



Commodity Futures Trading Commission (“CFTC,” “Commission”)  
Markets Risk Advisory Committee (MRAC) Climate Related Market Risk Subcommittee (“Subcommittee”)  
Notice<sup>1</sup>

May 14, 2020

Submitted to <https://www.cftc.gov/MRACclimate>

The Institute for Agriculture and Trade Policy (IATP) appreciates the opportunity to respond to the issues identified in the Notice. IATP first wrote on June 19, 2019 to the Commission on these issues.<sup>2</sup> We are responding to four of five topics outlined in the Notice, plus our “Urgency and ambition” topic. IATP hopes that these brief comments will help the Subcommittee prepare its report for MRAC. We look forward to reading the report and to commenting on the CFTC’s proposals for implementing the “actionable materials” recommended by MRAC following its review of the report.

### **Challenges to evaluating and managing climate-related financial and market risk**

Sophisticated public relations campaigns of climate change disinformation<sup>3</sup> have delayed, stunted or even reversed government and market participant policies and actions to mitigate greenhouse gases (GHGs) and adapt to climate change in response to increasingly urgent and dire consensus scientific reports, e.g., the *Fourth National Climate Assessment*.<sup>4</sup> One econometric study projects that with a 4 degree Celsius increase, annual global climate change damage will be \$23 trillion by 2100.<sup>5</sup> But more important for risk managers and regulators than the scale of damages is the short-term structure and sequence of asset reevaluations and default cascades that must be managed in equities and derivatives markets to prevent market and financial system collapse.<sup>6</sup> What should the Subcommittee report recommend to MRAC concerning possible CFTC studies, proposed regulations or guidance, new data reporting requirements and legislation to reduce the impact of disinformation and to increase the quantity and quality of relevant climate economic information to enable evaluation and management of financial and market risk?<sup>7</sup>

- The Subcommittee should recommend that the CFTC establish a Climate Change Financial Regulatory Lab to include a portal for consensus science climate change information; an electronic library on climate change information affecting specific underlying assets of CFTC regulated contracts; and a platform for machine learning about climate change and for beta testing climate change related financial products. Alternatively, the Subcommittee could recommend that such a Lab be established in a self-financing agency, e.g., the Office for Financial Research, for use by all financial regulatory agencies.
- The Climate Bond Initiative expects global issuance of Green Bonds by governments and corporations to rise to \$350-400 billion in 2020 from \$255 billion in 2019.<sup>8</sup> It is tempting to grow this market by allowing Green Bonds to become underlying assets for derivatives trading<sup>9</sup>, e.g., exchange traded Green Bond funds.<sup>10</sup> Voluntary adherence to bond issuance standards<sup>11</sup> is just one reason that the Subcommittee should advise the CFTC to resist this temptation.
- According to Frank Ackerman, the shortcomings of regulatory cost-benefit analysis (CBA) become most evident in worst case economics<sup>12</sup>, such as the 2007-2010 default cascades that resulted in \$29 trillion in Federal Reserve emergency loans.<sup>13</sup> The Subcommittee should not advise the

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Commission to apply in climate related rulemakings or staff papers conventional CBA, e.g., leading to conclusions about a purported “global war on energy freedom.”<sup>14</sup> The Subcommittee should recommend that the CFTC staff develop a CBA model based on both historical data and the non-linear asset impacts of climate change related weather events in worst case economic scenarios.

### **Integrating climate-related scenario analysis, stress testing, governance initiatives into financial and market risk assessments and reporting**

In the “Global Climate Change Analysis 2018,” 72% of 6,937 companies self-reporting to a Carbon Disclosure Project (CDP) survey affirmed they “integrated climate into your [their] business strategy,” with fossil fuels and financial services self-reporting at 90%. But only about 25 of the largest by market cap 500 CDP surveyed companies reported doing quantitative climate risk scenario analysis.<sup>15</sup> Most scenario analysis assists climate risk planning with a medium-term horizon, e.g., to 2030, and for corporate reporting to institutional investors.<sup>16</sup> The methodological translation of such analysis to the very short term strategies of derivatives trading is far from realized.

- The Subcommittee should recommend that the CFTC introduce a climate related scenario analysis metric or criterion and quantified scenario reporting to be adopted as part of the business conduct standard required to be a member of an exchange of a centralized clearing platform.

Stress tests for central banks are conducted with assumptions about linear shock transmissions and historical data that have little similarity with the climate’s non-linear shock transmissions and disorderly transitions from Business as Usual baseline information. The Bank for International Settlements characterizes the system-wide financial impact uncertainty of climate events as “green swans.”<sup>17</sup> Market participant product design and trading strategies must anticipate the physical risks to underlying assets and the transitional risks of climate policy “shocks” that respond to the scale and frequency of climate change related damages.

- The Subcommittee should recommend that the CFTC ask for input about how to “translate” the climate stress testing of equity portfolios<sup>18</sup> into testing models adequate to and appropriate for derivatives trading practices and strategies.

### **Policy initiatives and best practices for risk management and disclosure of financial and market risks related to climate change that support financial stability**

Securities and Exchange Commission (SEC) climate risk disclosure for publicly listed firms lack both a uniform standard and an enforcement mechanism.<sup>19</sup> As such, the SEC disclosure model should not be emulated by the CFTC. In a hyper-polarized U.S Congress, it is unlikely that the Commodity Exchange Act (CEA) will be amended to include climate risk relevant measures. In the near term, the public interest in having a stable climate will probably have to be pursued, in CEA terms, through preventing and disciplining misrepresentation, market manipulation and fraud in futures, options and swaps trading in Designated Contract Markets (DCMs) and Swaps Execution Facilities (SEFs). These are weak forms of defense of a stable climate, since they require demonstration of intentionality in today’s largely automated trading environment. How else might the Commission reduce the risks of climate change?

Currently, participation in environmental markets is regarded as the preferred means for market participants to minimize costs in complying with GHG emissions caps or voluntary emissions reduction commitments. However, there is abundant evidence that emissions offset projects, which are the underlying assets of emissions offset derivatives, are often fraudulent<sup>20</sup> and even when not fraudulent, fail to reduce emissions. For example, a study for the European Commission determined that 85% of EU financed emissions offset projects under the Kyoto Protocol’s Clean Development Mechanism failed to reduce emissions.<sup>21</sup> In 2011, UBS reported that the first six years and \$287 billion of public subsidies to

industry in the European Emissions Trading Scheme (ETS) had resulted in almost no emissions reductions. Had that public subsidy been invested directly in replacing Europe's most GHG emitting power plants, UBS estimated a 43% reduction in emissions.<sup>22</sup> The 2018 emissions price rebound was largely due to the fourth phase of ETS redesign, which included new rules for the Market Stability Reserve, a supply of emissions allowances for auction.<sup>23</sup>

Environmental market failures add to the global failure<sup>24</sup> to halt the momentum towards an unstable climate that will impose huge costs on market participants. Less obviously, unreliable underlying assets for emissions derivatives trading can pose financial stability risks, if emissions derivatives positions are designated as collateral, e.g., in Collateralized Loan Obligations. Such a use of these positions would be enabled in the International Emissions Trading Association demand that emissions trading positions be unlimited and completely fungible. In the argot of the U.N. Framework Convention on Climate Change (UNFCCC), the trading of "ITMOs [Internationally Transferrable Mitigation Outcomes] would be unlimited for buyers and sellers [no position limits] and "there will be no restriction to the use of ITMOs."<sup>25</sup> The argot euphemistically would allow international offset credits to be the underlying assets for unlimited emissions derivatives trading in U.S. markets and by foreign affiliates of U.S. parent firms.

- The Subcommittee should recommend that the CFTC staff contract climate scientists to evaluate the scientific integrity of emissions offsets projects used as the underlying assets in U.S. environmental markets. The staff should review the accounting standards for such projects in U.S. emissions derivatives trading and cross border trading of emissions derivatives contracts by the subsidiaries of U.S. parent firms and publish their findings.
- The Subcommittee should recommend that the CFTC staff develop a concept note on position limits and aggregation for environmental contracts traded on DCMs and SEFs.

**Appropriate methods by which market participants' data and analyses can enhance and contribute to the assessment of climate-related financial and market risks and their potential impacts on agricultural production, energy, food, insurance, real estate and other financial stability indicators;**

Weather derivatives are used in hedging strategies for agricultural and energy market participants. In agriculture, weather derivatives contracts are designed for the economic and agronomic specifics of each major crop.<sup>26</sup> The underlying asset of weather derivatives are weather indexes that aggregate both catastrophic and non-catastrophic data. CFTC staff have met with market participants about capital and margin requirements for weather related futures, options and swaps contracts,<sup>27</sup> but there is no integration of climate risk into these requirements. Exchanges do not provide data for the Commitment of Traders or Bank Participation reports on position data either for weather derivatives or for indexed weather derivatives products,<sup>28</sup> although these products have been traded for at least 15 years.

- The Subcommittee should recommend that the CFTC survey market participants about their U.S. and cross border use of weather derivatives.
- The Subcommittee should recommend that the CFTC commission a report on the adequacy of weather indexes to incorporate non-linear climate data to design longer term contracts.
- Because weather derivatives are currently unregulated, the Subcommittee should recommend that the CFTC develop a concept note that would include proposals, at a minimum, for weather derivatives data reporting, and margin and capital requirements for market participants trading weather derivatives, including cross hedging.

## Urgency and ambition: lengthening the climate scenario horizon of short-term derivatives trading

At the 25th UNFCCC Conference of the Parties, market participant pledges to produce “net zero” emissions by 2050 were presented as signaling ambition and urgency. Frédéric Hache, a former investment banker, said of these pledges, “Everybody talks about ambition but nobody questions the how. The how is at least as important, because that’s where all the greenwashing takes place.”<sup>29</sup> The CFTC must critically examine the “how” of derivatives product design and trading to reach “net zero” and not become an enabler of greenwashing. Otherwise, derivatives trading could exacerbate climate instability and financial instability.

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<sup>1</sup> <https://www.cftc.gov/sites/default/files/2020/04/2020-07860a.pdf>

<sup>2</sup> <https://www.iatp.org/sites/default/files/2019-06/Letter%20to%20the%20CFTC%20on%20Climate%20Financial%20Risk.pdf>

<sup>3</sup> <https://www.desmogblog.com/global-warming-denier-database>

<sup>4</sup> <https://nca2018.globalchange.gov/>

<sup>5</sup> <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2018EF000922>

<sup>6</sup> <https://www.americanprogress.org/issues/economy/reports/2019/11/21/477190/climate-change-threatens-stability-financial-system/>

<sup>7</sup> <https://voxeu.org/article/why-are-economists-letting-down-world-climate-change>

<sup>8</sup> <https://www.reuters.com/article/us-greenbonds-issuance/green-bond-issuance-hit-record-255-billion-last-year-research-shows-idUSKBN1ZF1GD>

<sup>9</sup> <https://positivemoney.org/2019/09/securitisation-is-back-and-green-finance-must-stray-far-away/>

<sup>10</sup> <https://www.bloomberg.com/professional/blog/green-bonds-green-green/>

<sup>11</sup> <https://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1590&context=sdlp>

<sup>12</sup> <https://frankackerman.com/worst-case-economics/>

<sup>13</sup> <http://www.levyinstitute.org/publications/29000000000000-a-detailed-look-at-the-feds-bailout-by-funding-facility-and-recipient>

<sup>14</sup> <http://climatechangereconsidered.org/wp-content/uploads/2018/12/8-Cost-Benefit-Analysis-final.pdf> at 674.

<sup>15</sup> <https://www.cdp.net/en/research/global-reports/global-climate-change-report-2018>

<sup>16</sup> <https://www.iigcc.org/download/navigating-climate-scenario-analysis-a-guide-for-institutional-investors/?wpdmdl=1837&refresh=5e9f80ca13ae01587511498>

<sup>17</sup> Woodall, “What makes a climate risk appetite?” *Climate Risk Review*, March 30, 2019.

<sup>18</sup> <https://www.unpri.org/pri-blog/assessing-climate-risks-in-investors-portfolios-a-journey-through-climate-stress-testing/5526.article>

<sup>19</sup> <https://law.lclark.edu/live/files/26719-48-3bishop>

<sup>20</sup> E.g. <https://wattsupwiththat.com/2015/07/09/interpol-report-shows-five-criminal-activities-in-carbon-trading-markets/>

<sup>21</sup> [https://ec.europa.eu/clima/sites/clima/files/ets/docs/clean\\_dev\\_mechanism\\_en.pdf](https://ec.europa.eu/clima/sites/clima/files/ets/docs/clean_dev_mechanism_en.pdf)

<sup>22</sup> <https://www.thegwpc.com/europes-287-billion-carbon-waste-ubs-report/>

<sup>23</sup> <https://www.ft.com/content/6e60b6ec-b10b-11e8-99ca-68cf89602132>

<sup>24</sup> <https://www.ft.com/content/30d2692a-0faa-11ea-a225-db2f231cfeae>

<sup>25</sup> <https://law.lclark.edu/live/files/26719-48-3bishop> at 5.

<sup>26</sup> [https://www.researchgate.net/publication/283614895\\_Effectiveness\\_of\\_weather\\_derivatives\\_as\\_a\\_hedge\\_against\\_weather\\_risk\\_in\\_agriculture](https://www.researchgate.net/publication/283614895_Effectiveness_of_weather_derivatives_as_a_hedge_against_weather_risk_in_agriculture)

<sup>27</sup> E.g. [https://www.cftc.gov/LawRegulation/DoddFrankAct/ExternalMeetings/dfmeeting\\_012612\\_489](https://www.cftc.gov/LawRegulation/DoddFrankAct/ExternalMeetings/dfmeeting_012612_489)

<sup>28</sup> E.g. <https://www.cmegroup.com/trading/weather/>

<sup>29</sup> Cited in <https://www.propublica.org/article/offsets-un-climate-action-summit-the-word-nobody-wanted-to-say>