June 17, 2022

Vanessa A. Countryman
Secretary
Securities and Exchange Commission
100 F Street NE
Washington, DC 20549-1090

Re: The Enhancement and Standardization of Climate-Related Disclosures for Investors
[File No. S7-10-2; Release No. 33-11042; RIN 3235-AM87]

Dear Ms. Countryman:

Thank you for the opportunity to comment on the Commission's proposed rule, "The Enhancement and Standardization of Climate-Related Disclosures for Investors."[1] Unfortunately, the concerns I raised in the Commission's initial request for comment on March 15, 2021 have not been alleviated.[2] There is much that could be said on the details of the Commission's proposed rule, however I will briefly state some general concerns with the proposed rule.

The Commission's prescriptive approach for additional disclosure requirements of financial impacts of climate change necessitates that the Commission have relevant expertise in the climate policy frameworks and metrics used, why they were chosen, and how these (as opposed to any number of others or any at all) relate useful information to potential investors. Additionally, the Commission must have relevant climate expertise to evaluate the sufficiency of information provided by individual filers if the regulatory standards are to be enforced in any comparable, reliable, and consistent manner that is neither arbitrary nor capricious. This requires expertise in climate models, climate scenarios, and risk analysis, which each entail a vast number of assumptions and about economic growth, energy production and consumption, and technological change in this country and globally.

That the Commission is not equipped to do this and lacks this expertise is apparent - a statement I submit humbly, acknowledging that I am not a world-renowned scientist in a climate-relevant discipline and lack expertise in, for example, securities law and regulation. It must be said, though, because the Commission must have this expertise if it is to finalize, implement, and enforce a rule of the scope and specificity it has attempted here. Instead, problems are apparent. Here are just three examples:

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[1] "The Enhancement and Standardization of Climate-Related Disclosures for Investors," Securities and Exchange Commission, Proposed Rule, *Federal Register*, Vol. 87, No. 69, April 11, 2022, pp. 21334-21473 https://www.govinfo.gov/content/pkg/FR-2022-04-11/pdf/2022-06342.pdf. All references throughout this comment letter are to the SEC version of the proposing release, March 21, 2022 https://www.sec.gov/rules/proposed/2022/33-11042.pdf.

[2] Comment submitted by Katie Tubb to the Securities and Exchange Commission, "Notice on Public Input Welcomed on Climate Change Disclosures," March 15, 2021, submitted June 11, 2021, https://www.sec.gov/comments/climate-disclosure/cll12-8907322-244259.pdf.

1. The first climate-related data the Commission's proposed rule sites (footnote 10) does not support the Commission's reasoning for requiring additional climate disclosure. The proposed rule notes "that the impact of climate-related risks on both individual businesses and the financial system as a whole are well documented."[3] It continues by citing data from the National Oceanic and Atmospheric Administration as evidence that "In 2020 alone, a record 22 separate climate-related disasters with at least $1 billion in damages struck across the United States, surpassing the previous annual highs of 16 such events set in 2011 and 2017." Weather events have always impacted individual businesses and communities. However, the proposed rule argues a need for additional climate disclosure requirements because such risk is more costly than ever before.

This is a misuse of data, telling an incomplete story. Property damage from weather disasters has indeed increased in the U.S. However, this does not tell us whether climate change is getting worse or weather events are becoming more risky, but rather that there are more people, who are building more valuable real estate, and filling it with more valuable things as the economy grows. When accounting for this growth as recommended by the U.N. to reflect an accurate picture of progress (or lack thereof),[4] disaster losses in both the U.S. and globally have been *decreasing*.[5] This is a far cry from risk to the entire financial system that the Commission claims to be concerned about and is trying to hedge against with purportedly more accurate disclosure requirements.[6]

2. In expounding on alleged overwhelming demand from investors for additional disclosure of climate related information, the proposed rule cites a Swiss Re Institute study on the economics of climate change.[7] The argument appears to be that the alleged demand is reasonable to respond to in light of this study, in which the Swiss Re Institute "estimated how global warming could affect 48 countries – representing 90% of the world economy – and found that the decrease in GDP in North America could range from – 3.1% if Paris Agreement targets are met (a well-below 2°C increase), to – 9.5% if no mitigating actions are taken (3.2°C increase)."

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[3] Proposed Rule, p. 10.

[4] See Goal 11.5. "Transforming Our World: The 2030 Agenda for Sustainable Development," United Nations, A/RES/70/1, 2015, https://sdgs.un.org/sites/default/files/publications/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf.

[5] Bjorn Lomborg, "Welfare in the 21st Century: Increasing Development, Reducing Inequality, the Impact of Climate Change, and the Cost of Climate Policies," *Technological Forecasting and Social Change,* Vol. 156, July 2020, https://doi.org/10.1016/j.techfore.2020.119981. Roger Pielke, Jr., "U.S. Disaster Costs 1990 to 2019," The Honest Broker, February 2, 2022, https://rogerpielkejr.substack.com/p/us-disaster-costs-1990-to-2019. Roger Pielke, Jr. "Tracking Progress on the Economic Costs of Disasters under the Indicators of the Sustainable Development Goals," *Environmental Hazards,* Vol 1 Is. 8, October 27, 2018, https://doi.org/10.1080/17477891.2018.1540343.

[6] Unfortunately, the Commission's proposed rule is not the only financial entity to make similar mistakes in misusing climate information in financial contexts. See the discussion on former Bank of England Governor Mark Carney's misuse of flood data and forecasting: Steven E. Koonin, *Unsettled,* (BenBella Books: Dallas), 2021, pp. 145-146.

[7] See footnote 790. Proposed Rule, p. 319.

Upon further investigation, the study relies on emissions scenario Representative Concentration Pathway 8.5 (RCP8.5, or SSP5-8.5) to project an upper bound of economic costs, which it describes as a "business as usual" scenario. Yet the Intergovernmental Panel on Climate Change no longer considers RCP8.5 the most likely reference case as it did in the 2014 *Fifth Assessment Report*, but rather of low likelihood according to Working Group I's contribution ("Climate Change 2021: The Physical Science Basis") for the upcoming *Sixth Assessment Report.*

And for good reason. RCP8.5 is the most extreme emissions scenario, assuming high emissions growth (an assumption which has already diverged from historical data as an overestimation), massive population growth, minimal technological progress, low economic growth, and a sixfold increase in global *per capita* coal consumption by 2100 that far exceeds the International Energy Agency's projections (an assumption which also has already diverged from historical data as an overestimation).[8] This would be more coal than has been used globally since 1870. It is hard to see how this is a scenario that describes "business as usual."

Is the SEC prepared to evaluate and judge which climate scenarios as used by reporting companies and/or their consultants are material and useful for potential investors? These scenarios project drastically different climate, energy, and economic impacts. Yet these are the kinds of decisions the Commission must be able to make if the proposed rule is to be "consistent, comparable, and reliable."

3. That the Commission proposes to mandate disclosure of Scope 1 emissions from individual companies (let alone Scope 2 and Scope 3 as well) is utterly irrelevant to climate risk, as experienced locally by the individual company or globally. This is so, regardless of one's opinion about the degree of severity of human caused climate change. An individual filing company's greenhouse gas emissions are infinitesimally small, having no significant or detectable impact on global temperatures or regional weather events. Assuming the U.S. could eliminate *all* greenhouse gas emissions immediately and not just those from public companies, this would mitigate global temperatures by less than 0.2 degrees Celsius by 2100.[9] Additionally, as noted in my previous comment, even climate models (in which greenhouse gas emissions are but one component) cannot be used as reliable regional forecasters.[10]

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[8] Roger Pielke, Jr. and Jason Ritchie, "How Climate Scenarios Lost Touch With Reality," *Issues in Science and Technology*, Vol. 37 (No. 4), Summer 2021, https://issues.org/climate-change-scenarios-lost-touch-reality-pielke-ritchie/. Matthew Burgess, Justin Ritchie, John Shapland, and Roger Pielke, Jr. "IPCC Baseline Scenarios Have Over-Projected CO2 Emissions and Economic Growth," *Environmental Research Letters*, December 23, 2020, https://iopscience.iop.org/article/10.1088/1748-9326/abcdd2/pdf. Larry Kummer, "A Closer Look at Scenario RCP8.5," Climate Etc., December 13, 2015, https://judithcurry.com/2015/12/13/a-closer-look-at-scenario-rcp8-5/.

[9] Kevin Dayaratna, Katie Tubb, and David Kreutzer, "The Unsustainable Costs of President Biden's Climate Agenda," The Heritage Foundation, *Backgrounder* No. 3713, June 16, 2022, https://www.heritage.org/sites/default/files/2022-06/BG3713_0.pdf.

[10] "The IPCC has noted some of the problems with CMIP5, such that it "cannot be taken as a reliability regional probability forecast." The models in CMIP6 appear not to have reduced uncertainty across models, but rather increased it even as models have become more sophisticated." Tubb comment to the SEC, June 11, 2021.

In other words, an individual company's greenhouse gas emissions is a number without meaning or context, and is trivial information in the context of trying to assess "climate risk" - telling an investor nothing about the financial value of a company.

It may be useful to consider the experiences of two other independent agencies which arguably have a clearer connection (at least, relative to the SEC) to climate policy – the Council on Environmental Quality (CEQ) and the Federal Energy Regulatory Commission (FERC). For years, the CEQ attempted to rationalize guidance requiring permitting agencies to review and/or require mitigation of greenhouse gas emissions from project applicants needing review under the National Environmental Policy Act. In short, CEQ could not conclude that any amount of emissions from a single project would have measurable effects on global temperatures. A worthwhile review of that regulatory history can be found in a public comment submitted to FERC earlier this year.[11]

It is worth noting the context of this particular comment because the issue on which FERC was deliberating was whether (and how) to establish a threshold of greenhouse gas emissions over which a project would be required to meet additional environmental review. FERC issued a policy statement establishing such a threshold, only to retract it less than a month later so as to "benefit from further clarification."[12] If greenhouse gas emissions data from an individual project cannot tell an *environmental* or an *energy* regulator anything significant about climate risk or impact, there is little reason to conclude it will tell the SEC or a potential investor anything significant.

Instead of providing clarity, what the SEC proposes will be a huge undertaking[13] for any company with all but guaranteed certainty of miscalculation and will generate vast amounts of meaningless information for investors trying to assess a company's climate risk. One conceivable exception is a company whose business falls under an existing (not hypothetical, possible, "someday maybe") tax or tariff on greenhouse gas emissions at the state or federal levels. However, this is not a generally applicable condition relevant to all public companies. Congress has declined multiple times to implement a carbon tax, carbon border adjustment, or similar tool such that the greenhouse gas emissions of every public company would be relevant to the Commission.

This myopic focus on greenhouse gas emissions will almost certainly have unintended consequences elsewhere, namely massive financial and human capital burdens diverted

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[11] Comment submitted by Patrick Michaels, Kevin Dayaratna, and Marlo Lewis, Federal Energy Regulatory Commission, Notice Inviting Technical Conference Comments, 86 FR 66293, November 22, 2021, pp. 3-7, https://cei.org/wp-content/uploads/2022/01/CEI-Comments-Michaels-Dayaratna-Lewis-Docket-No.-PL21-3-000-FINAL.pdf.

[12] Federal Energy Regulatory Commission, "FERC Updates Policies to Guide Natural Gas Project Certifications," February 17, 2022, https://www.ferc.gov/news-events/news/ferc-updates-policies-guide-natural-gas-project-certifications. Miranda Willson, "FERC Retreats on Gas Policies as Chair Pursues Clarity," *EnergyWire*, March 25, 2022, https://www.eenews.net/articles/ferc-retreats-on-gas-policies-as-chair-pursues-clarity/.

[13] This author considers the implications of data collection for just one product, Cocoa Puffs, of a single company: Vince Bielski, "The Green U.S. Supply-Chain Rules Set to Unspool and Rattle the Global Economy," Real Clear Investigations, April 7, 2022, https://www.realclearinvestigations.com/articles/2022/04/07/the_green_supply-chain_rules_set_to_unspool_and_rattle_the_economy_825567.html.

by filing companies and the companies entailed in their supply chains[14] and litigation risk. The Commission would be doing exploratory work for activists rather than useful information for investors. It is not the task of the SEC to require, collect, evaluate additional climate information of any sort, but that which is financially relevant to a potential investor.

Because the Commission lacks relevant expertise, it is forced to rely on third parties to inform its reasons for additional regulation and selection of standards in the proposed rule. In some cases, choices seem to be based on what appears to have won international "popularity contests" of acceptance.[15] But reliance on third parties is deeply problematic. In many cases, these are not neutral entities but self-interested parties who stand to gain significant economic benefit from the proposed rule if finalized.[16]

A final point must be made questioning the wisdom of moving forward as the Commission proposes. While the proposed rule encourages and even presumes a number of times that a radical energy transition away from conventional energy (coal, oil, and natural gas) is certain, this is far from clear and already the proposed rule has not aged well.

Conventional, carbon-intensive fuels meet over 90 percent of Americans' transportation fuel needs,[17] 79 percent of Americans' total energy needs,[18] 83 percent of global energy needs.[19] Conventional energy's share of total energy consumption has remained roughly unchanged for decades, even as global consumption of energy has increased and renewable energy technologies

[14] It is not hard to imagine some of the unintended consequences Scope 3 emissions reporting may have on small businesses in the supply chains of larger public companies. One could imagine a situation where a large public company decides to discontinue contracts with small businesses that are unable to supply them with emissions data needed to report Scope 3 emissions. The Commission seems to know this is a possible outcome given its condescending suggestion that "a registrant could seek to reduce the potential impacts on its business of its upstream emissions by choosing to purchase from more GHG emission-efficient suppliers or by working with existing suppliers to reduce emissions." Proposed Rule, p. 161.

[15] For example, in choosing the TCFD disclosure framework rather than one of the several other frameworks the proposed rule acknowledges.

[16] Government Accountability and Oversight, "Disclosing the Real "Climate Risk" - Case Study: UK "ESG" Billionaire Behind U.S. Climate Regulatory, Litigation Campaigns," June 2022, https://govoversight.org/wp-content/uploads/2022/06/Hohn-TCI-CIFF-Paper.pdf. Relatedly, there are questionable and concerning connections between Michael Bloomberg's current position as President Biden's U.N. Special Envoy for Climate Ambition and Global Ambassador for Race to Zero Campaign, Bloomberg LP's role in developing the TCFD framework, and how this particular company would stand to benefit economically from the SEC's choice in climate disclosure frameworks. "Deciphering the Task Force on Climate-related Financial Disclosures (TCFD)," Bloomberg Professional Services, May 2, 2018, https://www.bloomberg.com/professional/blog/deciphering-task-force-climate-related-financial-disclosures-tcfd/.

[17] U.S. Energy Information Administration, "U.S. Energy Consumption by Source and Sector, 2020," https://www.eia.gov/totalenergy/data/monthly/pdf/flow/total_energy_2020.pdf.

[18] U.S. Energy Information Administration, "U.S. Energy Facts Explained—Consumption & Production," last updated May 14, 2021, https://www.eia.gov/energyexplained/us-energy-facts/, and U.S. Energy Information Administration, Monthly Energy Review, January 2022, Table 1.3, https://www.eia.gov/totalenergy/data/monthly/pdf/sec1_7.pdf.

[19] BP, "Statistical Review of World Energy," 70th edition, July 2021, https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf.

have entered energy markets.[20] The U.S. Energy Information Administration's *International Energy Outlook* projects global energy use to increase by 50 percent by 2050, and projects no scenario in which global demand for oil and natural gas do not increase through at least 2050.[21] Thousands of products are made with oil, coal, and natural gas as feedstocks.

Despite the aspirational policies and regulations attempting to define a transition away from conventional fuels, actions speak louder than words. Countries and businesses are showing every day that they are more interested in affordable energy and products than in paying a green premium (again calling into question the purported overwhelming demand from investors for the information the Commission is proposing to collect). This is proving particularly true in light of the energy price crisis, whether considering China's interest in buying Russian oil, climate warrior Germany's decision to hold onto coal, or the choices of individual companies looking to keep costs low for customers in the face of rampant inflation.[22] The Commission should not aid a policy "gamble"[23] and therefore raise the stakes of failure.

Even so, it is not appropriate or reasonable for the Commission to require companies to guess at the future and be held liable for it. Anyone – a filing company or consultants on whom they rely to comply with the Commission's rule should it be finalized - who purports to have knowledge of the "changing demands of business partners; long-term shifts in market prices; technological challenges and opportunities, and other transitional impacts"[24] for an individual filing company is either misleading, over confident about human abilities to forecast the future, or woefully self-deceived. Could the SEC of 1934 reasonably have asked radio companies to anticipate the technological innovations of the internet and personal computers a mere six decades later?

Or looking to more recent history, almost no one (including the U.S. Energy Information Administration) anticipated the major oil and gas boom that began in the late 2000s with the onset of affordable directional drilling and hydraulic fracturing (a technology which had been in existence for decades already). Yet this innovation turned the U.S. from projections of energy

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[20] Hannah Ritchie and Max Roser, "Energy Production and Consumption," Our World in Data, 2020, https://ourworldindata.org/energy-production-consumption.

[21] U.S. Energy Information Administration, "International Energy Outlook 2021," October 2021, https://www.eia.gov/outlooks/ieo/pdf/IEO2021_Narrative.pdf.

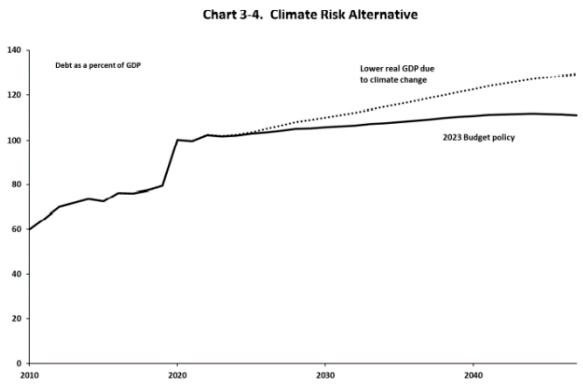
[22] Huileng Tan, "China and India Now Account for About 50% of Russia's Seaborne Oil Exports, as Asian Demand Props Up Moscow's Energy Revenues," Market Insider, June 14, 2022, https://markets.businessinsider.com/news/commodities/china-india-half-russia-crude-oil-exports-sanctions-2022-6. Madeleine Bruder, "EU Accepts It Will Burn More Coal in Move Away from Russian Gas," *Financial Times*, May 18, 2022, https://www.ft.com/content/5d95b294-280f-4b38-9d23-70035e077392. Anmar Frangoul, "Volkswagen is Prolonging Its Use of Coal Due to Russian Energy 'Threat,'" CNBC, May 4, 2022, https://www.cnbc.com/2022/05/04/volkswagen-to-prolong-coal-fired-power-as-russia-concerns-continue.html. Andy Beill, "Talking Point: Are You More Concerned with the Rising Cost of Living than Climate Change?" Evening Standard, May 18, 2022, https://www.standard.co.uk/comment/comment/millennials-genz-concerned-rising-cost-living-climate-change-talking-point-b1000861.html.

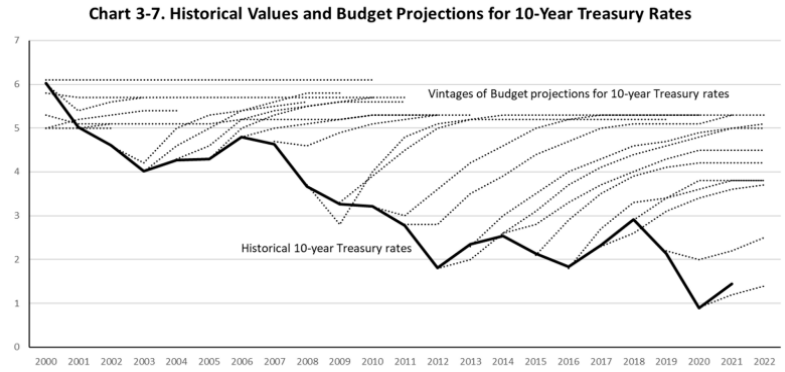
[23] Quoting FERC Commissioner Mark Christie on the implications for electric grid reliability. Katie Tubb, "Fueling the Climate Crisis: Examining Big Oil's Climate Pledges," testimony before the Committee on Oversight and Reform, U.S. House of Representatives, February 8, 2022, https://oversight.house.gov/sites/democrats.oversight.house.gov/files/Tubb%20Testimony.pdf.

[24] Proposed Rule pp. 55-56.

shortages and high imports to becoming a major global energy producer in less than a decade.[25] One wonders how companies using and supplying hydraulic fracking services would have fared if this proposed rule – and the litigation of public companies which it invites – had been finalized in the early 2000s. Would the technology have ever achieved economic viability?[26] The question is worth noting because hydraulic fracking is what unlocked affordable access to vast natural gas supplies in the U.S. and consequently a major contributing reason for national greenhouse gas emissions reductions in the last decade.[27]

Even so, the U.S. government likely would not fare any better against such a standard if taxpayers were to hold it liable. The Office of Management and Budget (OMB) unwittingly advised humility when making projections about the future in President Biden's proposed budget for fiscal year 2023. For the first time, the OMB included the federal government's climate-related fiscal risk assumptions and exposure into its long-term budget outlook.[28] The chapter also includes a chart (Chart 3-7) showing historical interest rate projections compared to historical data, unintentionally showing the danger of having too much confidence in the limited abilities of people, and even the U.S. government, of predicting the future.





[25] U.S. Energy Information Administration, "United States Continued to Lead Global Petroleum and Natural Gas Production in 2020," *Today In Energy*, July 19, 2021, https://www.eia.gov/todayinenergy/detail.php?id=48756.
[26] George Mitchell is credited with developing the affordable hydraulic fracturing and direction drilling technology which instigated an energy boom in the United States in the late 2000s that continues to this day. Mitchell Energy and Development Company is a public company. "Mitchell Energy and Development Corporation," Company-Histories.com, https://www.company-histories.com/Mitchell-Energy-and-Development-Corporation-Company-History.html.
[27] U.S. Energy Information Administration, "U.S. Energy-Related Carbon Dioxide Emissions Fell in 2019, Mainly in Electric Generation," *Today In Energy*, November 10, 2020, https://www.eia.gov/todayinenergy/detail.php?id=45836. U.S. Energy Information Administration, "Carbon Dioxide Emissions from the U.S. Power Sector have Declined 28% Since 2005," *Today In Energy*, December 21, 2018, https://www.eia.gov/todayinenergy/detail.php?id=37816
[28] Thanks to David Kreutzer for finding this example. Office of Management and Budget, *Budet of the U.S. Government: Fiscal Year 2023*," Analytical Perspectives: Long-Term Budget Outlook, pp. 34, 36, https://www.whitehouse.gov/wp-content/uploads/2022/04/ap_3_long_term_fy2023.pdf. Candace Vahlsing, "Quantifying Risks to the Federal Budget from Climate Change," The White House, April 4, 2022, https://www.whitehouse.gov/omb/briefing-room/2022/04/04/quantifying-risks-to-the-federal-budget-from-climate-change/.

Arguably, projecting federal budgets in ten-year time windows is a more developed and understood "science" than is climate science in its current state and climate related modeling over the next 100, 200, or 300 years. To require public companies to report transition or climate risk in the near-, mid-, or long-term is to require what even the U.S. government cannot do for one of its chief functions (budgeting), and it to mislead (rather than provide certainty).

"We all want progress," C.S. Lewis once wrote, "but if you're on the wrong road, progress means doing an about-turn and walking back to the right road; in that case, the man who turns back soonest is the most progressive."[29] This proposed rule, if finalized in anything near its current state, will contribute significantly to the degradation of human well-being in the United States. I urge the Commission to do an about-turn at the soonest.

Sincerely,

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[29] C.S. Lewis, *Mere Christianity, Unsettled*, (Macmillan Publishing Company: New York), 1952, p. 36.