Today, the Commodity Futures Trading Commission (CFTC or Commission) held a roundtable entitled “Voluntary Carbon Markets (VCMs) Convening.” The roundtable was broken into four panels to explore various aspects of voluntary carbon offsets markets. Below is a summary of the roundtable prepared by Delta Strategy Group. It includes several high-level takeaways from the discussion, followed by summaries of the CFTC commissioners’ opening statements and summaries of the discussions held in each of the roundtable’s panels.

Key Takeaways
The following is a summary of the main topics explored in today’s hearing. Each is discussed in further detail in the Discussion section below.

- This was the first roundtable of its kind for voluntary carbon markets for the CFTC. Chairman Behnam said that he believes the CFTC has a role to play in improving consumer confidence and credence in these markets so that they can expand.

- Senate Ag Chair Debbie Stabenow (D-MI) said that VCMs and associated derivatives products have an important role to play in mitigating both the physical and transition risks associated with climate change.

- During the roundtable, common recommendations for CFTC involvement in VCMs from participants included monitoring spot markets for fraud and manipulation. Many said that the best way to do this is to promote total transparency from the creation of an offset to its sale and to its ultimate retirement. Participants also encouraged the CFTC to work with the USDA to ensure that these markets best serve ag producers and offer them the proper compensation for their involvement in these markets.

- Another theme of the roundtable was the need for similar standards for both voluntary and compliance carbon markets, as well as European markets. Some said that the CFTC should work to encourage this convergence, and some argued that this convergence is already taking place naturally.
OPENING REMARKS

Opening Statements from Commissioners and Keynote Speakers

Chairman Rostin Behnam
Climate change poses a new and emerging threat to financial market stability. The derivatives markets are used to hedge a range of risks, and they serve as information resources for hedgers and investors when it comes to price discovery. Market participants in all sectors will manage the physical and transition risks associated with climate change in these derivatives markets.

We will release a request for public comment on these issues in the near future. The Commission may use this information to issue future rulemakings or guidance or take other potential actions. Financing in carbon markets could exceed a trillion in future years. As has been agreed in international convenings, there should be international trading of carbon markets. The private sector has demonstrated leadership and ingenuity to accelerate the growth and adoption of these markets, and derivatives products based on these assets are already listed on CFTC overseen exchanges. The CFTC must root out fraud or manipulations in these markets and assess their credibility and integrity.

Commissioner Kristin Johnson
President Biden has tasked all financial regulators to study and assess the physical and transition risks associated with climate change. Undoubtedly, voluntary carbon markets will play a vital role in this transition to a less carbon-intensive economy.

Commissioner Christy Goldsmith Romero
A whole of government approach to climate change will lead to more understanding and more effective strategies to mitigate its associated risks. As our markets evolve, regulators must be thoughtful and deliberate. In determining how to promote these markets, we must seek data and input from those in our markets who bear the brunt of this risk. There is a growing market demand for derivatives products that will serve as a hedge against physical and transition risks related to climate change, but we must ensure that fraud and greenwashing do not damage the integrity of these markets. The CFTC’s role extends to promoting responsible innovation in these markets.

Commissioner Summer Mersinger
It is important to have conversations such as this in the public eye. I want to hear information on how this impacts the work we do at the CFTC, especially how it impacts our traditional ag products. We need to understand what is the best role, if any, for the CFTC to play in these markets.
Commissioner Caroline Pham
Derivatives are a powerful risk management tool. Any action beyond this discussion needs to consider the impact on smaller entities. We cannot forget the importance of end-users who depend on our markets to hedge risks and for price discovery.

Senate Ag Committee Chair Debbie Stabenow (D-MI)
Chairman Behnam was one of the first financial regulators to discuss the financial stability risks of climate change. Derivatives markets have an important role to play in our transition to a carbon-neutral economy. When combined with other environmental policies, carbon markets can make a real difference in transitioning the private sector. We should pass the Growing Climate Solutions Act to continue to fund products such as those that create carbon offsets. We have to promote integrity in these markets if they are going to succeed.

House Ag Committee Chairman David Scott
Voluntary carbon markets make a value proposition to farmers, producers, and the public at large. They can promote financial opportunities while tackling the largest threat of our time, climate change. We should reward our farmers and ranchers for implementing practices that sequester carbon. We must fairly compensate our farmers for the hard work they do to mitigate the threats of climate change. These markets must be transparent and reliable to be successful. We must explore how carbon markets can work alongside our Farm Bill conservation programs.

PANEL I: CARBON OFFSET STANDARDS AND QUALITY INITIATIVES
DISCUSSION
Presentations
Stephen Donofrio, Director, Ecosystem Market Place of Forest Trends: We have been tracking VCMs for the last two decades. This market hit over a billion dollars in value last year. We have seen ups and downs in these markets due to changes in policies, technology, and supply and demand. We have seen many offset buyers move overseas to find more mature markets. There have been advancements in opportunities to improve market depth and integrity. As market value and volume grows, it fuels the creation of new carbon projects, thus providing more market supply. We are beginning to see long term and forward-looking demand for these products as major corporations make carbon reduction commitments in coming years. Our main goal remains to bring more projects online.
David Antonioli, CEO, Verra: At our core, we lay out scientific and environmental standards for all certified credits. We require permanence and additionality of carbon offsets. We apply accounting methodology that sets out the exact data parameters that projects must adhere to. One of the key pillars of our operations is the requirement of third-
party verification. We offer full transparency on every project that we have certified on our registry. We are working to offer a complementary program to regulatory reduction programs. VCMs contain ready-made, easily scalable infrastructure that can support national climate efforts.

Mary Grady, Executive Director, American Carbon Registry: The intent for quality VCMs has always existed, but this has been an evolving concept. The lack of confidence in these markets stems from the original implementation of these markets. There has been trial and error in these markets that have led to positive outcomes, but there have been some negative outcomes and lesson learns. A centralized approach to these markets does not always promote innovation. VCMs help fill in gaps in regulated or mandated markets that allow for more flexibility and innovation. We will continue to advance with technological and environmental practice innovation. The result of VCMs has been a convergence between VCMs and mandatory markets, as our standards have been adopted by compliance markets. Independent standards operate across markets. We want to accelerate compliance programs through innovating in private, voluntary markets. It is difficult to establish a top-down standard approach due to regionality.

Kristen Gorguinpour, Vice President, Climate Action Reserve: We serve as an offset project registry and help to ensure that compliance markets have appropriate transparency, but we also work to quantify VCM standards. We want to move away from project specific standards and try to establish more universal standards. Our goal is to establish a clear perspective for what should be considered and valued in an offset. There is a huge opportunity for investment in North American VCMs to leverage this market to improve innovation and market standards.

Sonja Gibbs, Head of Sustainable Finance, Institute of International Finance: Voluntary carbon markets face challenges from fragmentation and a perceived lack of integrity. We work to create a global benchmark for carbon offset quality. Voluntary carbon markets are not a primary tool to fight climate change, but they help channel capital from mature economies to emerging markets most impacted by climate change. These markets can accelerate the development of breakthrough technologies. To achieve the goals of VCMs, we must promote integrity, transparency, market confidence, and an adoption of scientific standards. We would appreciate any regulation that would provide investor confidence and protections.

Thomas Hale, Ph.D., Professor in Public Policy, University of Oxford: There has been an explosion of corporate net-zero ambitions. We are seeing similar actions from cities, regions, and national governments. These targets vary hugely in quality. Some are robust with plans, deliverables, and concrete steps, but others are simply press releases. Real
transparency is a barrier to success. Most companies with a net-zero target do not specify whether they use offsetting in their goals. Transparency quality issues lead to a quantity issue with the creation of offset projects. We need to become more efficient in how we reduce emissions.

Questions

* Tyson Slocum, Director, Energy Program, Public Citizen: We have seen significant growth in net-zero commitments. This seems to demonstrate that we are very behind on ensuring the integrity of carbon offsets. Is there a disconnect between current institutions' ability to manage this growth and the current track record of poor performance of offsets in terms of credibility? *Gibbs:* This work has been going on for decades. The problem is these markets vary across the globe. We are working to bring interested parties together to create a common standard so these markets can scale. Doing this with a market-led approach, these standards should become tangible and see widespread acceptance; *Antonioli:* We are not seeing a crisis of integrity. We are seeing a crisis of confusion because these projects are all different and unique.

**PANEL II: STATE AND FEDERAL REGULATORY UPDATES**

**DISCUSSION**

**Presentations**

* Jason Gray, Project Director of the Governors’ Climate and Forests Task Force, UCLA Law School:* VCMs can be a strong compliment for existing markets, but there are stronger scientific requirements in compliance markets such as California. We need consistent offsets that ensure additionality, comparability, and transparency. We must rely on data quality and verification. Some voluntary platforms offer offsets without full data transparency to verify the validity of the offsets. We need standards for eligible projects and practices. The practices should focus on additionality, meaning they do not stem from any existing regulations. Enforcement in voluntary market contracts is essential.

* John E. Morton, Climate Counselor, U.S. Department of the Treasury:* As demand for offset grows, there is work to be done to ensure market integrity and high standards for verification. At Treasury, we are following steps to organize around private sector innovation, and we see potential for this innovation to improve compliance standards. We believe that the CFTC will play a vital role in enhancing these markets and ensuring that they are internationally acceptable. VCMs can play an extremely important role, and they are increasingly integrating with our work with banks and climate funds. We must enhance the credibility of private sector net-zero commitments. There is a need for carbon sequestration projects that are not profitable or even economically viable.
Sean Babington, Senior Advisor for Climate, U.S. Department of Agriculture: The USDA agrees with sentiments already expressed today. We need to drive emission cuts from regulations. VCMs could play a role, assuming they are high quality and verifiable. The USDA works to contribute to these reductions in the ag and forestry sectors. Ag is uniquely vulnerable to climate impacts, and it is also a source of emissions. The ag sector could actually reduce emissions, however, if the proper regulations and incentives are in place. We hope to focus on incentives led by voluntary markets, not mandates. We offer these incentives through conservation programs and new initiatives for climate-smart commodity programs. We hope that the billion-dollar grant program that USDA Secretary Vilsack has introduced will help drive these goals. We are also working to ensure equity in these programs for marginalized communities. Our goal is robust standards and monitoring practices. When it comes to VCMs, we think the ag sector is an appropriate source for offsets. These private markets can be a way to obtain vital investment in these practices. USDA has statutory authority in this area. We are directed to ensure farmer participation in these markets, but we do not see ourselves as regulators.

Annie Petsonk, Assistant Secretary, U.S. Department of Transportation: Sectors should work first to reduce their emissions directly, not through participation in offset markets. It is hard to move certain vessels, such as ocean liners and airplanes, to use renewable fuels to sustain the bulk of their activities. We must catalyze innovation in these sectors, and the private sector has a role to play in this. Sustainable aviation fuel has been an important step towards addressing these sectors. CORSIA has allowed the gradual adoption of sustainable aviation fuel by using less offsets as they become less necessary. The most important aspect of VCMs is being able to verify additionality through data and science. We cannot allow offsets to be counted for already ongoing or required emission reductions.

Philip B. Duffy, Climate Science Advisor, Office of Science and Technology Policy, White House: To achieve climate goals, we will have to rely on offsets at this time. We do not currently have access to the renewables we need to eliminate emissions in some sectors. Offsets should be reserved for sectors that are the most difficult to reduce emissions in. Nature based solutions to carbon removal are far less expensive than other technological approaches, which makes them more popular and accessible. One of the challenges we face in offsets is ensuring that these practices actually result in permanent carbon reduction. It is difficult to measure progress in soil carbon storage. We could base ag offsets on existing carbon reductions. Many ag practices could be altered to encourage carbon reduction. The government should not verify offsets, but we should achieve synergy between public and private markets.
Christine Dragisic, Branch Chief, Office of Global Change, U.S. Department of State: We are engaged in the CORSIA carbon program. This helps airlines meet carbon reduction obligations and goals. These goals help improve independent climate verification efforts. We also work with international partners to aggregate demand for carbon offsets. Carbon offsets have fluidity between voluntary and mandated emission reductions and fluidity between domestic and international practices.

Questions
Tyson Slocum, Director, Energy Program, Public Citizen: What are federal agencies doing to ensure that these markets are long-lasting enough to offset large emission issues? Babington: The USDA works to steward a long-term data set around forest cover inventories. We have a good deal of government data that can help the private sector gain a better understanding of this science.

Nat Keohane, President, Center for Climate and Energy Solutions: Where should CFTC efforts focus in these VCMs? Gray: There is no one area to focus on. There should be an effort to reduce market confusion. The accounting side must be as robust as possible and updated as science improves; Morton: I think ongoing efforts to improve standards will continue to bring more capital into these markets. We need transparency on additionality; Babington: Standardization is vital going forward. The USDA is working to make sense of the confusion these markets are full of right now. Producers are struggling to make sense of the options they have to participate in these markets. We also want to ensure we involve marginalized communities and underserved producers; Petsonk: We do not have a single set of accounting standards for corporations that make commitments to reduce emissions; Duffy: We have been successful in monitoring actual emission reduction. We are focused on improving coordination across federal agencies, transitioning to greater measurement capabilities, and making progress on the fundamental science of monitoring emissions and removal; Dragisic: The most important goal is transparency around climate goals and the methods being used to achieve those goals. Regulators could improve the transparent disclosure of emission claims and ensure that the science behind offsets is legitimate.

PANEL III: CARBON OFFSET TRADING AND INFRASTRUCTURE DISCUSSION
Eric Pitt, Consultant, Ceres Accelerator for Sustainable Capital Markets (Moderator): We must create further regulations for GHG emissions. Voluntary markets are a strong starting point for this work and can function as a compliment for compliance markets. We must bring risk capital into these markets by ensuring market integrity and transparency. Companies should set science-based targets for reducing operational
emissions and supply chain emissions. They should only use offsets in addition to their efforts to reduce emissions.

Kathy Benini, Managing Director, S&P Global: Registries are critical aspects of VCM infrastructure. Registries track the lifecycle of environmental assets by ensuring that these assets meet certain transparency and scientific standards. Registries must meet KYC standards as would any other financial institution. Registries provide transparency by providing the public with sufficient information on all offset projects. It is important that projects are only registered once and cannot be issued multiple sets of offsets for the same practices. The biggest challenges registries face includes double counting and double claiming. Offsets need to be checked against all other projects, not just among the programs a registry is already hosting. Real capital will flow into these markets with validity and verified practices.

John Melby, President, Xpansiv: We are working to build out the digital infrastructure to create a delivery process akin to other commodities. Our goal is to connect registry systems with the global commodity market infrastructure. We provide portfolio management, spot exchanges, and market data to the public. We work to track the path of offsets to verify their legitimacy for trade.

Dan Scarbrough, President and Co-Founder, IncubEx: VCMs have been around for decades with varying degrees of interest. We believe that a layered approach is necessary to ensure offset verification. Robust third-party verification is vital for these products. Offset projects are generally similar under various protocols, but there is not currently a standard for what is a “good” offset. The standards vary across products, but we focus on ensuring permanence and additionality. Compliance markets provide a framework under which standards for VCMs could evolve. We have evolved from an OTC market that is project specific to a market with standard contracts and listed futures, and I believe we are moving towards global standards that will allow for international benchmarks. We have seen an increase in open interest across the board in these markets.

John Frederick, CFO, Indigo Agriculture: The science in these markets is robust, and the math behind our measurements for sequestered carbon is complex. We must work to hold ourselves accountable and avoid double counting any markets. These markets reflect sustainable practices that are increasingly being practiced by ag groups. This should be seen as an opportunity to bring both economic and climate opportunities for our ag producers. These practices, however, are not free, and we need to find a way to stimulate our farmers economically if they are to be on the front line of climate practices. We work to make it easy for farmers to capitalize on their ag practices.
Evan Ard, CEO, Evolution Markets: The OTC marketplace for VCMs acts as an incubator for new innovations in this space. Many products that have made it to environmental futures products began as OTC products.

Mike Kierstead, Head of Environmental Products, ICE: Project based credits are not completely voluntary, as many markets are driven by mandates that corporations have made or promises they have made to their shareholders. Technology based carbon removals are still in limited supply due to the costs. There is no standardization for these markets because registries use different standards to verify offsets. We believe that these offsets must be treated as financial products in terms of market governance and cybersecurity.

Pete Keavey, Managing Director of Energy and Environmental Products, CME Group: Our offset futures products operate in a similar way to any other commodity future that we offer. To date, we have had 111,000 contracts traded on our exchange. The majority of these sit in the nature-based offsets at this time. We have roughly 80 firms that have participated in these contracts.

Discussion
Pitt: What is the role of speculation in these markets? Has there been an evolution in the types of market participants involved in these markets? Ard: There is a fair amount of purely financial interest in these markets. This provides liquidity to these markets; Kierstead: These markets depend on liquidity if these markets are going to scale.

Tyson Slocum, Director, Energy Program, Public Citizen: Are verification protocols subject to enforcement? Frederick: Third-party verifiers work with the registries to ensure that these projects are up to all standards. Registries have an ongoing commitment to ensure that these projects maintain these standards; Scarbrough: These markets depend on a layered approach. It is important that independent verifiers continue to work between projects and the registries; Melby: There are many standards on the markets, but these offsets are primarily traded on markets with the best standards. Methodologies are set by verifiers and third-party providers. Programs like CORSIA have brought standards to some specific markets and this has been a net positive.

PANEL IV: MARKET PARTICIPANTS RECOMMENDATIONS FOR THE CFTC
DISCUSSION (Part I)
Presentations
Janet Peace, Chief of Advisory Services, BlueSource (Moderator): The real driver in these markets has been the pursuit of net-zero goals from corporations. These markets are not
truly unruly, as we have registries pursing standards and validity. That said, there are some companies that are creating their own projects without third-party verification.

Mark Kenber, Executive Director, Voluntary Carbon Markets Integrity Initiative: Carbon markets exist to serve a public purpose of improving climate goals and directing money into energy economies that are carrying out climate-smart practices. We need transparency on every aspect of every transaction. Markets are not designed by those actually carrying out the practices, so we need to design markets with them in mind, not just financial participants. We need to decide what a legitimate use of a carbon offsets looks like. We have corporations trying to move towards net-zero carbon goals, but it is unclear what companies even mean when they make these goals public. We need to ensure that companies are on track to meeting these goals through changing their business practices, and, if they do use offsets to cover their practices while they change, we need to ensure that they are quality offsets.

Bella Rozenberg, Senior Counsel/Head of Regulatory and Legal Practice Group, ISDA: VCMs are a market driven solution to climate change. Market participants clearly see the need to offset, reduce, or remove carbon emissions regardless of regulatory requirements. We need a strong legal foundation, regulatory clarity, and good internal governance. It is important to establish the legal nature of voluntary carbon credits to establish how they should be created, traded, and retired. To optimize VCM’s potential, this legal foundation must work across international jurisdictions. It is important for the CFTC to assert that voluntary carbon credits are commodities so that it has the power to carry out enforcement cases in the event of fraud. CFTC can offer more investor confidence and therefore bring more capital into these markets.

Linda French, Global Head of ESG Policy & Regulation, JPMorgan Chase: Our view is that offsets are not a substitute for carbon reduction. Offsets are only meant to address unavoidable emissions that we cannot remove through changing business practices. We also have individuals in our firm who work within VCMs in various ways. Investors are nervous to enter these markets because we do not have sufficient standards for offsets at this time. This will change as these markets further develop. Markets are naturally evolving towards convergence and set standards. The CFTC has an important role to ensure there is an effective interface with other markets, jurisdictions, and regulators so these markets can continue to grow responsibly.

Aoife Kearney, Assistant General Counsel, Neuberger Berman: Moving forward, greater standardization is key to improving these markets and bringing in capital. We need enhanced convergence and interoperability between international standards. European markets are developing faster than those in the U.S., and we need to ensure that, as
international standards develop, they work for all jurisdictions. We also need more transparency to improve the quality of disclosures for investors.

*Darcy Bradbury, Managing Director, D. E. Shaw:* We need to ensure that these markets are efficient for hedgers and investors alike. A liquid efficient market brings in liquidity providers and regular investors instead of just those who invest when they need to hedge their risks such as around harvest. VCMs do not meet these tests yet, but they are growing and evolving. Even compliance markets in Europe are not as liquid as we would like to see before trading in them. These futures products are still sparsely traded by our standards. Additional liquidity allows for trading, but it also helps producers better manage their risks. If the policy goal of the CFTC is to develop a robust and vibrant market, it needs to be free from rapid regulatory shifts that could cause a lack of confidence in markets.

*Alexia Kelly, Director, Net Zero + Nature, Netflix:* We are on track to deliver on our carbon reduction targets. Decarbonizing companies’ entire supply chain will take significant time and investment, which is the purpose of carbon offsets. We support the benefits of governance that these markets are working to provide in order to ensure that these markets provide the best possible products.

**Questions**

*Peace:* What would you recommend for the CFTC as far as its involvement in these markets? *Kenber:* If you want VCMs to grow, it needs to be built on trust stemming from full transparency; *Rozenberg:* Use your existing authority to improve transparency; *French:* The CFTC should play a leadership role globally to ensure interoperability; *Kearney:* It should improve transparency and encourage a convergence of governance standards; *Bradbury:* The CFTC should discuss existing contracts so market participants have a better understanding of these markets.

**DISCUSSION (Part II)**

**Presentations**

*Angela Churie Kallhauge, Executive Vice President, Environmental Defense Fund (Moderator):* These markets require predictability so that we can build for the long term. There are concerns about these markets, but we have seen a development in involvement from institutions, regulators, and investors that demonstrate that there is a lot of effort to mitigate these concerns already.

*Chuck Conner, President & CEO, National Council of Farm Cooperatives:* Several of our members have initiated programs in this space with third-party carbon purchasers. Their objective is to get compensation for farmers working on climate practices, but each project
is separate and different. We will help farmers implement, grow, and bring carbon offsets to markets. The use of third-party verifiers is vital to ensure that farmers’ efforts are rewarded with the compensation they deserve. Work remains within the ag industry to understand the best practices for measuring, monitoring, and capitalizing on climate practices. The CFTC should coordinate with the USDA to ensure that these markets best benefit ag producers.

**Shelby Swain Myers, Economist, American Farm Bureau Federation:** I have been working with growers on the opportunities and challenges of VCMs. Farmers are leading efforts in conservation and carbon reduction and sequestration. This does not come without barriers. We cannot allow these practices to do harm to American ag production. Growers must participate in these markets while still carrying out traditional business practices. Third party verifications also impose new costs and burdens. There are also mentions of only new practices qualifying in these markets, which inhibits the role of early adopters in these markets. Conservation practices come with time, costs, and risks. We need to understand whether specific carbon producing practices are a commodity, or if carbon itself is the commodity.

**Tyson Slocum, Director, Energy Program, Public Citizen:** Voluntary offsets have an important role to play in climate change mitigation efforts, but we have to ensure that the underlying offsets are real. I do not think that we have confidence that these offsets are legitimate. These markets are growing, but it should not continue to grow until we can be positive these offsets are valuable. If you are pursuing a voluntary offset, it can only be credible if it is not required. This is a different and less tangible commodity than any other commodity we deal with, making it more vulnerable to fraud. We have seen massive fraud in renewable fuel markets. We need more enforcement and oversight of these markets.

**Jeff Swartz, Vice President Low Carbon Strategy, Regulatory Affairs and Partnerships, BP:** We are working to be a carbon-neutral company by 2050. We participate in compliance offsetting and voluntary offsetting markets around the world. We develop hedging solutions for companies in need of innovative structures, but this requires us to tap into less liquid markets. We support the CFTC’s role in promoting fair and orderly trading, including in these VCMs. We would support more market transparency. There is also a need for more market standardization to help these markets reach a larger scale. The CFTC should ensure sufficient transparency in all exchanges tied to VCMs.

**Michael LeMonds, Vice President, Holcim US:** We do not use offsets as a part of our net-zero strategy. They are a useful tool, but they should not be a main building block for carbon reduction efforts. The CFTC need to ensure that carbon markets are fair, transparent, and actually deliver on the long-term carbon reduction promises they
make. Climate friendly products can sometimes hurt the innovation of true carbon-neutral products.

**Questions**

*Kallhauge:* What is your main recommendation for the CFTC? What do producers need in these markets? *Conner:* We need to bring more farmers into the fold on this. Ag is such a high-risk industry, and we need true risk mitigation practices to ensure transparency; *Slocum:* There are disconnects between some who say there are regional difference in VCMs and claims that we are moving towards standardization. It is unclear whether we should promote standards by projects or true standardization; *Myers:* Growers need transparency and clear guidelines so that they can be paid for the full environmental benefits they are bringing; *LeMonds:* Our shareholders expect climate risk mitigation to be at the forefront of our efforts.