

October 5, 2022

**VIA ONLINE SUBMISSION**

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

Re: Request for Information on Climate-Related Financial Risk

Dear Mr. Kirkpatrick:

CME Group Inc. (“CME Group”) appreciates this opportunity to provide comment on the Commodity Futures Trading Commission’s (“CFTC” or “Commission”) Request for Information on Climate-Related Financial Risk (the “Climate RFI”). CME Group, a corporate holding company, wholly owns the Chicago Mercantile Exchange Inc. (“CME”), which operates a CFTC-registered derivatives clearing organization (“DCO”) (“CME Clearing”). CME Clearing offers clearing and settlement services for futures and options contracts, including those listed on CME Group’s CFTC-registered designated contract markets (“DCMs”), and cleared swap derivatives transactions. These DCMs are CME, Board of Trade of the City of Chicago, Inc. (“CBOT”), New York Mercantile Exchange, Inc. (“NYMEX”), and the Commodity Exchange, Inc. (“COMEX”). On July 18, 2012, the Financial Stability Oversight Council (“FSOC”) designated CME as a systemically important financial market utility under Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act. As a SIFMU, CME is also a systemically important DCO (“SIDCO”).

CME Group commends the CFTC and the FSOC for the proactive steps they are taking to address climate change in response to Executive Order 14030 (“Executive Order”).<sup>1</sup> The CFTC plays an important role in this effort, as evidenced by the work of the Commission’s Climate Risk Unit, as well as by issuing this RFI. At the same time, it is important to recognize that other federal agencies may have the expertise and resources necessary to perform much of the work required to achieve the goals articulated in the whole-of-government approach to climate change.<sup>2</sup> In this regard, CME Group observes that the Climate RFI, as

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<sup>1</sup> E.O. 14030, 87 FR 27967 (May 20, 2021) (Climate-Related Financial Risk).

<sup>2</sup> See E.O. 14097, 86 FR 70935 (Dec. 13, 2021) (Reducing federal government carbon emissions to net zero by 2050).

well as the recommendations of the FSOC outlined in the *Report on Climate-Related Financial Risk* (“FSOC Report”),<sup>3</sup> cover a broad remit. Given this expansive scope, any undertaking by the Commission on climate-related financial risk should recognize the roles of different types of CFTC-registered entities, and their respective risk profiles. Each such entity effectively and efficiently employs its risk management practices in a manner considerate of the unique risks it faces, including with respect to climate-related financial risk. At present, DCOs and DCMs successfully monitor, manage and mitigate these risks because of the CFTC’s long history of embracing a principles-based regulatory framework.

This framework provides the Commission with a degree of nimbleness and flexibility that has allowed the CFTC to fulfill its mission statement of promoting “the integrity, resilience, and vibrancy of the U.S. derivatives markets through sound regulation.”<sup>4</sup> We believe that, based on this foundation, the CFTC can and should use its existing authority to accommodate the market-based approaches which are already developing to address the risks that the Executive Order, the FSOC Report, and the Climate RFI have identified. Participants in derivatives markets are already engaged in creating new markets and products to price and manage climate-related financial risk. For example, CME Group is promoting sustainability through a variety of initiatives.<sup>5</sup> In 2021, CME Clearing launched the industry’s first Sustainable Clearing service, enabling certain participants to credibly measure risk management activities that are used to hedge environmental, social, and governance (“ESG”) initiatives. CME Group’s E-mini S&P 500 ESG futures also reached a peak of \$4.2 billion in open interest in 2021, making it the most widely used ESG equity futures contract by notional value. Likewise, we are confident that through the CFTC’s leadership, the International Organization of Securities Commission’s (“IOSCO”) Sustainable Finance Task Force will assist the regulatory community across the globe in applying a principles-based framework promoting the emergence and evolution of market-based solutions to climate-related financial risk.

The Climate RFI includes questions targeted to the CFTC’s traditional regulatory footprint in listed derivatives markets, as well as several areas of inquiry suggesting an expanded scope of oversight. While we appreciate that the CFTC is seeking broad input on a wide variety of climate-related matters, the Commission should remain focused on its core mission and competencies as a derivatives markets regulator when formulating its policy response to address climate-related financial risk. The Commission’s principles-based regulatory foundation enables market stakeholders to create and innovate and should not be compromised by the temptation to reach into policy areas best addressed by regulators with different competencies, history, and expertise.

For example, the Climate RFI suggests a focus on the regulatory role for the Commission in the voluntary carbon markets. The voluntary carbon markets are still evolving and striving to reach a mature state. An overly proscriptive approach to the development of the voluntary carbon markets could have the effect of impeding the promise these markets offer to assist the larger community in reaching global emissions

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<sup>3</sup> Financial Stability Oversight Council, *Report on Climate-Related Financial Risk* [hereafter, *FSOC Report*] (2021), available at <https://home.treasury.gov/system/files/261/FSOC-Climate-Report.pdf>.

<sup>4</sup> CFTC, Mission Statement, available at: <https://www.cftc.gov/About/AboutTheCommission#:~:text=CFTC%20Mission%20Statement,derivatives%20markets%20through%20sound%20regulation>.

<sup>5</sup> See CME Group, *Advancing A Sustainable Future, CME Group 2021 Environmental, Social & Governance Report* (2021), available at <https://www.cmegroup.com/company/corporate-citizenship/files/2021-cme-group-esg-report.pdf>.

reduction targets. We will provide greater context and detail in our response to the RFI's questions on voluntary carbon markets, as well as in other portions of the RFI pertinent to CME Group's DCMs and DCO, such as risk management and product innovation.

### **Responses to the Climate RFI Questions**

Our responses to certain of the questions posed in the Climate RFI are as follows:

#### **a. Data**

*2. Would it help the Commission, registered entities, registrants, market participants and/or the public to understand and/or to manage climate related financial risk if Commission reporting requirements included information about climate-related aspects of listed derivatives products, reported transactions, and/or open positions? Are there data standards or definitions that the Commission should consider incorporating into any such reporting?*

Response: It may be premature for the Commission to impose a reporting requirement which includes the climate-related aspects of listed derivative products and transactions. While certain products, such as ESG stock indices and carbon offset markets are by their terms directed toward climate-related and other risks, there is a lack of uniformity and constantly evolving standards which would make a required disclosure regime burdensome and extremely difficult to implement.

#### **b. Scenario Analysis and Stress Testing**

*4. Are there any climate forecasts, scenarios, or other data tools that would be useful to the Commission, registered entities, and/or registrants to better understand the exposure of any registered entities or registrants to climate-related financial risk and how those risks translate to economic and financial impacts?*

*5. Are there any common scenarios, in addition to the scenarios developed by the Network for Greening the Financial System and/or the Financial Stability Board, that the Commission should consider incorporating into its oversight, and/or consider for registered entities and/or registrants?*

*6. Is a long-term (e.g., 30-year or 50-year) stress testing scenario relevant for derivatives markets subject to CFTC oversight? Is there a more relevant set of forward-looking climate relevant scenarios? Should these scenarios account for geographical stress? Should these scenarios try to target certain asset types? Can scenarios be customized to be more relevant for certain types of derivatives markets or registered entities?*

*7. Should registered entities and registrants be required to incorporate climate stress tests into their risk management processes? Do registered entities and registrants have the capability currently to conduct climate-related stress tests? If not, what would be needed in order to achieve this capability and on what timeline?*

Response to Q. 4-7: CME Group believes that revisions to current CFTC regulations with respect to stress testing for climate-related financial risks for DCOs are not necessary. The Commission should not deviate from its longstanding approach of embracing principles-based regulation solely for stress testing of climate-related financial risks, particularly since DCOs already account for these risks with respect to the derivatives products they clear. In respect of scenario analysis and stress testing, CME Group's comments are focused on DCO risk management. Scenario analysis and stress testing have long been a key part of a DCO's risk management practices as well as the CFTC's regulatory framework for DCOs as

described further below. Broadly, successful scenario analysis and stress testing requires consideration of the role of a DCO and the specific risk characteristics of the derivatives products it clears.

***Key Point: Any scenario analysis and stress testing with respect to climate-related financial risk must recognize that a DCO, in fulfilling its core role, manages the exposures of taken by its clearing members in the products it clears. These exposures have a short period of risk, typically between one- and five-days predicated on the time for the DCO to return to a matched book.***

More specifically, a DCO's core role is to manage the risks taken by its clearing members by acting as a market risk-neutral, creditworthy counterparty to every buyer and seller of the products it clears. A DCO mitigates counterparty risk by employing various risk management practices, including the collection of financial resources, such as initial margin (or "performance bond") and mutualizable resources (or "guaranty fund") to address future exposure while eliminating debt to address current exposure in its markets by settling the outstanding exposures of market participants at least once per day. Initial margin resources are sized to cover a DCO's potential future exposures to its clearing members, within a defined confidence interval, based on price movements within the time-period needed to manage a clearing member's default. Similarly, guaranty fund resources are sized to cover potential future exposures but are designed to enable a DCO to meet its financial obligations in extreme but plausible market conditions over the period of time it would take to manage the default of the clearing member creating the largest financial exposure (or two largest clearing members for SIDCOs and subpart C DCOs). The time-period used in sizing initial margin and guaranty fund resources is determined based on the unique characteristics of the products cleared (e.g., liquidity). For CME Clearing, this is between one and five days.

Stress testing for climate-related financial risk for DCOs, like stress testing conducted today, must recognize the short-term nature of the exposures managed by DCOs. The Climate RFI and FSOC Report granularly discuss climate-related financial risk as it relates to physical risk and transition risk and recognize the long-term horizon for meeting climate change goals. Similarly, it is important to consider these risks in relation to the purpose of a DCO's stress testing. Consistent with CFTC Regulation 39.11, the primary purpose of a DCO's stress testing is to assess the adequacy of its guaranty fund resources relative to the applicable period of risk, making medium- and long-term stress scenarios of little relevance for a DCO's stress testing. The relevance of both physical and transition risk to a DCO's stress testing is predicated on whether such risks could result in price movements that would constitute extreme but plausible market conditions over a time-period of five days or less. As explained below, this may be the case for acute physical risk, but not for chronic physical risk or the long-term transition risk associated with a changing energy economy.

- **Physical Risk:** The Climate RFI and FSOC Report recognize that physical risk could be acute or chronic. Acute physical risk is associated with climate-related events that could occur over a very short time-period such as hurricanes, sudden dramatic temperature changes, or flooding whereas chronic physical risk is associated with climate-related events that could occur over a number of years, such as rising sea levels, deteriorating air quality, drought, and wildfire risk. Given this, including extreme but plausible stress scenarios that capture acute physical risk in a DCO's stress testing may be relevant to certain products cleared by a DCO, such as commodities. Unlike acute

physical risk, the long-term (e.g., 10 to 30+ years) and even medium-term nature<sup>6</sup> (e.g., 3 to 10 years) of chronic physical risk is significantly longer than the relevant period of risk for a DCO's stress testing.

- **Transition Risk:** In contrast to acute physical risk and similar to chronic physical risk, transition risk is associated with potential stresses relating to events that could most likely occur over a number of years (e.g., 10 to 30+ years),<sup>7</sup> such as shifts in policy, consumer and business sentiment, or technologies associated with changes necessary to limit climate change. While transition risk may materialize more quickly (e.g., 3 to 10 years)<sup>8</sup> if there is a delay or diverging shifts in policy for limiting climate change, the time-period in which it would reasonably materialize would still be significantly longer than the relevant period of risk for a DCO's stress testing.

This makes clear that chronic physical risk and transition risk related stress scenarios are not and should not be required to be, incorporated into a DCO's stress testing. Given the timeframe in which these types of risk could reasonably materialize, an assumption that they could result in stresses over a period of risk of one to five days is not implausible.<sup>9</sup> Similarly, the inclusion of common scenarios that have been developed to capture climate-related financial risks are not fit for the purpose of DCO stress testing, since they also focus on medium- and long-term time horizons.<sup>10</sup>

As noted above, the inclusion of stress scenarios that capture acute physical risk may be relevant to DCOs that clear derivatives products and asset classes that are exposed to the risk of climate-related disaster events. Notably, DCOs currently employ stress scenarios in their stress testing that capture these types of events. Consistent with the CFTC's principles-based regulatory framework, CFTC regulations do not enumerate every type of risk that a DCO must consider in its stress testing and instead require that guaranty fund resources should be sufficient even in extreme but plausible market conditions. The same approach should be taken for climate-related financial risk.

The CFTC allows a DCO to determine the appropriate methodology for meeting this requirement. In particular, CFTC Regulation 39.11(c)(1) requires that a DCO's stress testing methodology includes both

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<sup>6</sup> *FSOC Report* at pgs. 94-95 (noting, "[l]ong horizons are also appropriate for assessments of changes in chronic physical risks. Past and prospective GHG emissions will be accompanied by shifts in chronic risk factors—sea-level rise, drought, and wildfire risk, etc.—over the span of many decades.").

<sup>7</sup> *Id* (noting, "[t]he economic transitions associated with meeting climate goals will occur over decades. Scenarios over such time periods are needed to gauge the plausible range for such economic transitions across scenarios.").

<sup>8</sup> *FSOC Report* at pg. 94.

<sup>9</sup> With respect to transitions risk, making such an assumption would be inconsistent with the FSOC Report, which states that "[i]t will be necessary to consider the full range of *plausible* scenarios regarding future changes to policy, technology, and household preferences" (emphasis *added*). *FSOC Report* at pg. 52.

<sup>10</sup> See Network for Greening the Financial System, *NGFS Climate Scenarios for central banks and supervisors* (June 2020) (noting, all scenarios are evaluated over a long-term timeframe (e.g., achieving net zero CO2 emissions by 2050 or 2070) and even the disorderly scenario that assumes climate policies are not introduced until 2030, has a timeframe of 20-years), available at [https://www.ngfs.net/sites/default/files/medias/documents/820184\\_ngfs\\_scenarios\\_final\\_version\\_v6.pdf](https://www.ngfs.net/sites/default/files/medias/documents/820184_ngfs_scenarios_final_version_v6.pdf); *FSOC Report* at pg. 110 (noting, Figure 5.5 depicts all scenarios are evaluated over a long-term timeframe (e.g., reducing CO2 emissions by 2050) and even the disorderly scenario that assumes climate policies are not introduced until 2030, has a timeframe of 20-years).

historical data and hypothetical scenarios and explicitly provides that a DCO should have reasonable discretion in determining the methodology.<sup>11</sup> In adopting this regulation, the Commission recognized the importance of providing a DCO “discretion in designing stress tests.”<sup>12</sup> This discretion continues to be important today and allows a DCO to effectively account for the unique risks, including climate-related financial risks, of the markets it clears as part of its stress testing. While DCOs’ stress testing frameworks are designed to account for a variety of extreme but plausible market conditions, they continually evaluate the appropriateness of their stress scenarios in accounting for the unique risks they face. In particular, pursuant to CFTC Regulation 39.36(a)(2)-(3), SIDCOs and subpart C DCOs are required to perform comprehensive analyses of stress testing scenarios and underlying parameters (at least monthly but more frequently as market conditions warrant) to ascertain their appropriateness for determining their required level of financial resources in current and evolving market conditions. These analyses encompass the impact of climate-related financial risks as appropriate.

For the reasons outlined above, the Commission should not deviate from its longstanding approach of embracing principles-based regulation for stress testing of climate-related financial risks, particularly since DCOs already account for such risks today.

### **c. Risk Management**

*8. How might registered entities and/or registrants need to adapt their risk management frameworks—including, but not limited to, margin models, scenario analysis, stress-testing, collateral haircuts, portfolio management strategies, counterparty and third-party service provider risk assessments, and/or enterprise risk management programs—to address climate-related financial risk?*

*9. Are there ways in which the Commission’s existing regulations and/or guidance could better address climate-related financial risk, including credit risks, market risks, counterparty risks, and other financial and operational risks? Are there ways in which the Commission’s regulations and/or guidance relating to risk management, system safeguards, business continuity, governance, recordkeeping, and/or internal audit could better address such risk?*

*10. Could the Commission’s existing regulations and guidance better clarify expectations regarding management of climate risks, taking into account a registered entity’s or registrant’s size, complexity, risk profile, and existing enterprise risk management processes? Would it be helpful for the Commission to promulgate regulations or issue guidance for registrants and/or registered entities regarding the implementation of policies and procedures to measure, track, and account for physical and transition risk?*

*11. DCOs’ risk management frameworks focus on market risk aspects with add-ons for liquidity, concentration, wrong way risk, settlement risk as well other asset class appropriate risks. Should these risk management frameworks directly incorporate climate-related risk specific to clearing member firms, or their clients’ climate-related risks, and, if so, how?*

*12. Should the Commission consider amending its minimum capital and liquidity requirements to better recognize climate-related risks?*

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<sup>11</sup> Note, SIDCOs and subpart C DCOs are subject to some additional requirements with respect to stress testing under CFTC Regulation 39.36(a).

<sup>12</sup> 76 FR 69334 at 69349 (noting, “[t]he Commission believes it is appropriate to allow the DCO discretion in designing stress tests because stress testing is an exercise that inherently entails the exercise of judgment at various stages.”).

Response to Q. 8-12: We believe that revisions to current CFTC regulations with respect to climate-related financial risks are unnecessary due to the fact that climate-related financial risks are taken into account under the existing regulatory framework for DCOs. Consistent with current CFTC regulations, DCOs identify, monitor, and manage the ranges of risks they face relative to the derivatives products they clear and market participants they face. This includes consideration of climate-related financial risks, which, as noted above, are particularly relevant to DCOs that clear products with commodities (e.g., agricultural commodities and energy) as their underlying asset class.

***Key Point: Current CFTC regulations sufficiently and appropriately address the practices that a DCO must employ with respect to the range of risks it faces, including with respect to climate-related financial risks.***

As noted above, the CFTC has long embraced a principles-based regulatory framework that focuses on outcomes, as opposed to listing granular requirements that enumerate each type of risk a DCO faces and the manner in which it should be managed. For example, the CFTC amended CFTC Regulation 39.13(g)(2)(i) to remove a list of examples of risks that a DCO should consider in its margin methodology, noting, in part, that “the Commission reiterates that a DCO should consider a range of risks...associated with the particular products and portfolios it clears. However, the Commission further notes that DCOs have discretion with respect to how they identify, label, and address such risks.”<sup>13</sup> The Commission’s principles-based regulatory framework rightfully recognizes that DCOs must employ practices that effectively manage the range of risks they face, but that each DCO must be permitted to maintain a level of discretion to determine the appropriate method of compliance with those principles.

Consistent with CFTC Regulation 39.13(a), DCOs manage the risks associated with discharging their responsibilities using comprehensive and appropriate tools, practices, and procedures. CFTC Regulation 39.13(b) states that a DCO “shall have and implement written policies, procedures, and controls...that establish an appropriate risk management framework that, at a minimum, ***clearly identifies and documents the range of risks to*** which the derivatives clearing organization is exposed, addresses the monitoring and management of the entirety of those risks, and provides a mechanism for internal audit” (emphasis ***added***). The Commission has repeatedly recognized that while a DCO should address all the risk types to which it is exposed, it was not necessary, in fact harmful, to explicitly list them in the regulation.<sup>14</sup> Consequently, to the extent a DCO is exposed to climate-related financial risks, the CFTC’s regulatory framework already requires a DCO account for those risks.

Today DCOs address climate-related financial risks as appropriate for their markets and will continue to do so as these risks evolve. DCOs’ practices relating to climate-related financial risks include:

- **Margin Models:** Similar to a DCO’s stress testing for its guaranty fund, DCO margin models are designed to yield margin requirements that are commensurate with the risks of the products and portfolios cleared. Unlike the guaranty fund, margin requirements are designed to meet at least a 99% portfolio level coverage standard on an *ex post* basis, as opposed to covering extreme but plausible market conditions. This means where climate-related financial risks result in price

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<sup>13</sup> 85 FR 4800 at 4810.

<sup>14</sup> 76 FR 69334 at 69363.

movements that could occur, within the defined confidence interval, over a time-period of five days or less, they would be captured in a DCO's margin requirements. This is relevant to DCOs that clear products and asset classes exposed to the risk of climate-related disaster events. For the same reasons outlined above, acute physical risk—not chronic physical risk and transition risk—is the most relevant to a DCO's margining practices due to the one- to five-day period of risk.

Where products cleared by CME Clearing are exposed to seasonal patterns relating to specific weather conditions, harvest, consumption, or other similar considerations, we calculate and collect margin to account for seasonal volatility. For example, agricultural products are impacted by seasonal and weather factors, so CME Clearing uses historical seasonal volatility data, as well as closely monitoring expected crop yields and the prevailing weather conditions during pivotal crop formation months, to determine the appropriate margin requirements. Similarly, for certain energy products primarily used as fuel for heating and cooling, CME Clearing determines margin requirements using seasonal volatility data, as well as considers current and predicted inventory levels and forecasted cooling degree days and heating degree days.

- **Scenario Analysis & Stress Testing:** As detailed above, a DCO includes stress scenarios that capture climate-related financial risks in its stress testing to assess the adequacy of its guaranty fund resources, while continually evaluating the appropriateness of its stress scenarios.
- **Operational Resilience:** Consistent with CFTC Regulation 39.18(c), a DCO's operational resilience practices are designed to enable the timely recovery and resumption of operations and the fulfillment of their core clearing obligations following any disruption of its operations. These requirements are not tied to any one specific disruption event, which by design, require a DCO to have practices to address a wide variety of potential disruption events, including those related to climate-related disaster events. Consistent with this principles-based requirement, DCOs have developed comprehensive business continuity plans that are tested on a regular basis. For example, this may include cross training staff located outside of the production region to cover and manage critical clearing processes should a disaster event occur and having geographically diverse data centers.
- **General Business Risk Management:** CME Group tracks impacts from climate and sustainability risk within its risk universe categories as applicable based on the potential impact to its operations and strategy.<sup>15</sup>

While DCOs address climate-related financial risks in a variety of ways today, a DCO's primary role is to manage the risks that arise from becoming the buyer to every seller and the seller to every buyer if a clearing member defaults. A DCO focuses on the creditworthiness of its clearing members and their ability to meet their financial obligations to it and, if they cannot, ensuring it can successfully manage a clearing member default. As noted above, the management of a clearing member's default is designed to take place over a short time-period, often one day for liquid products making chronic physical risk and

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<sup>15</sup> As part of maturing its ESG program as it relates to climate risk and in preparation for new SEC disclosure rules, CME Group is evaluating disclosure under the framework developed by the FSB's Task Force on Climate-related Financial Disclosures which is designed to improve and increase reporting of climate-related financial information.



transition risk irrelevant to DCO risk management practices. DCOs have substantial experience in effectively managing significant volatility in the markets they clear, as demonstrated by their successful navigation of the 2008 global financial crisis and COVID-19 related market volatility. Based on this experience, to the extent climate-related financial risks increase market volatility, DCOs are well-placed to anticipate and manage those risks within the principles-based framework already in place at the CFTC.

For the reasons outlined above, we believe that revisions to current CFTC regulations with respect to climate-related financial risks are not necessary.

#### **d. Product Innovation**

*18. What derivatives products are currently used to manage climate related financial risk, facilitate price discovery for climate-related financial risk, and/or allocate capital to climate benefiting projects? Please explain how these products are used, negotiated, and traded. What, if any, conditions, including market practices and/or regulatory requirements, may constrain or promote their expanded use or development to address climate-related financial risk? Are there ways in which Commission regulations or guidance could better address particular considerations relating to the listing of these types of products for trading?*

Response: At CME Group, we develop the tools necessary to access emerging ESG markets and help market participants manage risks to achieve their sustainability objectives. The types of products that CME Group provides are varied and are designed to meet the risk management needs of their respective customer bases. A broad description of the types of products that we offer that are ESG -based and/or can be used to manage climate-related risks are as follows:

- **ESG Equity Indexes:** CME Group offers products based on the S&P 500 ESG Index and S&P Europe 350 ESG Index. These indexes are broad-based, market-cap-weighted indexes that are designed to measure the performance of securities meeting sustainability criteria, while maintaining similar overall industry group weights as their underlying indices.
- **Battery and Recycled Metals:** In December 2020, CME Group launched a cash-settled Cobalt Metal (Fastmarkets) futures contract on COMEX. There has been widespread adoption of our futures across the battery metals supply chain, as the industry expects to enter a prolonged phase of growth to support higher demand from electric vehicle (“EV”) manufacturers. With higher EV delivery volumes expected, participants need a way to hedge their cobalt price risk. Also in 2021, CME Group listed a Lithium futures contract on COMEX in response to the increasing demand and price risk stemming from the rapid growth of EV and large-scale battery storage applications for electronic devices. CME Group also lists a futures contract based on recycled steel, which enables risk management for this key scrap market.<sup>16</sup>
- **Emissions:** CME Group has a long history of listing emissions products, including California, European Union, and voluntary. CBOT hosted the first acid rain auctions in the 1980s and

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<sup>16</sup> In 2020, around 530,000 tons of recycled steel was hedged on CME Group exchanges. The use of one ton of recycled stainless steel scrap in stainless steel production could reduce CO2 emissions by 4.3 tons.

NYMEX created the Green Exchange in 2008. In 2021, CME Group launched a new suite of voluntary carbon emissions offset products, discussed below, on NYMEX.

- **Bioenergy:** CME Group offers a number of biofuel and renewable fuel products, including ethanol and used cooking oil derivatives. The U.S and Europe are leading the charge on the production of key biofuels and lower carbon feedstocks, such as renewable diesel in the U.S. or hydrotreated vegetable oils (“HVO”) across Europe. Some traditional oil refiners have turned their attention to the production of renewable diesel. The transition from fossil fuels to more sustainable fuels, such as renewable diesel or HVO, is drawing energy traders to CME Group’s benchmark agricultural markets. Soybean oil and other feedstocks are expected to feature in this growing market in the run up to achieving a net zero emissions economy by 2050 (and beyond).<sup>17</sup> In the years ahead, the supply of additional products (like sustainable aviation fuel) is expected to increase as the industry looks to further decarbonize its fuel choices.
- **Weather:** The use of derivatives markets for hedging climate-related risk has existed for over 25 years. CME Group’s weather products quantify weather in terms of how much the temperature deviates from the monthly or seasonal average in a particular city, allowing market participants to trade the weather much like any other commodity index. CME’s weather derivatives offer a useful tool for hedging volumetric risks related to adverse temperature and climatic conditions. They are index-based products geared to average seasonal and monthly weather in 12 cities around the world – nine in the U.S., two in Europe, and one in Asia.

All of these ESG derivatives products are available in the same manner as all other CME Group futures and options products -- electronically through CME Globex and via block trade or other off-exchange trade through CME ClearPort. The nature of the underlying market and its characteristics makes these products ESG products. There is no differentiation in the manner in which they are traded and cleared nor does there need to be. Given the fact that trading is subject to the full suite of regulatory protections applicable to products traded on a DCM and cleared through a DCO, we do not believe that any additional regulations are necessary. While we appreciate the CFTC’s attention to this issue, we encourage the Commission, consistent with its principle-based regulatory framework, to foster the evolution of market-driven solutions that allow for innovation in product development.

#### e. Voluntary Carbon Markets

*22. Are there ways in which the Commission could enhance the integrity of voluntary carbon markets and foster transparency, fairness, and liquidity in those markets?*

*23. Are there aspects of the voluntary carbon markets that are susceptible to fraud and manipulation and/or merit enhanced Commission oversight?*

*24. 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?*

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<sup>17</sup> CME Group, Open Markets (Nov. 4, 2021), *Biofuels Thrive on Net Zero Carbon Ambitions*, located at <https://www.cmegroup.com/openmarkets/energy/Biofuels-Thrive-on-Net-Zero-Carbon-Ambitions.html>

Response to Q. 22-24: The spot market for voluntary carbon and a related registry framework continue to evolve. Beyond its existing limited spot market authority<sup>18</sup>, it may be premature for the CFTC to develop further regulations, including a registration framework, so as to not inhibit existing industry efforts; however, we believe that forums sponsored by the CFTC, such as the Voluntary Carbon Convening in June 2022, and subsequent forums offer great opportunities for different industry stakeholders to discuss relevant matters. CME Group is a strong proponent of market-based solutions and has been in the forefront of launching voluntary carbon-based futures contract. In 2021, CME Group launched its CBL Global Emissions Offset (“GEO”) futures contract in conjunction with spot market operator CBL, an Xpansiv company, which is a market-based solution that sets its foundation in an international framework and is designed to harmonize the buying and selling of offsets from registries and emission reduction projects across the world.

Developed and adopted by the International Civil Aviation Organization (“ICAO”), the Carbon Offsetting and Reduction Scheme for International Aviation (“CORSIA”) is a globally accepted carbon offset and reduction scheme. Originally designed by and for the aviation industry, CORSIA’s stringent screening process can be used as a guide for organizations across industries when sourcing emissions offsets. The spot GEO contract sets its foundation in the rigorous selection criteria and review process developed by ICAO and a group of carbon experts from 19 countries known as the Technical Advisory Body (“TAB”). ICAO and TAB have spent years developing a stringent screening process to determine which offset registries and project types are eligible for CORSIA. One of the primary goals of the emissions unit criteria is to ensure that offsets under CORSIA result in genuine or additional greenhouse gas (“GHG”) emissions reduction. CORSIA-eligible voluntary carbon offset credits for the GEO futures contract will be eligible from selected registries.

CME Group has further innovated by developing, with CBL, the CBL Nature-Based Global Emissions Offset (“N-GEO”) contract, designed to lead to a more efficient and transparent market for Agriculture, Forestry and Other Land Use (“AFOLU”) sector credits, well as the CBL Core Global Emissions Offset (“C-GEO”) futures contract. The N-GEO contract follows the industry-leading Verified Carbon Standard (“VCS”) and require additional certification of Verra Registry’s stringent Climate Community and Biodiversity (“CCB”) Standard. CBL C-GEO futures are intended to align with the draft Core Carbon Principles, an emerging set of transparent and consistent standards around the supply of carbon credits to be overseen by the Integrity Council for the Voluntary Carbon Markets. As noted above, the framework for the spot market for voluntary carbon is continuing to evolve. At this point, we believe that the CFTC should facilitate ongoing discussion while being mindful that imposing regulation too early may impede innovation.

#### **f. Public-Private Partnership/Engagement**

*30. What specific literature and research should the Commission review and consult related to climate risks as applicable to the derivative markets, underlying commodities markets, registrants, registered entities, or other derivatives market participants?*

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<sup>18</sup> See CEA Sections 4b; 6(c)(3); 9(a)(2); see also CFTC Rule 180.2. To the extent that voluntary carbon products are listed on DCMs such as NYMEX, these products are subject to comprehensive self-regulatory and CFTC oversight.

Response: In May 2021, the United Nations Sustainable Stock Exchanges (“SSE”) initiative issued new guidance for derivatives exchanges, prepared in collaboration with the World Federation of Exchanges (“WFE”), the global industry group for exchanges. The joint report provides guidance on ‘How Derivatives Exchanges can Promote Sustainable Development - An Action Menu’. The document was produced by an international Advisory Group, comprised of 71 members and chaired by CME Group, which was made up of derivatives and stock exchange representatives and experts, as well as experts from the wider ecosystem. A link to the document can be found [here](#).<sup>19</sup>

#### **g. Capacity and Coordination**

*33. What steps should the Commission consider in order to expand its capacity to define, identify, measure, monitor, assess, and report on climate-related financial risks and their effects on financial stability? For example, what factors should the Commission consider when it looks to prioritize staffing, training and expertise on climate-related issues? Which analytic, data modeling, and monitoring methodologies would be helpful to the Commission in this regard?*

Response: Adaptability is one of the Commission’s great strengths. As derivatives markets evolved to price and manage new and different risks over the Commission’s history, its principles-based regulatory framework has been nimble and adaptable, allowing the industry to develop and the Commission to monitor a wide array of new and different products. Derivatives products designed to price and manage climate-related financial risks are no different from other new and emerging products the Commission has overseen from introduction to widespread adoption and successful pricing and risk management. We have full confidence that should the Commission determine further subject matter expertise is required on climate-related matters, it will take appropriate steps consistent with the technical rigor and market-first approach used when reviewing other emerging asset classes.

*34. How should the Commission coordinate its efforts with international groups and other regulatory bodies and supervisors? Are there standards, definitions, or metrics that could facilitate the sharing of relevant climate-related information amongst regulatory bodies and supervisors, and/or their analyses and aggregation of climate-related data? Are there specific steps that could be taken to enhance global coordination and regulatory comity?*

Response: The Commission serves at an important intersection among regulators across the globe tasked with addressing climate-related financial risks, both within the complex of U.S. government financial regulatory bodies and international organizations, such as IOSCO. With that in mind, we appreciate the Commission’s engagement and collaboration with other policymakers and encourage the Commission to take a deliberative approach in working with other policymakers that recognizes the unique characteristics of U.S. derivatives markets and prioritizes the stability of the broader U.S. financial system.

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CME Group thanks the Commission for the opportunity to comment on this very important issue. We would be happy to discuss any of these issues with the Commission. If you have any comments or

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<sup>19</sup> Sustainable Stock Exchange & World Federation of Exchanges, *How Derivatives Exchanges can Promote Sustainable Development - An Action Menu* (May 2021), available at <https://www.world-exchanges.org/storage/app/media/uploaded-files/SSE-WFE-Derivatives-Exchanges-Guidance.pdf>.

questions, please feel free to contact me at 212-299-2200 or via email at christopher.bowen@cmegroup.com.

Very truly yours,



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