

# Public Statements & Remarks

## Closing Remarks of Commissioner Christy Goldsmith Romero at the Global Research Alliance for Sustainable Finance and Investment Annual Conference

### A Roadmap for Action on Climate Resilience

Yale University

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*Remarks as prepared for delivery*

*Standard disclaimer*

Thank you to the Global Research Alliance for Sustainable Finance and Investment for inviting me to close out this highly informative conference. The timing is certainly appropriate, at the end of the warmest summer on record—a summer that experienced extreme heat events such as smoke days that made it unsafe to go outside, a month-long stretch of 110+ days in Phoenix, and the heartbreaking deadly Maui wildfires.[1] It's inspiring to be here in a group of people who are looking for sustainable finance and investment solutions to the emerging risks from climate change, particularly one year after the passage of the landmark Inflation Reduction Act.

The CFTC is a market regulator like the SEC. Only instead of stocks and bonds, we regulate derivatives of commodities like wheat, oil, and copper, as well as of interest rates and other financial products. The risk management functions of these markets are integral to the global response to climate change.[2] These markets help discover prices for commodities like a megawatt hour of solar power generation or the lithium used in electric vehicles and batteries. They can be used to hedge interest rate risk for long-term investments under the IRA or to hedge the risk that severe climate events pose to row crops.

Today, I want to talk to you about my priority to promote market resilience to climate-related financial risk. I will describe how we can use the lessons from the past to have a climate-resilient future. I'll talk to you about what the CFTC is doing, and what more we can do, as part of President Biden's whole-of-government approach to building a climate-resilient economy. I will share three new proposals I am announcing today to promote market resilience to climate risk.

### **The Impact of Climate Events on CFTC-Regulated Markets**

The Biden White House's Roadmap to Build a Climate-Resilient Economy says, "U.S. financial markets and institutions face systemic risks from climate change."<sup>[3]</sup> The markets the CFTC regulates are directly impacted by extreme heat, drought, wildfire, floods, and storms, all of which have been made more intense and frequent by climate change. Hurricane Ian caused almost \$113 billion in damage, wiping out farming and grazing land and destroying billions of dollars' worth of agricultural products.<sup>[4]</sup> It was the most severe of 18 billion-dollar disasters that together made 2022 the third most costly year on record.<sup>[5]</sup> Almost \$21 billion came from crop losses.<sup>[6]</sup> And, in 2023, there have already been 15 billion-dollar climate events.

Climate-driven events result in severe economic losses to farmers, ranchers, and producers. This impacts commodities and derivatives markets. A changing climate threatens supply chains, like persistent drought in the Midwest leaving river barges carrying grain stuck in the mud of the Mississippi River. I recently visited a large grain company on the Missouri River to see firsthand the impact when they cannot fill the barge because of low water levels. And along with farmers and ranchers, the impact could fall on Americans who may have to pay more to feed their families.

There is also the potential for more profound tipping points that present irreversible damage, like the melting of an Antarctic ice sheet, thawing of the tundra,<sup>[7]</sup> or the collapse of the Atlantic Meridional Overturning Current, including the Gulf Stream.<sup>[8]</sup> Understanding and accounting for tipping points is an area of development for climate modelers, and one the CFTC will need to watch closely.

Markets and market participants are certainly aware of climate change and its effects on the economy. According to news reports, the trading firm Citadel hired a team of 20 weather forecasters to help understand changing weather patterns, which it reportedly credits for its \$8 billion in commodities trading profits last year.<sup>[9]</sup> CFTC-regulated exchanges have listed over 200 climate-related products, which help manage risks from severe climate events or hedge investments made in the low-carbon transition. As long as the innovation in these products is responsible and properly manages climate risk, they can help play a crucial role in achieving the goals of the IRA and other laws.

## **Regulators' Responsibility to Manage Evolving Risk**

Climate change poses an evolving, systemic risk to U.S. financial stability and markets that financial regulators have a responsibility to monitor.<sup>[10]</sup> A key recommendation in the Financial Stability Oversight Council's 2021 report on climate-related financial risk is for each member agency, including the CFTC, to expand their capacity to define, identify, measure, monitor, assess, and report on climate-related risks and their effects on financial stability.

In doing so, we can apply lessons from the past to address climate-related risks. Next month is the 15th anniversary of the 2008 financial crisis. Regulators were caught unaware of emerging risks that led to the failure or near-failure of almost every major investment bank and a number of systemically important banks. I was at the SEC then, and then spent 12 years at Treasury, including more than a decade as the Special Inspector General for the Troubled Asset Relief Program (SIGTARP), appointed by President Obama.

One of my roles as SIGTARP was to report and testify to Congress about the lessons to be learned from the crisis. I found that regulators underappreciated the significance of the risks related to under capitalization, complex mortgage derivatives, and the failure of risk management by financial institutions. Regulators did not understand how the significant interconnections between financial institutions posed systemic risk, or the painful toll the crisis would take on hardworking American families and small businesses. Our financial system was not resilient.

The Dodd-Frank Act stabilized our financial system by implementing a framework for comprehensively managing risk. Dodd-Frank Act reforms provide the direction and the tools for regulators to make our financial markets and system more resilient to risk. And that strengthens financial stability.

But then, 2023 saw the failure of several regional banks that failed in risk management. And technologies like social media and online banking played a role. In Congressional testimony about the failures, Federal Reserve Vice Chair Michael Barr testified about the importance of regulators evolving their understanding of emerging risk and financial stability.[11]

To use the lessons from the past to have a climate-resilient future, as regulators, we need to appreciate the size and scope of the risk that climate change poses to our financial system and markets. We need to evolve our understanding of climate risk. We need to ensure that there is appropriate climate risk management so there is not a threat to financial stability.

## **A Roadmap for Action**

A roadmap for action exists. The Dodd-Frank Act provides the tools. The CFTC's Market Risk Advisory Committee under CFTC Chairman Behnam's sponsorship issued a report in 2020 with detailed expectations for the CFTC and other regulators to move urgently and decisively to measure, understand, and address climate-related financial risk.[12] And the FSOC issued recommendations to address the challenges and needs posed by climate-related financial risk, warning that if unaddressed, those risks will only become more acute.

At the CFTC, we have started down this roadmap, but there is more that we can do. CFTC economists now regularly track market activity and pricing for crops and energy after drought, wildfires and storms. They build on data from the National Oceanic and Atmospheric Administration (NOAA), the United States Department of Agriculture (USDA), and other sources to understand links between the climate and our markets.

In June, we announced a new Environmental Fraud Task Force, which I had been pushing for, and worked to launch.[13] We have held two public roundtables on voluntary carbon credit markets. Our Energy and Environmental Advisory Committee (EEMAC) met to discuss metals markets that are critical for electric vehicles and batteries. I traveled to Salt Lake City with EEMAC to visit the largest copper mine in the U.S. and heard from one of our exchanges about metals markets and new metals derivatives that respond to the growing demand for batteries.

In June 2022, we put out a request for information on climate-related issues.[14] We received over 80 comments from industry, climate experts, academics, and public interest groups.

With that range of perspectives, today, I will make three new proposals for the CFTC to implement FSOC's recommendations. These proposals are aimed at evolving and deepening the CFTC's understanding of climate-related financial risk that impact our markets and market participants. The goal of all three is to promote market resilience, which is one of our core missions.

**Proposal #1: The Commission should conduct a horizontal supervisory review of climate risk management at exchanges, clearinghouses and, in conjunction with the National Futures Association, at market intermediaries.[15]**

A lesson of the financial crisis is that risk hides where regulators don't look for it. The CFTC has a responsibility to ensure strong risk management, particularly by our largest registrants. Dodd-Frank Act reforms require exchanges, clearinghouses, and intermediaries like brokers and dealers, to have risk management frameworks that are comprehensive. I previously stressed the importance of the Commission monitoring climate-related financial risk by working with exchanges, clearing houses and intermediaries to understand how they are managing climate risk.[16]

From my first day in the office, I have been working on that goal. Working closely with me, the National Futures Association (NFA) conducted a special project to review how some of their large members were managing climate-related risk. The results were encouraging. The NFA found that rather than being seen just as a standalone risk, climate risk was part of existing risk management frameworks—integrated into assessment and management of other risks like operational risk, market risk, credit risk, and liquidity risk.[17] These results now form the basis for the NFA, as a self-regulatory organization for CFTC-regulated entities, to build its capacity to monitor climate-related financial risk and to expand its review to a broader set of intermediaries. The CFTC should consult with the NFA in expanding this review.

The CFTC should also launch its first supervisory review of climate-risk management by exchanges and clearinghouses, without delay. Responses to our climate risk RFI confirmed that clearinghouses and exchanges are already including climate-related risks as part of their risk management frameworks.[18] Commenters clarified that effective risk management frameworks include both the operational risk that a severe climate event could cause to ongoing operations, as well as the broader market risk, credit risk and liquidity risk from climate events. We need to understand how this occurs in practice. And we need to understand how our registrants are managing the risk of transition to a lower carbon environment.

And we should ask how our registrants are taking into account the changes in insurance markets. Almost 40% of damage from U.S. climate disasters last year was uninsured.[19] Insurers are rapidly exiting markets like Florida and California.[20] What remains is more expensive and covers less. The Federal Reserve has asked large banks to model how the availability of insurance might affect their ability to withstand climate disasters.[21] The CFTC should understand how our registrants are approaching this challenge.

The Commission's initial review should be flexible, staying mindful of the differences in market function, size, and risk profile of registrants. We should acknowledge that risk management may be performed at an enterprise level. We should draw on our market expertise, dovetailing with, not duplicating, the efforts of other regulators.

The goal of this initial review would be to increase the Commission's capacity to understand evolving risk and to determine how our registrants are managing climate risk. There should not be supervisory consequences for deficiencies in climate risk management in an initial review. Any identified gaps can help develop new capacities in working groups or at the Commission. Any benchmarks or best practices can serve as a valuable reference.

**Proposal #2: The CFTC should work with its largest regulated entities, particularly those deemed systemically significant, on scenario analyses to increase our understanding of climate impacts in derivatives markets.[22]**

The CFTC uses stress testing to ensure that clearinghouses are prepared to meet their obligations during periods of elevated risk. Drawing on the lessons learned from the 2008 financial crisis, stress tests help the Commission understand the impact of potential severe shocks, including interconnections and sources of contagion that could impact financial stability. These stress tests are one type of scenario analysis, a tool that financial institutions regularly use to plan for potential risks. Former Federal Reserve Governor Lael Brainard has described scenario analysis as a useful tool for understanding climate risk "because it requires assessing the implications for financial stability and individual financial institutions in a systematic way." [23]

The Biden White House's Roadmap to Build a Climate-Resilient Economy describes climate-related risks as "a uniquely complex set of risk management challenges" that "challenge[] traditional notions of risk diversification" and "make historical patterns less useful for financial risk assessment." [24] To assess resilience to these kinds of hard-to-predict climate shocks, the Commission can develop and use plausible, but extreme scenarios to assess how resilient financial institutions and other registrants are to those shocks.

The Commission does not need to start from scratch. The responses to our RFI inform us that exchanges and clearinghouses are already conducting internal stress tests using climate-related scenarios. [25] For example, clearinghouses are already looking at the stresses that a severe climate event can create for their financial resources over the short term (for example, less than five days). [26] As a start, the Commission should better understand the work that is already underway across clearinghouses and exchanges.

The Commission can then work with these large entities to conduct analyses using a common set of derivatives-market scenarios. This will increase our understanding of the impact of simultaneous or close in time shocks, and the impact on financial stability. And while the initial focus would be on short-term physical climate risk, many registrants are already thinking about how to respond to medium and long-term climate-risk scenario analysis required by the Federal Reserve and European regulators that include transition risk.[27] The International Swap Dealers Association published a framework for banks to use in stress testing their trading book, which includes consideration of transition and combined shocks.[28]

Like the Federal Reserve's pilot climate scenario exercises with the six largest banks, the CFTC's initial exercises should be principles-based, exploratory, and with a focus on increasing the Commission's capacity to understand climate-related financial risk. This will help build a picture of what the most extreme but plausible climate impacts could be to energy, agriculture, and environmental derivatives markets. It will help us see the interconnections and possible contagions that could threaten financial stability.

**Proposal #3: The CFTC should issue principles describing how the largest regulated entities should address climate-related financial risks through existing risk management frameworks.[29]**

Just like the banking regulators, the CFTC should issue principles for managing climate risk. This can help the largest banks, brokers, exchanges, and clearinghouses understand the CFTC's expectations under existing rules as they navigate the uncertainty, complexity, and data challenges in building resilience to climate change.

Principles will help these organizations develop strategies, deploy resources, and manage risks consistent with the CFTC's expectations, while leaving flexibility to address these risks in a way that fits with their individual business models and risk profiles. Principles will also create clear expectations regarding progress. They will aid the CFTC and NFA in incorporating climate risk management into regular supervisory reviews.

The CFTC should seek to harmonize with banking regulators' Draft Principles for Climate-Related Financial Risk Management (Prudential Principles) given that we also regulate banks.[30] These principles, which were issued last year, provide a high-level framework for the safe and sound management of exposures to climate-related financial risk. They lay out the expectation that regulated entities should incorporate climate risk into governance, policies and procedures, strategic planning, risk management, risk measurement, and reporting. They also highlight the way that climate risk fits with existing financial risks, such as credit, liquidity, operational, and legal and compliance risks. Regulated entities can use principles like these to help assess collateral adequacy or counterparty and third-party service provider risk.

And similar to the Prudential Principles, the CFTC should remind organizations that their public climate-related commitments should be aligned with and supportive of internal strategies and risk appetite statements. This reminder helps avoid greenwashing, which is a threat to market integrity.

## Conclusion

The challenges posed by climate change are complex, uncertain, and economy-spanning. But making sure the financial system and markets are resilient to evolving climate-related financial risk is critical to the CFTC's role as a market regulator. The Dodd-Frank Act has given regulators the tools to ensure that the financial system is resilient to risk, including climate risk. It is up to us to make full use of those tools, with a sense of urgency as severe climate events are coming faster and costing more. This is the challenge of our day, and we must rise to meet it.

[1] National Oceanic and Atmospheric Association, "Record shattering: Earth had its hottest July in 174 years" (Aug. 14, 2023) <https://www.noaa.gov/news/record-shattering-earth-had-its-hottest-july-in-174-years>.

[2] See *Request for Information on Climate-Related Financial Risk*, 87 Fed. Reg. 43501 (July 21, 2022) (*Climate Risk RFI*) (Comment by Futures Industry Association).

[3] The White House, *Roadmap to Build a Climate-Resilient Economy* at 16, August 14, 2021, <https://www.whitehouse.gov/briefing-room/statements-releases/2021/10/15/fact-sheet-biden-administration-roadmap-to-build-an-economy-resilient-to-climate-change-impacts/> (<https://www.whitehouse.gov/briefing-room/statements-releases/2021/10/15/fact-sheet-biden-administration-roadmap-to-build-an-economy-resilient-to-climate-change-impacts/>) (*White House Roadmap*).

[4] Christa D. Court et al. Estimated Agricultural Losses Resulting from Hurricane Ian, University of Florida-Institute of Food and Agricultural Sciences Economic Impact Program, Feb. 9, 2023.

[5] NOAA National Centers for Environmental Information (NCEI) U.S. Billion-Dollar Weather and Climate Disasters (2023), <https://www.ncei.noaa.gov/access/billions/> (<https://www.ncei.noaa.gov/access/billions/>).

[6] Daniel Munch, "New Estimates Reveal Major 2022 Weather Disasters Caused Over \$21 Billion in Crop Losses," Farm Bureau (Mar. 3, 2023), <https://www.fb.org/market-intel/new-estimates-reveal-major-2022-weather-disasters-caused-over-21-billion-in-crop-losses> (<https://www.cftc.gov/Exit/index.htm?https://www.fb.org/market-intel/new-estimates-reveal-major-2022-weather-disasters-caused-over-21-billion-in-crop-losses>).

[7] White House Roadmap at 9.

[8] Ditlevsen, P., Ditlevsen, S. "Warning of a forthcoming collapse of the Atlantic meridional overturning circulation." 14 NATURE COMMUNICATIONS 4254 (July 25, 2023), <https://www.nature.com/articles/s41467-023-39810-w> (<https://www.cftc.gov/Exit/index.htm?https://www.nature.com/articles/s41467-023-39810-w>).

[9] Henry Mance and David Sheppard, "The science of forecasting ever more extreme weather", THE FINANCIAL TIMES, Aug. 3, 2023, <https://on.ft.com/3rSHSyK> (<https://www.cftc.gov/Exit/index.htm?https://on.ft.com/3rSHSyK>).

[10] Financial Stability Oversight Council, Report on Climate-Related Financial Risk at 3, <https://home.treasury.gov/system/files/261/FSOC-Climate-Report.pdf> (<https://home.treasury.gov/system/files/261/FSOC-Climate-Report.pdf>). President Biden's Executive Order 14030 on Climate-Related Financial Risk outlines a whole of government approach to mitigate the risk of climate-related financial risk. The EO directed the Financial Stability Oversight Council, of which the CFTC is a member, to consider a detailed and comprehensive assessment of climate-related financial risk.

[11] See *Statement of Michael S. Barr, Vice Chair for Supervision, Board of Governors of the Federal Reserve System before the Committee of Banking, Housing and Urban Affairs, U.S. Senate (Mar. 28, 2023)*.

[12] CFTC, *CFTC's Climate-Related Market Risk Subcommittee Releases Report* (Sept. 9, 2020), <https://www.cftc.gov/PressRoom/PressReleases/8234-20> (<https://www.cftc.gov/PressRoom/PressReleases/8234-20>).

[13] Commissioner Christy Goldsmith Romero, *Remarks of Commissioner Christy Goldsmith Romero at ISDA's ESG Forum on Promoting Market Resilience: A Thoughtful Approach to the Daunting Challenge of Climate Financial Risk, Mar. 7, 2023*, <https://www.cftc.gov/PressRoom/SpeechesTestimony/oparomero7> (<https://www.cftc.gov/PressRoom/SpeechesTestimony/oparomero7>); Commissioner Christy Goldsmith Romero, *Adjusting the Sails for Cyber and Climate Resilience*, (Feb. 10, 2023), <https://www.cftc.gov/PressRoom/SpeechesTestimony/oparomero6> (<https://www.cftc.gov/PressRoom/SpeechesTestimony/oparomero6>).

[14] See CFTC, *CFTC Release Request for Information on Climate-Related Financial Risk*, (June 2, 2022), <https://www.cftc.gov/PressRoom/PressReleases/8541-22> (<https://www.cftc.gov/PressRoom/PressReleases/8541-22>).

[15] This proposal is consistent with Recommendation 4.6 of the FSOC report and MRAC recommendation 4.11.

[16] See Commissioner Christy Goldsmith Romero, *Adjusting the Sails for Cyber and Climate Resilience*, (Feb. 10, 2023), <https://www.cftc.gov/PressRoom/SpeechesTestimony/oparomero6> (<https://www.cftc.gov/PressRoom/SpeechesTestimony/oparomero6>).

[17] In some cases, these were at an enterprise level and some parent companies disclosed climate risks using frameworks like the Task Force for Climate-Related Financial Disclosures.

[18] See Climate Risk RFI (comments by, among others, CME Group Inc., Intercontinental Exchange Inc., Nodal Exchange and Nodal Clear, and World Federation of Exchanges).

[19] Swiss Re Institute, "Natural catastrophes and inflation in 2022: a perfect storm" at 30 (2023), <https://www.swissre.com/institute/research/sigma-research/sigma-2023-01.html> (<https://www.cftc.gov/Exit/index.htm?https://www.swissre.com/institute/research/sigma-research/sigma-2023-01.html>).

[20] Saijel Kishan, "Florida's 'Last Resort' Property Insurer is Now State's Biggest" BNNBLOOMBERG, (Aug. 10, 2023), <https://www.bnnbloomberg.ca/florida-s-last-resort-property-insurer-is-now-state-s-biggest-1.1957317> (<https://www.cftc.gov/Exit/index.htm?https://www.bnnbloomberg.ca/florida-s-last-resort-property-insurer-is-now-state-s-biggest-1.1957317>); Michael R. Blood, "California insurance market rattled by withdrawal of major companies," (AP, June 5, 2023) <https://apnews.com/article/california-wildfire-insurance-e31bef0ed7eeddcde096a5b8f2c1768f> (<https://www.cftc.gov/Exit/index.htm?https://apnews.com/article/california-wildfire-insurance-e31bef0ed7eeddcde096a5b8f2c1768f>).

[21] Federal Reserve Board of Governors, *Pilot Climate Scenario Analysis Exercise: Participant Instructions*, January 2023, <https://www.federalreserve.gov/publications/climate-scenario-analysis-exercise-instructions.htm> (<https://www.federalreserve.gov/publications/climate-scenario-analysis-exercise-instructions.htm>).

[22] This proposal is consistent with FSOC Recommendation 4.3 and MRAC Recommendation 4.8 and 4.11.



[23] Governor Lael Brainard, “Building Climate Scenario Analysis on the Foundations of Economic Research” Speech at the 2021 Federal Reserve Stress Testing Research Conference, October 7, 2021, <https://www.federalreserve.gov/newsevents/speech/brainard20211007a.htm> (<https://www.federalreserve.gov/newsevents/speech/brainard20211007a.htm>).

[24] White House Roadmap at 18.

[25] See Climate Risk RFI (CME Comment: “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 detailed above, a DCO includes stress scenarios that capture climate-related financial risk in its stress testing to assess the adequacy of its guaranty fund resources, while continually evaluating the appropriateness of its stress scenarios.”); see *also* Climate Risk RFI (ICE comment: “in reference to clearing houses, as part of existing risk management frameworks, DCOs look at historic peaks in stress tests and consider the results of hypothetical stress tests.”)

[26] Climate Risk RFI (CME Comment).

[27] ESMA’s stress test, for instance, has asked clearinghouses to think about business model risk, which is the risk that shifts away from certain assets will reduce usage of a cleared product, negatively affecting revenue even as costs remain fixed. See ESMA, *Framework for the 5th ESMA Stress Test Exercise of Central Counterparties*, Final Report at 38, May 31, 2023, <https://www.esma.europa.eu/press-news/esma-news/esma-launches-fifth-stress-test-exercise-central-counterparties> (<https://www.cftc.gov/Exit/index.htm?https://www.esma.europa.eu/press-news/esma-news/esma-launches-fifth-stress-test-exercise-central-counterparties>); see *also* Federal Reserve Board of Governors, *Pilot Climate Scenario Analysis Exercise: Participant Instructions*, January 2023, <https://www.federalreserve.gov/publications/climate-scenario-analysis-exercise-instructions.htm> (<https://www.federalreserve.gov/publications/climate-scenario-analysis-exercise-instructions.htm>).

[28] ISDA, *A Conceptual Framework for Climate Scenario Analysis in the Trading Book* at 6, July 2023, <https://www.isda.org/2023/07/12/a-conceptual-framework-for-climate-scenario-analysis-in-the-trading-book/> (<https://www.cftc.gov/Exit/index.htm?https://www.isda.org/2023/07/12/a-conceptual-framework-for-climate-scenario-analysis-in-the-trading-book/>) at 6.

[29] This proposal is consistent with FSOC Recommendation 4.6 and MRAC Recommendation 4.11.

[30] Board of Governors of the Federal Reserve System, “Principles for Climate-Related Financial Risk Management for Large Financial Institutions,” 87 Fed. Reg. 75267 (Dec. 8, 2022). Similar to the approach taken by the prudential regulators, the CFTC can release its draft principles for public comment while it conducts a horizontal review and its exploratory scenario analysis.

**-CFTC-**