

Mr. Christopher Kirkpatrick  
Commodity Futures Trading Commission  
Three Lafayette Centre  
1155 21st Street NW  
Washington, DC 20581

Re: In Response to Proposed Guidance on the Listing of Voluntary Carbon Credit Derivative Products on Designated Contract Markets

Dear Secretary Kirkpatrick,

We are undergraduate economics students at Duke University respectively studying economics and political science with a demonstrated interest in the intersection of financial regulation and climate finance. Our advanced economics coursework and personal interests have driven us to write to you today, as you contemplate regulations that will have a notable impact on derivative markets.

We respectfully submit these comments in response to the Commodity Futures Trading Commission's (CFTC) proposed guidance on the listing of voluntary carbon credit (VCC) derivative products on designated contract markets (DCMs).<sup>1</sup>

In the next century, the challenge of anthropogenic climate change will continue to impact governments, businesses, and individuals across the world. A 2022 IPCC report found that total net greenhouse gas emissions (GHGs) have reached a record high across all major sectors, with little progress being made to limit rising temperatures to 1.5C under the 2015 Paris Agreement.<sup>2</sup> In fact, governments in aggregate intend to increase fossil fuel production in the foreseeable future in spite of their net-zero commitments.<sup>3</sup> Every feasible pathway forward involves not only the innovation and implementation of green technologies and carbon-free systems, but also scaling strategies and incentives to remove or reduce GHGs, particularly in hard-to-abate sectors such as cement, steel, and petrochemicals. The creation and expansion of voluntary and compliance carbon markets will need to accompany developments such as the rapid commercialization of electric vehicles and solar power. Compliance markets are governmentally regulated GHG emissions reduction regimes where firms are allocated annual emissions

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<sup>1</sup> "Statement of Commissioner Kristin Johnson: Commission Guidance Regarding Listing of Voluntary Carbon Credit Derivative Contracts." December 4, 2023.

<https://www.cftc.gov/PressRoom/SpeechesTestimony/johnsonstatement120423>

<sup>2</sup> Intergovernmental Panel on Climate Change. 2022. *Mitigation of Climate Change*.

[https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC\\_AR6\\_WGIII\\_FullReport.pdf](https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_FullReport.pdf)

<sup>3</sup> Stockholm Environment Institute, Climate Analytics, E3G, IISD, and UNEP. 2023. *The Production Gap: Phasing down or phasing up? Top fossil fuel producers plan even more extraction despite climate promises*.

[https://productiongap.org/wp-content/uploads/2023/11/PGR2023\\_web.pdf](https://productiongap.org/wp-content/uploads/2023/11/PGR2023_web.pdf)

allowances, e.g., cap-and-trade schemes such as the Regional Greenhouse Gas Initiative, which is regulated by state authorities. On the other hand, voluntary markets are entirely self-governed, with buyers typically being private sector companies seeking to meet their sustainability targets and drive down GHG emissions. Moreover, compliance and voluntary markets are not mutually exclusive, with some compliance schemes allowing for a limited use of VCCs.

Voluntary markets will play an outsized role in the United States, where there is minimum political will to implement a compliance market at the national level (emissions trading scheme). Companies, governments, individuals, and other entities purchase carbon offsets and in turn, receive a certificate reflecting a promise to proactively reduce or remove emissions, measured in tonnes of carbon dioxide equivalents (CO<sub>2</sub> eq.). Offsets are sold through both primary and secondary carbon markets, with buyers purchasing directly from emissions reductions projects or through spot and derivative contracts. Spot contracts involve ex-post carbon credits that are delivered at the time of purchase and retired soon thereafter, i.e., offsets based on GHG reductions or removals that have already taken place. On the other hand, derivatives such as futures or forwards may involve offsets that have *yet to fulfill* their promise of GHG removal or reduction, pending the agreed upon date of delivery.

Globally, the VCC market is expected to grow from \$2 billion to \$250 billion in the next two decades through both public and private efforts.<sup>4</sup> Examples include major airlines offering carbon offset additives for commercial flights and the United States Energy Transition Accelerator. Notably, over 300 companies signed onto the Climate Pledge in March 2022, pledging to neutralize GHG emissions with carbon offsets to reach carbon neutrality by 2040, among other goals.<sup>5</sup> These companies (also buyers of VCCs) include Maersk, Sony, T-Mobile, and Salesforce. Indeed, voluntary carbon credits are integral to financing a stable transition to a green economy and mitigating the worst effects of climate change.

In recent years, VCC derivatives have emerged as a new mechanism for hedging against carbon credit price volatilities and managing climate-related risks. Buying allowances and then hedging through forward, future, option, or swap contracts can reduce a firm's financial exposure to risks embedded in changes in carbon credit prices. Derivatives can also help foster trust in the carbon market and provide price signals on the quality of underlying assets, thereby facilitating the growth of sustainable investments and contributing to long-termism.<sup>6</sup> However, given the market is still in its infancy, there is little aggregate information on VCC derivatives trading volumes. VCC trading platforms, such as CME Group, have created a number of VCC derivatives, with

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<sup>4</sup> Morgan Stanley. 2023. "Where the Carbon Market is Poised to Surge."

<https://www.morganstanley.com/ideas/carbon-offset-market-growth>

<sup>5</sup> Leading the Charge on Climate Change. The Climate Pledge. <https://www.theclimatepledge.com/us/en/History>

<sup>6</sup> *Derivatives in Sustainable Finance*. Centre for European Policy Studies and the European Capital Markets Institute. [www.isda.org/a/KOmTE/Derivatives-in-Sustainable-Finance.pdf](http://www.isda.org/a/KOmTE/Derivatives-in-Sustainable-Finance.pdf)

more than 10,000 contracts (10M VCCs) settled at expiration.<sup>7</sup> Moreover, eighteen futures contracts based on VCCs have been submitted to the Commission for listing on DCMs.<sup>8</sup> These developments reveal a growing interest in the use of VCC derivatives in hedging against climate-related price volatility.

Unfortunately, the existing voluntary carbon market lacks transparency and standardization, which introduces potential for fraud and manipulation and endangers market integrity. As such, we propose the following recommendations for the CFTC to implement:

1. Mandate that derivative contracts listed on DCMs need to have the underlying carbon credit asset to adhere to the Core Carbon Principles,<sup>9</sup> created by the Integrity Council for the Voluntary Carbon Market;
2. Develop a centralized digital system for recording the life cycle of carbon offsets;
3. Leverage existing anti-money laundering and fraud powers to take enforcement actions in notable cases of market manipulation or deceit, including in spot markets.

## **I. An Overview of Voluntary Carbon Credits (VCCs)**

### **A. Introduction to Sales Cycle and Current Trends/Trading Volumes**

Voluntary carbon offsets are tradable certifications premised on the *reduction* or *removal* of greenhouse gas emissions. A reduction-based project, for example, could mean replacing traditional wood and charcoal stoves with more energy-efficient petroleum gas cook stoves, thereby decreasing the volume of GHGs that would have otherwise been emitted. On the other hand, a removal-based project could mean actively taking CO<sub>2</sub>, methane, nitrous oxide, and other gasses out of the atmosphere through carbon capture, utilization, and storage (CCUS) technologies. Nature-based solutions, such as forestry projects which plant or maintain plots of land, are the most common type of credit project. In 2021, for example, avoided deforestation projects alone accounted for 77% of credit issuances and 79% of retirements.<sup>10</sup> By contrast, pure removal credits accounted for less than 3% of projects in 2021 and 2022. Removal projects, including CCUS, represent both immense potential and immense risk (i.e., risk of reversal or lack of permanence).

While direct air capture gets much attention, there is no one removal technology that has been deployed at scale. Scientists predict that a portfolio of technologies will likely be deployed to

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<sup>7</sup> Spilker, Gregor and Nugent, Nick. 2022. "Voluntary Carbon Market Derivatives: Growth, Innovation, and Usage." *Borsa Istanbul Review*. <https://doi.org/10.1016/j.bir.2022.11.008>

<sup>8</sup> "Statement of Commissioner Kristin Johnson: Commission Guidance Regarding Listing of Voluntary Carbon Credit Derivative Contracts."

<sup>9</sup> The Integrity Council for the Voluntary Carbon Market. *The Core Carbon Principles*. <https://icvcm.org/wp-content/uploads/2023/07/CCP-Section-2-R2-FINAL-26Jul23.pdf>

<sup>10</sup> Macfarlane, Micah. "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>

store carbon, and startups in this space are sprouting up, often with significant financial backing from outside investors. A company called Frontier, which includes Meta, Goldman Sachs, and many more, plans to invest \$925 million dollars into the research, development, and hopeful commercialization of these startups, showing immense faith in the potential of a matured removal technology market.<sup>11</sup> With all this excitement though, there needs to be adequate verification to make sure credit projects live up to their promises.

The initiation of the selling and acquisition processes for these credits typically involves the verification of the credits by an auditor to see if it adheres to the standards set forth by independent organizations such as the Verified Carbon Standard, the Gold Standard, the American Carbon Registry, and the Climate Action Reserve. If approved, the organization, which doubles as a registry, will list the credits for sale. Individuals and entities may then purchase a credit from the project developer via the registry and either choose to “retire” the credit after use or sell it in the secondary market. Other important market participants include retail providers and brokers who can help structure deals and match project developers with corporate buyers. Retirement marks the end of a credit’s life cycle, when the final owner of the credit uses it to negate their equivalent emissions.<sup>12</sup>

## **B. The Current State of the Market**

In 2020, 181.1 million tonnes of CO<sub>2</sub> eq. were traded across four of the largest carbon registries, a 32% increase from the year prior.<sup>13</sup> Notably, market demand has slowed in the past two years, dropping to 155 million tonnes of CO<sub>2</sub> eq. in 2022 as a result of growing accusations of greenwashing and concerns over the quality of listed credits.<sup>14</sup> Looking forward, the latest commercial reports indicate high growth opportunities in voluntary carbon markets, with some estimating the global VCM ballooning from \$2 billion in 2022 to \$100 billion in 2030.<sup>15</sup> This is accompanied by a rise in corporate commitments to carbon neutrality. Bloomberg analysis expects demand to become more inelastic and long-term as companies buy more carbon credits as a fundamental feature of their net-zero strategies rather than as a response to consumer

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<sup>11</sup> CNBC. "Why Big Tech Is Pouring Money Into Carbon Removal." YouTube. 28 June 2022.  
<https://www.youtube.com/watch?v=dRvkOFdfW7k>.

<sup>12</sup> Fredman, Alex. 2022. "The CFTC Should Raise Standards and Mitigate Fraud in the Carbon Offsets Market."  
<https://www.americanprogress.org/article/the-cftc-should-raise-standards-and-mitigate-fraud-in-the-carbon-offsets-market/>

<sup>13</sup> <https://www.isda.org/a/soigE/Role-of-Derivatives-in-Carbon-Markets.pdf>

<sup>14</sup> International Swaps and Derivatives Association. 2021 "The Role of Derivatives in Carbon Markets."  
<https://www.bloomberg.com/professional/blog/long-term-carbon-offsets-outlook-2023/#:~:text=Offset%20demand%20dropped%20in%202022,161%20million%20the%20previous%20year.>

<sup>15</sup> Morgan Stanley. 2023. "Where the Carbon Market is Poised to Surge."

behavioral demand.<sup>16</sup> These are all optimistic projections of a future in which we steadily rely on carbon credits as a cornerstone of a sustainable economy.

However, this is premised on assumptions that existing market inefficiencies will be resolved. For example, offset supply will likely parallel trends in demand, although it is unclear if markets will continue to supply primarily nature-based solutions or instead pivot to removal technology such as direct air capture. The science directly backs the efficacy of nature-based solutions on pulling carbon out of the air. However, they have been criticized for a number of reasons, fundamentally because they are cheap and low-quality. Removal technology, on the other hand, is hard to scientifically prove and construct, but it is much easier to account for than nature-based solutions. In a future where nature-based solutions and other low-quality credits continue to dominate the market, supply will heavily outpace demand, further driving down prices and generating a negative feedback loop in which minimal meaningful progress is being made towards reducing GHG emissions. Market participants could continue to move away from carbon credits over worries of greenwashing, resulting in market shrinkage. Alternatively, when considering recent developments such as the passing of the 2022 Inflation Reduction Act (IRA), nature-based solutions would be complemented by removal technologies as these become more reliable and accessible.<sup>17</sup>

### **C. Issues of Quality, Transparency, and Standardization Plague the Market**

In theory, the voluntary carbon market epitomizes an ideal solution through which sustainable finance can contribute to mitigating the worst effects of climate change. But all that glitters is not gold, especially when it comes to carbon credits.

A quality credit should have the following characteristics:<sup>18</sup>

1. *Additionality*: The GHG removals or reductions from the project would otherwise not have occurred, absent the profit incentives provided by the sale of carbon credits.
2. *Permanence*: The GHG removals and reductions should be permanent and prevent risks of leakage, to the best extent of their ability.<sup>19</sup>
3. *Exclusive Claim*: The GHG removals or reductions should only be counted once and retired afterwards. They should not be double issued, double claimed, or double used.

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<sup>16</sup> BloombergNEF. “Long-term carbon offsets outlook 2023.” July 18, 2023.

<https://www.bloomberg.com/professional/blog/long-term-carbon-offsets-outlook-2023/#:~:text=Offset%20demand%20dropped%20in%202022,161%20million%20the%20previous%20year.>

<sup>17</sup> The IRA crucially contained massive investment incentives, notably the Section 45Q tax credit, to expedite the production and commercialization of carbon capture, utilization, and storage (CCUS) technologies.

<sup>18</sup> ICVCM. *The Core Carbon Principles*.

<sup>19</sup> Carbon leakage occurs when an offset project may increase emissions elsewhere. For example, conservation projects in one region could incentivize accelerated deforestation in other regions.

4. *Measurable*: The GHG removals or reductions should be robustly quantified through conservative, science-based accounting principles.

Carbon credits often fail to meet these high-quality thresholds. Nearly half of all credits issued are nature-based credits, which are usually created through conservation of land in strategic locations.<sup>20</sup> These include projects for improved forest management (ex., protecting or restoring lands that have been logged), afforestation, reforestation, and revegetation (ex., planting trees to remove CO<sub>2</sub>), and regenerative agriculture (ex., using agricultural practices like cover crops and crop rotation to sequester carbon in soil). Big companies, like JPMorgan Chase & Co., Walt Disney Co., and BlackRock have collectively invested heavily in these nature-based carbon offsets to reduce their own carbon footprints. In one case, corporations bought offsets for the Hawker Mountain Sanctuary in Philadelphia, or 2,380 acres of forested land that have sequestered a supposed sum of 1.5 million tons of CO<sub>2</sub>. The punchline came when Bloomberg reported that this land had remained untouched for the better half of a century and were never in danger of deforestation, or that they failed to meet the criteria of additionality. In another example, a ProPublica study in 2019 using satellite imagery analysis found that “protected” forest lands continued to be logged in Brazil despite the fact that the project developer had sold 48,000 credits on the very promise of conservation.<sup>21</sup> Other types of credits, such as pure removal projects, are scarce, expensive, and have a high risk of leakage or permanence issues, given the current state of carbon capture, utilization, and storage (CCUS) technology.

In addition to the lack of quality assurances, voluntary carbon markets are opaque and disaggregated. There is a real information cost to consumers due to a lack of transparency and standardization. Different standard-setters (and registries) have different criteria, protocols, and categorization for carbon credits and are entirely self-regulated. These standard-setters each assert their model is best in class, without any baseline due diligence requirements. Thus, it is extremely difficult to compare credits across registries. Not only do different standard-setters have different verification criteria (ex. the Gold Standard emphasizes alignment with the UN Sustainable Development Goals whereas Verra does not), but they also have different measurement and accounting processes. The lack of transparency and standardization can result in incredible market failures. In one case, a Guardian investigation found that more than 90% of rainforest credits listed on Verra were in fact phantom credits, with threats to forests overstated by 400% on average.<sup>22</sup> This is in spite of the fact that these standard-setters heavily market their

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<sup>20</sup> Lawrence, Dee. *Forbes*. “High-Quality Nature-Based Carbon Credits: What You Need to Know.” September 30, 2022. <https://www.forbes.com/sites/forbesnonprofitcouncil/2022/09/30/high-quality-nature-based-carbon-credits-what-you-need-to-know/?sh=3c025abf4e86>

<sup>21</sup> Song, Lisa and Moura, Paula. *ProPublica*. “An Even More Inconvenient Truth: What Carbon Credits for Forest Preservation May Be Worse Than Nothing.” May 22, 2019. <https://features.propublica.org/brazil-carbon-offsets/inconvenient-truth-carbon-credits-dont-work-deforestation-redd-acre-cambodia/>

<sup>22</sup> Greenfield, Patrick. *Guardian*. “Revealed: more than 90% of rainforest carbon offsets by biggest certifier are worthless, analysis shows.” January 18, 2023. <https://www.theguardian.com/environment/2023/jan/18/revealed-forest-carbon-offsets-biggest-provider-worthless-verra-aoe>

science-based approaches, which is evidence that the voluntary carbon market is rife with opportunities for either intentional market manipulation and deceit, or unintentional mistakes that nonetheless deeply affect consumer confidence.

## II. The CFTC Has a Mandate to Regulate Climate-Related Financial Risk

At the heart of the Commissions' mandate is the imperative to regulate derivatives, or "complex financial contracts based on the value of an underlying asset, group of assets, or benchmark."<sup>23</sup> While commonly misrepresented as a modern financial innovation, the history of derivatives trading can be traced back to the very beginning of commercial activity in Mesopotamia as a means of hedging risk and uncertainties in production, distribution, and pricing of goods.<sup>24</sup> In the United States, derivative contracts initially concerned agricultural commodities such as oil, cotton, grains, and more. In 1972, Congress passed the Commodity Futures Trading Commission Act, officially replacing the Commodity Exchange Authority (which only regulated agricultural commodities) with the current Commission, which has exclusive authority over futures trading in all commodities.<sup>25</sup>

Various pieces of legislation, such as the 2010 Dodd-Frank Act, have since expanded the CFTC's mandate to regulate (1) commodity futures, options, and swaps markets and (2) over-the-counter markets (OTC). In the past two decades, the Commission has grappled with issues of regulation on derivatives based on the value of intangible commodities, including cryptocurrency and carbon offsets. Critically, the CFTC determined that carbon offsets qualified as *environmental commodities*, or "physically settled, non-financial instruments" in 2011<sup>26</sup> However, the specific context under this rule also emphasized the niche role of environmental commodities in complying with state and regional compliance markets in the United States.

Since then, demand has become more market-driven, with the carbon market arguably having developed to serve a larger purpose. In truth, the United States is unlikely to ever institute a national compliance program, and even then, it wouldn't be nearly as expansive as the European model, covering only specific sectors like power or heavy industry. Certainly, there is more political will in the current administration under President Joe Biden to scale environmental

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<sup>23</sup> Schmidt, John. *Forbes*. "A Basic Guide to Financial Derivatives." April 28, 2023.

<https://www.forbes.com/advisor/investing/derivatives/>

<sup>24</sup> Weber, Ernst. "A Short History of Derivative Security Markets." <https://ssrn.com/abstract=1141689>

<sup>25</sup> Note, while the Commission was formally established in 1974, it derives its legal authority from the 1936 Commodity Exchanges Act (CEA), which permits the CFTC to establish regulations to be published in Title 17 of the Code of Federal Regulations. June 6, 2008.

<sup>26</sup> The Business Council for Sustainable Energy. "Further Definition of Swap, Security-Based Swap, Security-Based Swap Agreement; Mixed Swaps; Security-Based Swap Agreement Recordkeeping; Proposed Rule 76 Fed.Reg 29,818." May 23, 2011.

[https://www.cftc.gov/sites/default/files/idc/groups/public/@swaps/documents/dfsubmission/dfsubmission\\_022912\\_1444\\_1.pdf](https://www.cftc.gov/sites/default/files/idc/groups/public/@swaps/documents/dfsubmission/dfsubmission_022912_1444_1.pdf)

initiatives, but the future of carbon credits is fundamentally about risk management. Stakeholders across the spectrum recognize the importance of carbon credits, with representatives from major firms like AllianceBernstein noting that “firms and individuals increasingly turn to the derivatives markets to mitigate physical and transition risk.”<sup>27</sup>

Historically, financial regulation in the United States has been reactive, with reforms and regulations imposed after a major crisis or event such as the Panic of 1907 or the 2008 Financial Crisis. These cataclysmic events respectively prompted the establishment of the Federal Reserve and broad-sweeping reforms through the Dodd-Frank Act.<sup>28</sup> Climate change, however, is an ongoing crisis with an indefinite time horizon. Physical risks have become especially apparent, with a noticeable increase in the frequency and severity of natural disaster events in the past decade. Thus, financial regulation to climate-related financial risk cannot only be reactive. It must also be anticipatory. Throughout our research process for this comment letter, one important obstacle has been the lack of available data surrounding voluntary carbon markets and specifically carbon derivatives. They are a relatively newer asset class and currently have lower trading volumes relative to other commodities in derivative and spot markets. This does not undermine the importance of preemptive mandatory standards that correct the immediate problems of carbon markets. The Commission recognized this, and in line with Section 3 of Executive Order 14030, the Commission released a Request for Information (RFI) on Climate-Related Financial Risk in June 2022. In relation to voluntary markets, the RFI posed three questions:<sup>29</sup>

1. Are there ways in which the Commission could enhance the integrity of voluntary carbon markets and foster transparency, fairness, and liquidity in those markets?
2. Are there aspects of the voluntary carbon markets that are susceptible to fraud and manipulation and/or merit enhanced Commission oversight?
3. Should the Commission consider creating some form of registration framework for any market participants within the voluntary carbon markets to enhance the integrity of the voluntary carbon markets? If so, what would a registration framework entail?

All three questions directly strike at the heart of the CFTC’s mandate to foster open, competitive, and financially sound markets and to protect market users from fraud, manipulation,

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<sup>27</sup> Lamdouar, Salima. “Re: 87 FR 34856 Request for Information on Climate-Related Financial Risk.” October 7, 2022.

<sup>28</sup> Schwarcz, Steven. “The Functional Regulation of Finance.” *Harvard Law School Forum on Corporate Governance*. June 16, 2014. <https://corpgov.law.harvard.edu/2014/06/16/the-functional-regulation-of-finance/>

<sup>29</sup> CFTC. “Request for Information on Climate-Related Financial Risk.” June 8, 2022. <https://www.cftc.gov/LawRegulation/FederalRegister/final-rules/2022-12302.html>



abusive risks, and systemic risk related to derivatives.<sup>30</sup> Thus, the Commission should exercise its full authority to build out comprehensive regulation in voluntary carbon markets in a three-pronged strategy of (1) policing market manipulation and fraud in spot markets, (2) extending direct oversight on futures markets, and (3) subjecting carbon swaps to reporting and recordkeeping regulations, as well as non-cleared margin requirements.<sup>31</sup>

### III. Recommendations

In assessing the current state of affairs in voluntary carbon markets in the United States, we believe that the benefits of proposed guidance for the listing of VCCs on DCMs outweigh the costs of compliance and other potential externalities.<sup>32</sup> We recommend that the Commission consider adopting the following rules with respect to voluntary carbon markets:<sup>33</sup>

1. *Adopt existing Core Carbon Principles,<sup>34</sup> created by the Integrity Council for the Voluntary Carbon Market, as the standard metric for quality carbon offsets underlying exchange-listed derivatives*

One of the issues with carbon credits is the lack of a common understanding of quality. However, there is no need for the Commission to develop its own standards. The CFTC is not an environmental or scientific organization and has neither the technical nor budgetary capacity to make such an attempt, nor does this fall within its purview as a *financial* regulator. Instead, the Commission should leverage existing efforts of independent organizations such as the Integrity Council for the Voluntary Carbon Markets (ICVCM) premised on building voluntary carbon markets through principles of integrity, transparency, and robust accounting.<sup>35</sup> ICVCM is an independent governance body whose primary objective is to ensure the growth of the global VCM to help address climate change and is funded by a range of philanthropic institutions, such as Sequoia Climate Foundation and the Bezos Earth Fund. In March of 2023, the ICVCM released the Core Carbon Principles, which have been recognized by members of the

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<sup>30</sup> CFTC. “The Commission.” <https://www.cftc.gov/About/AboutTheCommission>

<sup>31</sup> ISDA. “Voluntary Carbon Markets: Analysis of Regulatory Oversight in the US.” June 2022.

<https://www.isda.org/a/93WgE/Voluntary-Carbon-Markets-Analysis-of-Regulatory-Oversight-in-the-US.pdf>

<sup>32</sup> Salter, Trevor. 2022. ““Carbon Cowboys”: How to Rein in Deceptive Sellers in the Carbon Offset Market.” *The George Washington Journal of Energy and Environmental Law* 1(1)., 59-74. <https://gwjeel.com/volume-1-number-1/>

<sup>33</sup> Along with these recommendations, we strongly urge the Commission to coordinate climate-related financial rulemaking with other regulatory bodies, such as the Securities and Exchange Commission and the Federal Trade Commission. The CFTC should also coordinate with subnational efforts to regulate offsets, such as California’s Compliance Offsets Program. Relatedly and more broadly, the CFTC should consider if it is necessary to differentiate between compliance offsets and voluntary offsets.

<sup>34</sup> ICVCM. *The Core Carbon Principles*.

<sup>35</sup> ICVCM. 2023. “Strategic Report for the Period 2 November 2021 to 31 March 2023.” <https://icvcm.org/wp-content/uploads/2023/11/Annual-Report-and-Accounts.pdf>

Commission, including Commissioner Christy Goldsmith Romero and Commissioner Kristin N. Johnson, as a thoughtful and meaningful framework for assessing the quality of carbon credits.<sup>36</sup> ICVCM's standards draw from prominent international organizations, such as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSA) and the Taskforce on Scaling Voluntary Carbon Markets. Exchanges and clearinghouses in the United States that list and clear carbon offset derivatives should list offset derivatives that adhere to these standards.

As time goes on and the market becomes even more volatile with the rise of extreme weather events due to climate change, it is integral for the CFTC to periodically revisit the ICVCM standard and ensure that they are continuing to adequately avert as much risk as possible within the market. The ICVCM does state that its guidelines are "living documents [that] will further evolve in the light of experience."<sup>37</sup> However, it is important that the CFTC continues to conduct its own investigations in order to get a more unbiased assessment. If the ICVCM standard ever does prove inadequate, alternative ones can be brought forth for consideration. One such example is the Green Claims Directive that is already in use in European countries, having particular efficiency in cracking down on false green marketing advertisements.<sup>38</sup>

2. *Develop a centralized digital system (meta-registry) for recording the life cycle of carbon offsets*

Perpetual lack of regulatory oversight will leave consumers in the voluntary market vulnerable to exploitative behavior and heightened risk. In the medium-to-long term, the Commission should develop a single registry to aggregate listings and provide offset credibility and enhance price discovery. The meta-registry would provide information on the life cycle of a VCC, from inception and issuance to retirement. This will also help to address the predictions brought up in the CFTC's groundbreaking report, "Managing Climate Risk in the US Financial System," which said that public demand for accessible climate data will likely increase in the coming years, especially data that is sourced from the federal government<sup>39</sup>.

3. *Leverage existing anti-money laundering and fraud powers to take enforcement actions in notable cases of market manipulation or deceit, including in spot markets*

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<sup>36</sup> CFTC. "Keynote Remarks of Commissioner Kristin N. Johnson at Rice University's Baker Institute for Public Policy Annual Energy Summit." October 5, 2023.

<https://www.cftc.gov/PressRoom/SpeechesTestimony/opajohnson7>

<sup>37</sup> "Part 6: Assessment Procedure." The Integrity Council for the Voluntary Carbon Market. <https://icvcm.org/wp-content/uploads/2022/07/ICVCM-Public-Consultation-FINAL-Part-6.pdf>

<sup>38</sup> Salaheldin, Maram & Foote, Chrisitan. "Neutralizing 'Carbon Neutral'? Use of Carbon Offsets Faces Increased Global Scrutiny." *Clark Hill*. 2 June 2023. <https://www.clarkhill.com/news-events/news/neutralizing-carbon-neutral-use-of-carbon-offsets-faces-increased-global-scrutiny/>.

<sup>39</sup> Litterman, Bob. "Managing Climate Risk in the U.S. Financial System." Harvard Law School Forum on Corporate Governance and Financial Regulation. October 1, 2020. <https://corpgov.law.harvard.edu/2020/10/01/managing-climate-risk-in-the-u-s-financial-system/>.

Given that carbon offsets are classified as environmental commodities, the Commission has authority to monitor and take enforcement action against cases of market manipulation and deceit, including in transactions for purchase or sale in the United States in global spot markets such as the Carbon Trade Exchange or Expansiv's CBL Platform.

The CFTC holds substantial anti-fraud authority over spot markets. To discourage bad actors in voluntary carbon derivatives and spot markets, the Commission has already announced the creation of an Environmental Fraud Task Force, who will “examine, among other things, fraud with respect to the purported environmental benefits of purchased carbon credits, as well as registrants’ material misrepresentations regarding ESG products or strategies.”<sup>40</sup> To ensure the integrity of these markets, the Commission should employ its toolkit of enforcement actions, including litigation, monetary penalties, trading restrictions, and more, in notable cases of market manipulation and fraud. Particularly, Section 6b makes it unlawful “to cheat or defraud or attempt to cheat or defraud the other person” or willfully “manipulate or attempt to manipulate the prices of commodities through false or misleading reports” or statements.<sup>41</sup> Section 9 expands on enforcement through legal action, with civil penalties up to \$1 million if found guilty of manipulation or attempted manipulation.<sup>42</sup>

This subject has already been addressed by courts, as the U.S. plaintiffs’ bar took on Danone (maker of Evian water) and Delta Airlines claims of carbon neutrality based on faulty carbon offsets.<sup>37</sup> Therefore, we can expect more legal proceedings in the future on this matter. A detailed CFTC report on what constitutes fraud and mislabelling, not only when generating offsets but also as it pertains to advertising the effects of those offsets to the public, would be beneficial to judicial authorities. Moreover, it is for the ultimate benefit of the well-meaning consumer to know the subset of carbon offsets that provide some benefit to the environment, rather than be overburdened with a vast array of offsets, not knowing which ones are actually beneficial to the environment and which ones are fraudulent.

### **A. The Benefits of Mandatory Standards**

Section 19 of the CEA outlines the process of assessing costs and benefits of any proposed rule, which include the protection of market participants and the public, the efficiency, competitiveness, and financial integrity of derivative markets, and considerations of price

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<sup>40</sup> CFTC. “CFTC Whistleblower Office Issues Alert Seeking Tips Relating to Carbon Markets Misconduct.” June 20, 2023. <https://www.cftc.gov/PressRoom/PressReleases/8723-23>

<sup>41</sup> Legal Information Institute. “7 U.S. Code § 9 - Prohibition regarding manipulation and false information.” <https://www.law.cornell.edu/uscode/text/7/9>

<sup>42</sup> Ibid.

discovery, sound risk management, and other items of public interest.<sup>43</sup> The benefits of any, if not all, of the above recommendations are immense. In developing mandatory standards for voluntary carbon credits, the CFTC helps preserve the intended purpose of carbon derivative products — to incentivize and facilitate emissions removal and reduction, thereby mitigating climate-related financial risks — by ensuring market integrity, increasing transparency, and minimizing uncertainty.

## **B. The Costs of Mandatory Standards**

As with any type of regulation, there will necessarily be compliance costs associated with developing a high quality voluntary carbon market. In adopting the Core Carbon Principles, and relatedly adhering to its assessment framework and platform, originators of carbon credits will incur an additional cost of compliance as well as third-party verification. These costs will likely be passed onto the consumer, raising average prices for carbon offsets. Moreover, the eventual creation of a federal registry for carbon credits threatens the current business models of commercial registries and could potentially increase barriers-to-entry for some offset sellers. Additionally, our first recommendation of adopting the Core Carbon Principles from a private third-party entity inherently comes with legal risk, as in the case of the SEC’s proposed climate risk disclosure rule.<sup>44</sup> Finally, a regulation shock restricting the number of VCCs that can be used as underlying assets for derivative contracts may then decrease overall supply of VCCs. In the short term, this may mean that companies cannot meet their net-zero commitments. This may also mean greater opportunity or potential for manipulation of VCC prices, and by association, any related derivative contracts.

Arguably, however, these compliance costs are lower than reputational costs to firms or individuals that had intended to use carbon credits to mitigate their carbon footprint but instead purchased a faulty credit and was subsequently accused of greenwashing. For example, Shell came under intense media scrutiny for greenwashing after an investigation revealed questionable accounting practices for their VCC projects.<sup>45</sup> In another case, a Bloomberg report accused Credit Suisse, Delta, Volkswagen, and a number of other large companies of buying “junk

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<sup>43</sup> Legal Information Institute. “7 U.S. Code § 19 - Consideration of costs and benefits and antitrust laws.” <https://www.law.cornell.edu/uscode/text/7/19>

<sup>44</sup> Bruce, Dylan, Gellasch, Tyler, and Phillips, Todd. “The SEC Should Write Its Own Environmental, Social, and Governance Rules.” The Center for American Progress. December 13, 2021. <https://www.americanprogress.org/article/the-sec-should-write-its-own-environmental-social-and-governance-rules/#:~:text=The%20SEC%20is%20not%20legally,in%20how%20it%20does%20so.>

<sup>45</sup> Cvililini, Matteo. “Revealed: How Shell cashed in on dubious carbon offsets from Chinese rice paddies.” *Climate Home News*. March 28, 2023. <https://www.climatechangenews.com/2023/03/28/revealed-how-shell-cashed-in-on-dubious-carbon-offsets-from-chinese-rice-paddies/>

credits to cheaply attain carbon neutrality status.<sup>46</sup> Moreover, companies not only face reputational risk by purchasing low quality offsets, but many of them often have every intention and reason to avoid greenwashing practices. A recent study from Ecosystem Marketplace finds that the vast majority of companies that purchase VCCs invest three times more in emissions reduction than companies that don't, meaning they are otherwise honestly working towards becoming carbon neutral.<sup>47</sup>

Moreover, while carbon credits constitute a small portion of total transactions in the United States, and therefore do not directly pose a threat to the health and integrity of the overall financial system, a lack of standards may result in long-term harm and seed further distrust in voluntary markets. The performance of voluntary markets is critical to mitigating climate-related financial risk. While planting trees or removing carbon may seem like low-impact activities, they are instrumental in delaying the worst effects of climate change as governments, entities, and individuals around the world make progress towards a green economy. The counterfactual reality in which voluntary markets fail provide a starker cost-benefit analysis, where failed efforts to reduce or remove GHGs results in faster global warming, raises physical and transition risks and associated costs, and thereby threatens the security and well-being of the global financial system. Mandatory standards for voluntary credits are a first step to comprehensive climate-related macroprudential financial regulation. Lastly, faulty carbon credits and related derivatives post an indirect cost to consumers at large who then purchase from firms claiming net-neutrality in hopes of reducing their own carbon footprint.

### C. Alternatives

Given the current state of affairs, we believe that our proposed recommendations maximize net benefits for market participants.<sup>48</sup> They would also be the most effective and feasible for the CFTC to implement at this time. However, it is important to note that other solutions do exist and are worthy of consideration. One of the most prominent alternatives is to divide the standards the Commission uses into specific standards focusing on one category of credit derivatives instead of using the all-encompassing credit that is the ICVCM. Examples of this fragmentation include the standards set by Puro.earth (which specializes on geological storage offsets) and the standards set by MoorFutures (which specializes on peatland rewetting offsets).<sup>49</sup>

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<sup>46</sup> Rathi, Akshat, White, Natasha, and Pogkas, Demetrios. "Junk Carbon Offsets Are What Make These Big Companies Carbon Neutral." Bloomberg Green. November 21, 2022. <https://www.bloomberg.com/graphics/2022-carbon-offsets-renewable-energy/>

<sup>47</sup> Ecosystem Marketplace. "New research: Carbon credits are associated with businesses decarbonizing faster." October 10, 2023. <https://www.ecosystemmarketplace.com/articles/new-research-carbon-credits-are-associated-with-businesses-decarbonizing-faster/>

<sup>48</sup> White House. "Circular No. A-4." November 9, 2023. <https://www.whitehouse.gov/wp-content/uploads/2023/11/CircularA-4.pdf>

<sup>49</sup> Luik, Lisett. "ABC: who are Verra and Gold Standard? Why they matter." *Arbonics*. Published 13 September 2022. <https://www.arbonics.com/knowledge-hub/abc-verra-and-gold-standard>

This may be beneficial in theory, as the standards might be more detailed, and thus, the chances of having to address future fraud and manipulation violations in the derivative markets will likely decrease. However, in practice it runs into the same issues as the functional/sectoral approach to financial regulation - it will be difficult to coordinate different standards with one another and there may be regulatory overlap of different standards on the same offset. More alternative solutions that we considered include, but are not limited to:

1. Subjecting carbon credit registries to direct oversight by the CFTC. These organizations not only set standards and verify credits, but also often have their own registries which functionally serve as delivery points for derivative contracts. The CFTC could mandate that these registries, for example, track credit ownership and retirement in addition to credit verification through a standardized process. These registries would be subject to similar regulations for self-regulated organizations, such as establishing a notification process for failure of delivery and maintaining sufficient records regarding transactions as well as attributes and quality of offsets;
2. Developing a grading system for offsets similar to the Department of Agriculture's food labels to further differentiate between high and low quality credits;
3. And developing a standard for accounting and measurement methods.

#### **IV. Conclusion**

The CFTC was the first US federal regulatory organization to weigh in on climate when a subcommittee of it released the highly influential report, "Managing Climate Risk in the US Financial System," on September 9, 2020.<sup>50</sup> And, as noted in this document, regulators already have more than sufficient legal authorities that they can use to address climate risk. Therefore, we encourage the Commission to continue its leadership in producing regulations just as dynamic as the problems that they face. Voluntary and compliance carbon markets are predicted to expand to meet demands for carbon-reduction, and thus the regulations on them will have to expand as well.

Once again, it should be noted that the CFTC is not an environmental organization and does not have a focus on promoting any particular climate agenda. However, if the Commission does not take preemptive steps to assist financial markets with their transition risks into a green future, they risk bottling up a problem until it explodes. If the CFTC does not address fraudulent climate offsets now, then the same businesses who were responsible (knowingly or unknowingly) for trading on commodities and futures based on fraudulent offsets will face the brunt of the climate crisis as it threatens their investments in derivative markets tomorrow. Physical and liability risks, as well as transition risks, will become harder to mitigate as more time goes on without

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<sup>50</sup> "CFTC Subcommittee Issues First-of-its-Kind Climate Risk Report." Morgan Lewis. October 2020. <https://www.morganlewis.com/pubs/2020/10/cftc-subcommittee-issues-first-of-its-kind-climate-risk-report>

addressing them. Therefore, this is only something that can be resolved by a regulatory agency such as the CFTC.

This is not to say that the CFTC is exclusively responsible or capable of mitigating financial risks caused by the climate crisis. However, the proposed guidance offers powerful tools that are inherently related to anti-fraud, anti-manipulation, and market safety. When carbon offsets have the characteristics of additionality, permanence, exclusive claim, and measurability, derivatives based on them are beneficial towards these goals. But unfortunately, companies are facing increasing pressure to make sweeping claims about their environmental commitments based on derivatives. And thus, voluntary carbon markets too often are opaque, disaggregated, and fraudulent. To amend this, we recommend that the CFTC enforce the ICVCM's Core Carbon Principles, develop a meta-registry for recording the life cycle of carbon offsets, and aggressively litigate cases of market manipulation or deceit.

We can see similarities between this paper's position and the position in the recent proposal titled "CFTC Issues Proposed Guidance Regarding the Listing of Voluntary Carbon Credit Derivative Contracts" (which passed in a unanimous vote). Like this paper, the proposal favors mandatory standards. For example, in the Good Practices section, it talks about a need to confirm that carbon credits correspond to "independently verified emission reductions" This is precisely what we seek to achieve with the adoption of the Core Carbon Principles which is addressed with our recommendation of employing ICVCM principles.<sup>51</sup> Moreover, Good Practice 18 indicates a need to carry out enforcement actions against market participants engaging in false advertising, including monetary sanctions. We commend this Good Practice, as it corresponds with our recommendation to litigate abusive practices in the market using the expansive toolkit of enforcement actions the Commission has at its disposal.

Where our paper goes farther, however, is in our approval for the CFTC to not only monitor other offset registries, but to develop its own meta-registry for recording the life cycle of carbon offsets. By contrast, the proposal calls for, in Good Practice 8, methods to ensure that the carbon credit registry is reliable.<sup>52</sup> Creation of one CFTC registry (rather than multiple old registries) would be more beneficial towards the Commission's greater goals because consumers are then more likely to be able to interpret, trust, and have access to it. We encourage the CFTC to strengthen their recommendation in this, however we approve of the direction of the current release and are pleased to see where our thoughts align.

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<sup>51</sup> The Board of the International Organization of Securities Commissions. "Voluntary Carbon Markets Consultation Report." CFTC. December 2023. <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD749.pdf>

<sup>52</sup> The Board of the International Organization of Securities Commissions. "Voluntary Carbon Markets Consultation Report." CFTC. December 2023. <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD749.pdf>

The goal is, to the greatest extent possible, to limit the impact of climate-related financial shocks that will affect the economy. This is an admittedly hard goal, as climate change is by definition, a phenomenon that increases shocks. This is why we encourage the CFTC to be particularly thorough in their regulation of this market and to collaborate with other government organizations, such as the Securities and Exchange Commission (SEC), if they believe it would be beneficial towards these goals.

We also want to emphasize that the Commission should not stop with these regulations in addressing climate risk to the financial system. Because climate change is ever-evolving, the business practices pertaining to it will be as well. The Commission should instead, like other regulatory and litigation bodies, look at these recommendations as an ideal starting point into what approaches would be helpful in general when trying to regulate a green future. More and more people are beginning to look to offsets as less of an important tool for decarbonization. Therefore, it is important that while contemplating how to regulate derivatives that are based on voluntary carbon offsets, the Commission also contemplates how to extrapolate this precedent into a myriad of other environmentally-based derivatives that fall under its purview. Ultimately, the CFTC is trying to insure the integrity of derivative products, not moving forward a green agenda. However, with these policies, it can help the private sector become well-informed in their green initiatives, and by proxy, create a robust market for all.

Sincerely,

Chioma Ibeku, Kaylex Wilcox, and Susan Lin