGHT OF CARBON MKTS. *supra* note 45, at 45.

²⁴⁹ 17 C.F.R. § 180.1.

²⁵⁰ Kristin Johnson, Comm’r, Commodity Futures Trading Comm’n., Commission Guidance Regarding Listing of Voluntary Carbon Credit Derivative

Alternatively, the CFTC could focus solely on bringing enforcement actions against projects that blatantly fail to deliver on promises. Rather than pursuing a more ambitious agenda, the agency could direct initial efforts toward well-documented cases of non-additionality,²⁵¹ particularly in the project area most riddled with fraud—forest conservation.²⁵² Under this approach, a project developer's false claims about additionality, made with knowledge of their inaccuracy, would constitute delivering false or misleading information that affects commodity prices in interstate commerce.

E. *Spearhead Inter-Agency Collaboration*

The evolving complexity of virtual currencies has exposed the limitations of traditional regulatory frameworks designed for conventional financial instruments. Initially, divergent classifications of cryptocurrency raised questions about regulatory overlap between the SEC's investor protection mandate and the CFTC's oversight of commodity markets.²⁵³ The recognition of Bitcoin and Ethereum as commodities largely muted these questions,²⁵⁴ though siloed oversight seems unlikely given increased cooperation between the agencies.²⁵⁵ 2018 marked a significant milestone in this cooperation. Eager to enhance the functioning of

Contracts (Dec. 4, 2023), <https://www.cftc.gov/PressRoom/SpeechesTestimony/johnsonstatement120423> (on file with Columbia Business Law Review).

²⁵¹ Fredman & Phillips, *supra* note 117.

²⁵² See, e.g., Elgin, *supra* note 78.

²⁵³ Elizabeth Caires & Eric Forni, *Digital Assets Regulation in 2023: Is a New Regulatory Framework Finally Emerging?*, DLA PIPER (Feb. 2, 2023), <https://www.merklescience.com/blog/cftc-vs-sec-navigating-regulatory-overlap-in-the-crypto-market> [<https://perma.cc/F3JG-AE6S>].

²⁵⁴ See *Why CFTC-approved spot Bitcoin, Ethereum trading is a 'massively huge deal'*, COINTELEGRAPH (Dec. 6, 2025), <https://www.tradingview.com/news/cointelegraph:1cba550ab094b:0-why-cftc-approved-spot-bitcoin-ethereum-trading-is-a-massively-huge-deal/> [<https://perma.cc/7HYZ-BL53>] (“The CFTC placed Bitcoin and Ethereum under a similar commodity framework with its latest announcement”); see also Clayton Melton, *Commodity Futures Trading Commission: The Correct Regulator for the Virtual Currency Spot Market*, U. CHI. BUS. L. REV.: ONLINE EDITION (2022), <https://businesslawreview.uchicago.edu/online-archive/commodity-futures-trading-commission-correct-regulator-virtual-currency-spot-market> [<https://perma.cc/HXC2-VLXR>].

²⁵⁵ *Id.*

the underlying markets, the CFTC and SEC signed a Memorandum of Understanding (MOU) acknowledging that “enhanced coordination and cooperation concerning issues of common regulatory interest is necessary in order to foster market innovation and fair competition and to promote efficiency in regulatory oversight.”²⁵⁶ The MOU also established a regulatory liaison to facilitate discussion, coordination, and information sharing between the agencies regarding virtual currency regulation.²⁵⁷ Historical precedent for such collaboration exists in the CFTC-SEC Advisory Committee on Emerging Regulatory Issues.²⁵⁸ Although this committee has since been dissolved, its efficacy elucidates the role of collaborative structures in helping agencies navigate complex regulatory challenges.²⁵⁹

The inconsistent standards and lack of transparency dampening the VCM’s growth potential mirror the early challenges that stymied cryptocurrency regulation.²⁶⁰ By adopting a joint oversight structure similar to that used in the digital asset space, the CFTC and SEC could maximize clarity and accountability in the VCM. Building on the approach championed by the aforementioned advisory committee,²⁶¹ the two agencies could go beyond merely allowing every firm to choose to self-designate with either the CFTC or the SEC and instead require every firm offering VCCs to register with the CFTC and then forward disclosures to

²⁵⁶ U.S. SEC. & EXCH. COMM’N & COMMODITY FUTURES TRADING COMM’N, MEMORANDUM OF UNDERSTANDING BETWEEN THE U.S. SECURITIES AND EXCHANGE COMMISSION AND THE U.S. COMMODITY FUTURES TRADING COMMISSION REGARDING COORDINATION IN AREAS OF COMMON REGULATORY INTEREST AND INFORMATION SHARING (2018), https://www.cftc.gov/sites/default/files/2018-07/CFTC_MOU_InformationSharing062818.pdf (on file with Columbia Business Law Review) (signed by Jay Clayton, Chairman of the SEC, and J. Christopher Giancarlo, Chairman of the CFTC).

²⁵⁷ Taylor Moffett, *CFTC & SEC: The Wild West of Cryptocurrency Regulation*, 57 U. RICH. SCH. L. 713, 737 (2023).

²⁵⁸ See SEC, *CFTC Announce Creation Of Joint CFTC-SEC Advisory Committee On Emerging Regulatory Issues*, SEC. & EXCHANGE COMM’N (May 5, 2011), <https://www.sec.gov/news/press/2010/2010-75.htm> [<https://perma.cc/22NG-CR78>].

²⁵⁹ Moffett, *supra* note 256, at 740–45.

²⁶⁰ Daniel Araya, *The Challenges of Cryptocurrency Regulation*, THE REGUL. REV. (Oct. 9, 2018), <https://www.theregreview.org/2018/10/09/araya-challenges-cryptocurrency-regulation/> [<https://perma.cc/4VYE-UYMK>].

²⁶¹ Moffett, *supra* note 256, at 716.

the SEC. More concretely, the CFTC should establish position limits and market manipulation safeguards for VCC trading. At the same time, the SEC should develop standardized disclosure requirements for companies referencing VCCs in their environmental claims. By generating insights into different aspects of market transactions, this approach would aid the modification of regulations in response to shifting needs.

Effective VCM oversight necessitates coordination between agencies with complementary expertise. For assistance determining whether projects truly deliver their promised carbon reductions, the CFTC need look no further than the Environmental Protection Agency (EPA). The EPA's technical knowledge of carbon sequestration methodologies and GHG accounting would help reconcile the disconnect between VCC issuance and carbon removal.²⁶² With guidance from EPA experts, the CFTC could incorporate more rigorous environmental criteria into its oversight framework, reducing the number of credits likely to be deemed fraudulent. The EPA's scientific expertise in carbon measurement and verification parallels the Financial Crimes Enforcement Network's (FinCEN) technical expertise, on which the CFTC leaned when developing its digital asset regulatory framework.²⁶³ FinCEN, whose mission is to promote national security through collecting and analyzing financial intelligence, plugged holes in regulators' understanding of VCC fraud by proffering specialized insights into money laundering.²⁶⁴ Coupling the EPA's environmental science capabilities with the CFTC's financial expertise will bring about increased understanding of climate events and the risks they engender, providing a solid foundation upon which to base quality-driven standards. Critically, such collaboration offers a low-cost alternative to hiring outside climate and carbon market specialists.

By consulting with personnel at the EPA and SEC on environmental standards and disclosure requirements, respectively,

²⁶² Franki, *supra* note 86, at 207–08.

²⁶³ Press Release, Commodity Futures Trading Comm'n, Leaders of CFTC, FinCEN, and SEC Issue Joint Statement on Activities Involving Digital Assets (Oct. 11, 2019), <https://www.cftc.gov/PressRoom/SpeechesTestimony/cftcfincensecjointstatement101119> (on file with Columbia Business Law Review).

²⁶⁴ *What We Do*, FINCEN, <https://www.fincen.gov/about/what-we-do> [<https://perma.cc/KVR8-P48Z>] (last visited Jan. 31, 2025).

the CFTC can ensure the efficient deployment of its resources. To reject a whole-of-government approach in the VCM realm by discouraging the division of responsibilities between these agencies would impede development of effective strategies to mitigate climate-related risk. A lack of communication would create gaps exploitable by bad-faith actors, leaving market participants unsure about the legitimacy of the VCCs they trade.

CONCLUSION

The VCM plays a vital role in combating climate change, yet its effectiveness is hampered by fragmentation and opacity—byproducts of insufficient regulatory oversight. The CFTC's broad anti-fraud mandate, jurisdiction over derivatives markets, and increasing focus on climate-related financial risks imply its readiness to spearhead regulatory changes in the VCM. By treating VCCs as commodities subject to its jurisdiction, the CFTC can deter fraud and manipulative conduct. The CFTC should repurpose the template it successfully deployed for use in the virtual currency space. Developing transparent valuation metrics, enforcing rigorous market surveillance, and fostering industry best practices—pillars upon which its guidance for virtual currency regulation rests—are critical to reshaping the perverse incentives that motivate bad-faith market players. To achieve this goal, the CFTC must move beyond issuing deferential guidance. Only by taking proactive steps to ensure uniformity and mitigate uncertainty can the CFTC inspire faith in the VCM's integrity. If buyer confidence continues to wane, attracting the capital needed to scale impactful carbon reduction projects will be an uphill battle.