



Christopher Kirkpatrick
Secretary of the Commission
Commodity Futures Trading Commission (CFTC)
Three Lafayette Center, 1155 21st Street NW
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June 19, 2019

Re: Market Risk Advisory Committee (MRAC) meeting agenda Item on Climate Related Financial Risk

Submitted electronically to [http:// comments.cftc.gov](http://comments.cftc.gov)

Dear Mr. Kirkpatrick,

The Institute for Agriculture and Trade Policy (IATP)¹ attended the June 12 MRAC meeting at which the committee voted to authorize a subcommittee on climate related financial risk. IATP is encouraged that MRAC, rather than an asset class specific advisory committee, has created this subcommittee to report to MRAC for a November 2019 meeting. Climate change poses risks, as well as opportunities, for market participants and the public interest in all asset classes, so it is appropriate that MRAC should host this subcommittee.

Investor groups are targeting derivatives end users for possible disinvestments for failing to robustly disclose to investors their Climate Related Value at Risk (CVAR) and the actions they are taking to integrate climate change resilience planning and investment into their facilities, production processes and supply chains.² It no longer suffices for publicly traded companies to report just projects to reduce corporate carbon dioxide emissions reductions or to “offset” emissions increases by buying emissions credits. Even privately held derivatives end users, such as Cargill, are exposed to reputational risk for failing to meet self-determined climate change risk reduction goals in their supply chains.³ The scale and frequency of climate change shocks to the logistics and delivery of physical commodities will change derivatives contract terms, such as delivery points and exchange estimated deliverable supply.⁴

It would be self-defeating if derivatives market end-users, broker dealers, exchanges, centralized clearing platforms, and, indeed, regulators, approached climate change as just one more risk factor to be incorporated into Business As Usual (BAU) risk modeling. The heterogeneity and scale of climate related financial risks is hinted at in the *Fourth [U.S.] Climate Assessment*: “The impacts of climate change beyond our borders are expected to increasingly affect our trade and economy, including import and export prices and U.S. businesses with overseas operations and supply chains.”⁵ Just as foreign subsidiary defaults cascaded back to the U.S. parent banks and shadow banks, helping to trigger the \$29 trillion plus Federal Reserve Bank rescue loans from 2007 to 2010⁶, climate change loss and damage, both financial and physical, from foreign subsidiaries will surely not stop at the rising water’s edge.

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The current scenario analysis and modeling techniques for financial crises may prove to be inadequate for the worst-case scenarios of climate related financial crises.⁷ Market participants should not anticipate that governments and central banks, such as the Federal Reserve, will bailout systemically important and other large financial institutions again.⁸ Instead the CFTC should work with the prudential regulators to consider what modifications to current rules and guidance might be needed to prevent a climate related financial crisis triggered by massive and recurrent disruptions to the deliverable supply of underlying commodities and to corporate and public infrastructure financed by securitized bonds and debt instruments.

Should the subcommittee find that the derivatives industry and the CFTC lack adequate CVAR data upon which to base recommendations, MRAC may recommend data elements for a CFTC special call to gather such data for a staff study. However, if MRAC recommends such a study, it should not limit the use of the subcommittee's report to setting the parameters for the study. MRAC's initial and subsequent recommendations to manage climate related financial risk in the derivatives markets could start the CFTC on a 360-degree review of whether its definitions for non-financial commodities should be modified to increase the climate reliance of derivatives end users. For example, the increase in carbon dioxide emissions has resulted in protein decreases in grains and oilseeds that are the underlying for futures, options and swaps.⁹ Should the CFTC use its delegated authority to require that grains and oilseed definitions in derivatives contracts have a protein content consistent with good agricultural practices to sequester greenhouse gases, e.g. nitrous oxide, rather than release it? Should the Commission propose that exchanges develop separate electricity derivatives contracts for renewably generated electricity?

Perhaps the most urgent issue in adaptation to climate change is how to make the water cycle environmentally, socially and economically sustainable. Yet the trading of base and precious metals derivatives contracts depends on a mining and metal processing industry whose water use, to say nothing of water contamination, is unsustainable.¹⁰ Should the definition of metals derivatives contracts include water sustainability criteria for the underlying so that a contract be trade eligible? These questions indicate some of the issues that the subcommittee could consider under the Commodity Exchange Act provisions to ensure that price discovery serves the public interest, as well as serving the interest of market participants to become more resilient to climate change events and trends.

Financial derivatives also should be subject to a climate finance resilient review of instruments and trading practices. For example, climate change will negatively impact the terms and value of municipal bonds and the derivatives contracts based on those bonds.¹¹ Will bonds issued by governments with no or poor resilience planning continue to receive the same ratings as governments that invest in climate resilient infrastructure and planning? Will investors buy bonds for infrastructure projects by governments or corporations with no or low climate resiliency investment and planning?

Financial derivative contracts that package debt as a tradeable asset are another source of potential climate related financial risk. Corporate debt grew 20 percent to \$1.1 trillion in 2018, according to the Federal Reserve Bank.¹² Debt holders may default or the value of collateral be reduced or made uncertain by climate related events that are too "idiosyncratic" for algorithmic trading strategies to incorporate in price discovery.¹³ The subcommittee could initiate scenario analyses of such situations. Advised by the subcommittee's report, MRAC might recommend to

the Commission that it propose climate financial resilient modifications to rules and trading practices governing credit default swaps and collateralized debt obligations.

The subcommittee should study how banks are beginning to incorporate climate financial risks into stress testing.¹⁴ MRAC could recommend to the CFTC that it develop climate risk criteria for the stress testing models for futures and options exchanges, swaps execution facilities and centralized clearing platforms. The possibility of a climate shock triggered default cascade effecting the solvency or liquidity of adequately capitalized trading platforms may be remote at present. However, the non-linearity of climate shocks and trends may confound the ability of market participants and broker dealers to anticipate and manage prices risks, leading to exchange and clearing member defaults or liquidity crises.¹⁵ The subcommittee should be advised by consensus reports on climate science and the climate trends outlook at least to 2030 to prepare its report and recommendations for MRAC.

Finally, IATP greatly appreciates this opportunity to submit this short comment to assist the subcommittee's and MRAC's important work. We look to further assisting the subcommittee, MRAC and the Commission to develop studies, rules, guidance and/or policy to enhance the climate financial resiliency of derivatives market participants and the public interest in derivatives markets.

Sincerely,

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¹ IATP is a nonprofit, 501(c)(3) nongovernmental organization, headquartered in Minneapolis, Minn., with offices in Washington, D.C. and Berlin, Germany. IATP has participated in the Commodity Markets Oversight Coalition (CMOC) since 2009, and the Derivatives Task Force of Americans for Financial Reform since 2010. IATP has submitted several comments on CFTC rulemaking, and on consultation papers of the International Organization of Securities Commissions, the European Securities and Markets Authority, and the European Commission's Directorate General for Internal Markets. IATP has participated in meetings of the United Nations Framework Convention on Climate Change (UNFCCC) since 2008. In addition to contributing to UNFCCC position papers, IATP publishes its own climate related agricultural research, such as <https://www.iatp.org/emissions-impossible#appendix%20and%20datasets> More IATP work on climate change is at <https://www.iatp.org/climate-change>

² E.g. "Group of 88 investors targeting 700 companies for not reporting environmental information," CDP, June 17, 2019. <https://www.cdp.net/en/articles/media/group-of-88-investors-target-over-700-companies-for-not-reporting-environmental-information>

³ E.g., Kristen Leigh Painter, "Goal to save forests in Brazil is missed: Activists say Cargill should stop buying soybeans from destructive "rogue actors." *Star Tribune*, June 14, 2017.

⁴ Brian Sullivan and Mario Parker (Bloomberg News), "Hundreds of barges are stalled on Mississippi," *Star Tribune*, June 11, 2019.

⁵ "Summary Findings," Volume II, <https://nca2018.globalchange.gov/>

⁶ <http://www.levyinstitute.org/publications/29000000000000-a-detailed-look-at-the-feds-bailout-by-funding-facility-and-recipient>

⁷ Frank Ackerman, *Worst Case Economics: Extreme Events in Climate and Finance*, Anthem Press, 2017.

⁸ Sheila Bair, "Bank bailouts propped up the financial system. But we should never repeat them." *Washington Post*, May 23, 2019.

⁹ Helena Bottemiller Evich, "The Great Nutrient Collapse," *Politico*, September 13, 2017. <https://www.politico.com/agenda/story/2017/09/13/food-nutrients-carbon-dioxide-000511>

¹⁰ "In Too Deep: Analysis for institutional investors of water security issues facing the mining and metals sector," CDP, 2019. https://6fefcbb86e61af1b2fc4-c70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.rackcdn.com/cms/reports/documents/000/004/613/original/CDP_Metals_and_mining_report_2019.pdf?1560876943

¹¹ Ashley Schulten et al, "Getting physical: Scenario analysis for assessing climate related risks," Blackrock Investor Institute, April 2019, 10-12. <https://www.blackrock.com/us/individual/literature/whitepaper/bii-physical-climate-risks-april-2019.pdf>

¹² Jean Smialek, "Federal Reserve Warns as Debt Exceeds Peak Crisis Level," *The New York Times*, May 6, 2019.

¹³ Philip Georgiadis, "Goldman jettisons all its commodity trading recommendations," *Financial Times*, April 26, 2019.

¹⁴ Caroline Binham and David Crow, "Carney plans to test UK banks resilience to climate change," *Financial Times*, December 16, 2018. Alan Kline, "Why banks should stress test for climate change," *American Banker*, January 2, 2019.

¹⁵ T. Friedrich et al, "Nonlinear climate sensitivity and its implications for future warming trends," *Science Advances*, November 9, 2016. <https://advances.sciencemag.org/content/2/11/e1501923.full?intcmp=trendmd-adv>