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Sustainable Finance Initiative

June 16, 2022

Vanessa A. Countryman, Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549-1090
(duplicate via e-mail to:
rule-comments@sec.gov)

Re: File Number S7-10-22
The Enhancement and Standardization of
Climate-Related Disclosures for Investors

Dear Madame Secretary:

As members of Stanford University's sustainable finance research community,¹ we write in support of the Commission requiring standardized climate-related disclosures for investors. Collectively, we have decades of experience advising Finance Ministers, Governors, Chief Investment Officers, and executives in the asset management industry about climate risk and carbon accounting standards. Our recent book, [*Settling Climate Accounts: Navigating the Road to Net Zero*](#) investigates the rough edges of carbon accounting in practice and makes suggestions for the road ahead. In this letter, we provide recommendations and comments for the Commission's consideration.

¹ Alicia Seiger is the Managing Director of the Sustainable Finance Initiative at Stanford University and a Lecturer at Stanford Law School. In 2021, Alicia Co-Chaired the California Climate-related Risk Disclosure Advisory Group for the Governor of California and in 2018 Alicia served on the nation's first ever Decarbonization Advisory Panel for the New York State Common Retirement Fund. Alicia has testified before Congress on climate risk disclosures.

Marc Roston is a Research Fellow at the Steyer-Taylor Center for Energy Policy and Finance, a joint initiative of Stanford Law and Business School. Marc is a contributing author to *Settling Climate Accounts* and has spent more than 25 years in the asset management industry as a senior investment professional across a diverse range of investment activities with particular emphasis on hedge funds, private equity, and insurance related investments.

Thomas Heller, is the Charles and Nadine Shelton Professor of International Legal Studies (emeritus) at Stanford Law School and directs sustainable finance initiatives at Stanford law and business schools and the Precourt Energy Institute. He co-edited "Settling Climate Accounts" and serves as senior director at Willis Towers Watson. In 2009 Heller founded the Climate Policy Initiative. His research has focused on risk analytics, global energy use, international climate regimes, public finance and taxation, international technology investment, and the rule of law—with particular attention to legal and economic structures in the developing world. Professor Heller has worked with the Intergovernmental Panel on Climate Change (1995-2003), and has served as Jean Monnet Visiting Professor at the European University Institute, Deputy Director and Senior Fellow of the Freeman Spogli Institute for International Studies at Stanford University, and Senior Fellow (by courtesy) at the Woods Institute for the Environment.

Executive Summary

Investors need more consistent, comparable, and reliable climate-related information to make good decisions in a changing climate. Central bankers and regulators similarly need higher quality data to understand and monitor potential risks to financial market stability. We strongly support the Commission finalizing a durable climate disclosure rule that will integrate with widely adopted global frameworks and standards including the Task Force on Climate-Related Financial Disclosure (TCFD) and the International Sustainability Standards Board (ISSB.)

Beyond a rule that is compatible with TCFD and ISSB frameworks, we support requirements that issuers furnish information about Scope 1 and Scope 2 emissions, physical risk impacts, and transition plans including capital expenditures and the use of internal carbon pricing. We are concerned about Scope 3 as a mechanism for accurate carbon accounting. We believe that Scope 3 disclosure should remain voluntary. We argue that improvements to Scope 2 accounting and the development of a proper carbon accounting system will propagate information through the financial system more efficiently and effectively than chasing Scope 3 data.

Why We Support Climate-Related Disclosures for Investors

Well-established disclosure rules governing financial matters help investors manage risk and reduce uncertainty by carefully defining revenues, expenses, profits, and losses. More recent additions serve to ensure that all investors have equal access to information in support of fair markets.² Climate change presents new and unique challenges to financial markets but disclosure of climate-related information currently operates outside the well-established guardrails of standardized reporting.³

To make informed decisions in a changing climate, investors need information about two linked systems – climate impacts and human behavior. Climate impacts create measurable risks that follow from relatively accurate forecasts for near-term potential harms to physical systems, where “near-term” maps to a scale at which financial markets operate.⁴ For example, risks of flooding, hurricanes, and wildfire have been reasonably well-modeled on the time horizon of manageable or forecastable financial market risk. This statement does not deny that significant uncertainty remains about the longer-term physical risks of climate change, for example if continued emissions may drive ecosystems over tipping points. Similarly, human collective action (or rather, inaction) will likely worsen physical risk medium- and long-term.

Human decision-making in response to present-day and anticipated physical risk underlies transition uncertainty. The extreme difficulty of modeling human behavior, whether tactical or strategic, altruistic or self-interested, regional or global, leaves investors with a chasm of uncertainty. At what point might global insurers and reinsurers declare risk cannot be transferred? When might lenders refuse to accept certain assets as collateral? When might governments take meaningful action in response to known physical risks that will impact financial markets?

Many economists and financial market participants argue that a range of political or seemingly “non-financial” events could disrupt financial markets yet do not merit the Commissions’ action (i.e., particular war scenarios, the next pandemic, etc.)⁵ However, none of those triggering events are inevitable. Climate physical risk is. Investors demand and issuers supply climate related information because *transition*

² [SEC Regulation FD](#)

³ Seiger, Alicia, “[Examining the Macroeconomic Impacts of a Changing Climate](#),” Congressional Testimony, September 11, 2019.

⁴ IPCC Special Report: Global Warming of 1.5C [Summary for Policymakers](#)

⁵ Cochrane, John. Presentation to the [ECB Conference on Monetary Policy: bridging science and practice](#), “Outside the box: a heretical view of stimulative policy, the role of central banks, and monetary-fiscal interactions”, October 19, 2020.

*uncertainty must follow from physical risk.*⁶ As the traffic cop of markets and disclosures, the Commission must ensure fair and consistent data disclosure surrounding physical risks and appropriate discussion of transition uncertainty.

Protecting the Rule

Before we comment on specific elements, we want to stress that the rule, as currently written, is subject to substantial litigation risk. There are ways to significantly reduce that risk to ensure investors will have access to critical climate-related information. We support our Stanford colleague and former Commissioner Joseph Grundfest's recommendation to restructure the proposed quantitative emissions disclosure rules into a stratified format composed of three sets of severable disclosure requirements: (1) mandatory measurement and disclosure rules; (2) information aggregation rules; and (3) voluntary disclosure rules.⁷

Critical Elements of the Proposed Rule

Given the breadth and depth of the proposed rule, we focus our comments on the elements we think are most critical and the elements most likely to result in negative unintended consequences.

A strong rule will build on the TCFD framework and ensure compatibility with the ISSB's effort to deliver global baselines for climate-related disclosure standards. Our analysis finds that transition plans and the use of internal carbon pricing provide decision-useful information for investors. A high-quality transition plan can inform investors about an issuer's strategy for managing risk and opportunity through the energy transition.⁸ An issuer's use of carbon pricing can give investors insight into how firms are valuing tradeoffs between high- and low-carbon investments and how resilient a firm will be to transition shocks.

Investors need information about potential issuer physical risk, whether affecting existing assets, when building new infrastructure, or even potential investments in nature-based or other offsets. Proper management of physical risk will require innovative forms of insurance, the development of which may be accelerated by disclosure.

After offering our support for TCFD and ISSB compatibility, transition plans, carbon pricing, and physical risk data, we want to spend the remainder of our letter cautioning against making Scope 3 disclosures mandatory and highlighting paths to better carbon accounting.

A Summary of Our Analysis on Scope 3 Accounting

- Mandatory Scope 3 emissions disclosure will likely result in several unintended negative consequences including:
 - the diversion of time and resources into compliance activities for a fundamentally flawed system,⁹ and away from investments that result in real emissions reductions¹⁰

⁶ CDP. "[More than 680 financial institutions with US\\$130 trillion in assets call on nearly 10,400 companies to disclose environmental data through CDP](#)," March 14, 2022.

⁷ See SEC comment letter from Joseph Grundfest in reference to File Number S7-10-22.

⁸ A properly functioning carbon accounting system and collaboration with governments will be essential elements for building credible transition plans.

⁹ Kaplan, Robert S., and Karthik Ramanna. "[Accounting for Climate Change](#)" *Harvard Business Review* 99, no. 6 (November–December 2021): 120–131.

¹⁰ Reiners, Lee, and Torrent, Karen. Duke Law Global Financial Markets Center Climate Risk Disclosure Lab. "[The Cost of Climate Disclosure: Three Case Studies on the Cost of Voluntary Climate-Related Disclosure](#)," 2022.

- a reduction in both the quantity and quality of Scope 3 information as a result of gaming¹¹
- fewer issuers making public commitments to emissions reductions because of the associated legal risks
- driving demand for low-cost (and low-quality offsets.)¹²
- Scope 3 emissions are double (triple, quadruple...) counted across the financial system and so one actor's reduction gets counted on multiple ledgers creating a mirage of climate progress.¹³
- The objectives of Scope 3 accounting are better accomplished through other means including disclosures of internal carbon pricing and transition plans, enhancements to Scope 2 accounting methodologies,¹⁴ efficiency standards, first-movers coalitions,¹⁵ advance market commitments,¹⁶ and improvements in country-level accounting for natural carbon stocks.¹⁷
- For these reasons, we argue Scope 3 emissions disclosure should remain voluntary.

Scope 3 Purpose and Promise

The combined efforts by World Resources Institute and World Business Council for Sustainable Development produced the Greenhouse Gas (GHG) Protocol in 2001 as a means to identify risks from then-perceived imminent global action on carbon pricing. Direct emissions (Scope 1) and purchased energy (Scope 2) contributed directly to first order risks via corporate expenses. The GHG Protocol made clear that supply chain emissions, a “nice to have” but non-essential category of emissions, had indirect and unclear risk implications. Importantly, the GHG Protocol made clear: Scope 3 does not aggregate, and it is not a carbon accounting system in the sense that GAAP is an accounting system.

Absent climate policy, Scopes survived—even thrived. Twenty years later, Scopes survive not as a risk measurement tool, but as a complex system of carbon emissions counting that doesn't add up. We might describe three flavors of Scope 3 emissions: upstream, downstream and financed.¹⁸ In an idealized world, by measuring supplier emissions, issuers may seek to influence upstream partners judged short in their own reduction ambitions. By turning attention downstream, advocates argue large sellers hold more power to influence customer choices, and even end-user (household) behavior. Finally, financed emissions might allow climate activists to hold the financial services industry accountable for the emissions of the entire economy via investing and lending.¹⁹

While we commend the good intentions and admirable goals of Scope 3 proponents, hope and promise do not reduce emissions. Reductions literally get lost in translation from carbon *counting* to carbon

¹¹ Ambiguity, counterintuitively, provides an odd feature to current Scope 3 reporting: firms cannot push emissions just beyond their reporting borders. More precise rules would, therefore, be highly gameable, analogous to corporate taxes.

¹² Already voluntary Scope 3 disclosures focus action and expenditures on appealing headlines for purchases of low-cost, poorly designed and long-term ineffective offsets. This well recognized problem has garnered attention of self-governing bodies including the [Voluntary Carbon Markets Integrity Initiative](#) (VCMI) – not to be confused with the [Integrity Council for the Voluntary Carbon Market](#) (ICVCM) - and the [Task Force on Scaling Voluntary Carbon Markets](#) (TSVCM), though [conflict](#) and [confusion](#) abound. Quality issuers also exist for [zeroing out Scope 2 emissions](#) though as discussed later in this letter, there are better solutions to Scope 2 accounting that can enhance the efficacy and productivity of Scope 2 “offsets.”

¹³ Liebreich, Michael. “[Climate and Finance – Lessons from a Time Machine](#),” March 3, 2021.

¹⁴ Seiger, Roston, Heller; “[How the SEC's rules will - and won't - solve climate change](#),” Impact Alpha; March 22, 2022.

¹⁵ [First Movers Coalition](#).

¹⁶ Athey, Glennerster, Ransohoff & Snyder. “[Advanced Market Commitments Worked For Vaccines. They Could Work for Carbon Removal as Well](#),” Politico Opinion, December 22, 2021.

¹⁷ Heller, Seiger, Bernasconi, Chapter 7: A Natural Approach to Net Zero, *Setting Climate Accounts: Navigating the Road to Net Zero*; Palgrave 2021.

¹⁸ Even this simplified description sounds better than reality. Many companies may have overlaps in their upstream and downstream. Banks may finance their suppliers and customers.

¹⁹ Financed emissions are gaining attention, driven by pressures from the divestment movement and Net Zero pledges.

accounting. For example, even well-intended issuers have a difficult time calculating upstream Scope 3 emissions with confidence. Companies struggle with data availability and in many cases use industry averages. Industry averages short-change innovators by rewarding laggards, and discourage laggard reporting because they benefit from industry averages.²⁰ Downstream emissions fall largely outside the control of issuers and may run counter to other governance obligations. Supply chain emissions are more effectively managed through carbon pricing,²¹ efficiency standards, and mandates.

Calculating financed emissions and translating those values into emissions reduction might be the most costly and detached mode of action. Data collection carries huge cost, with little connection between financed emissions and issuer risk. Successfully pressuring investors to reduce high-emissions financing activity will not materially raise the cost of capital to heavy emitters let alone halt emissions.²² Furthermore, such pressure not only does not ensure a smooth transition to carbon free infrastructure, it may work against it.²³ Our surveys of the application of Scope 3 category 15 attribution by financial institutions in practice have revealed intractable challenges. For example, after setting absolute emissions targets for Oil and Gas sector lending, and tracking them over a period that included COVID-induced disruptions of 2020, emissions attributable to lenders spiked even as actual emissions of clients were decreasing.²⁴

Scope 3 Questions and Answers

Despite these known challenges, many advocates have trouble letting go of the promise that mandatory Scope 3 emissions reporting will reduce risk for investors and the financial system. The following question and answer section addresses some of the long-held beliefs about Scope 3 disclosure.

Q: Studies estimate that Scope 3 amounts to 60 - 90% of most companies' carbon emissions, isn't Scope 3 too big to ignore?

A: First, all Scope 3 emissions are *someone's* Scope 1 and Scope 2. We have more accurate and reliable measures of those emissions. Second, Scope 3 boundaries determine the percentage, not companies' actions. Depending on where we draw boundaries, many companies ought to exceed 90% in their Scope 3. Here, the 80-20 rule applies: Most of what investors need to understand about the risks of an issuers' Scope 3 emissions is already known; figuring out the last 20% is costly and still largely unknowable (i.e. investors already know traditional energy and transportation companies have enormous Scope 3 footprints, the exact number is neither particularly helpful nor is it exactly knowable.) Understanding an issuer's views on internal carbon price and transition plan, including capital expenditures, will tell an investor much more about an issuers' risk than a Scope 3 calculation. Moreover, that information will be much less costly to acquire, freeing up resources to invest in real emissions reductions.

²⁰ Ballard, Ed., "[Scope 3 Rules Hinder Progress on Emissions, Researchers Say](#)" Wall Street Journal, April 14, 2022.

²¹ We use carbon pricing in the broadest sense. A globally uniform carbon price set at our best guess at the social cost of carbon, while ideal, appears politically infeasible. However, firms might influence their supply chains by committing to an internal carbon price.

²² Beck, Jonathan and van Binsbergen, Jules H. "[The Impact of Impact Investing](#)," Working Paper, Stanford Graduate School of Business.

²³ Heller, Seiger, et. al; Chapter 10, *Setting Climate Accounts: Navigating the Road to Net Zero*; Palgrave 2021. See also: Seiger, et al; Afterword in "[Developing Climate Risk Disclosure Practices for the State of California](#)," September 2021.

²⁴ Even efforts to address these challenges further highlight the pressure that will be placed on interpretation of Scope 3 inputs which themselves are subject to other industry-specific dynamics (e.g., volatility of valuations in sectors linked to commodity cycles.) It is difficult to see how Scope 3 can carry the weight of the decisions for which it purports to provide useful information.

Q: Scope 3 might be complex and messy now, but won't mandatory Scope 3 accounting improve data quality?

A: There are reasons to believe that the quality of Scope 3 information under current voluntary practices might be better than what would be available under a mandatory regime. Scope 3 is highly gameable. Moving calculations into a compliance function will amplify and accelerate gaming activity. Issuers' legal counsel will work to move as many emissions as possible outside of the bounds of materiality, and accountants will work to shrink Scope 3 ledgers through self-serving counting methodologies. Furthermore, making Scope 3 reporting mandatory will likely slow down efforts by companies to make public reduction commitments or join Net Zero coalitions out of fear of costly compliance or legal liability – further reducing the quantity and quality of Scope 3 data.

Q: Doesn't Scope 3 information help investors make better decisions?

A: Scope 3's value to investors as a proxy for risk management at both the firm-level and the system-level is limited because of gaming, double counting, and risk transfers to the state. Like most ESG data in current practice, Scope 3 information will vary widely by source and will be employed mostly for compliance and marketing (including to align ledgers with normative targets in Net Zero pledges.)²⁵ To make better decisions in a changing climate, investors will find it more useful to analyze information about if and how an issuer: (1) uses internal carbon pricing, (2) is investing in lower carbon strategies, and (3) is protecting its physical property, employees and supply chains from extreme weather.

Scope 2 Extensions and Carbon Accounting

The good news is that there are more effective ways to fulfill Scope 3's promise. We are particularly excited about the prospect of higher frequency Scope 2 accounting. Roughly 75% of global emissions come from direct and purchased electricity, heat, and transportation (i.e., Scope 2.) Current GHG Protocol measures Scope 2 on an annual basis. Higher frequency Scope 2 means accounting for emissions on hour-by-hour or minute-by-minute intervals. By shifting to higher frequency Scope 2 measurement, and expanding RECs to encompass a broad range of time-based energy attribute certificates²⁶, we expect investment would quickly shift to accelerate the transition to zero carbon energy systems. Also, consider that Scope 2 is essentially a carve out of Scope 3. It is a special case of supply chain emissions with identifiable boundaries and paths for action. Scope 2 might then be expanded to solve other material special cases in similar ways in transportation, for example.

High frequency Scope 2 is not a panacea but it could carry a lot of the burden in the wake of the difficult decision to cut the Scope 3 cord. The ultimate goal should be a purpose-built carbon accounting system. Investors need greenhouse gas emissions data to flow through information systems consistently, reliably and comparably, and such that emissions are counted only once. This type of comprehensive and accurate carbon accounting will be central to managing climate risk in financial markets. The GHG Protocol was a useful measurement framework years ago, but it is not an accounting system, nor was it built to be one. An actual accounting system would give investors the ability to evaluate an issuers' carbon balance sheet and carbon flows. Thankfully, researchers have identified a viable path forward.²⁷

²⁵ Net Zero Tracker. "[Net Zero Stock Take 2022](#)," June 2022.

²⁶ Clean Energy Buyers Association, [SEC Comment Letter for Proposed Rule No. S7-10-22](#)

²⁷ Kaplan, Robert S., and Karthik Ramanna. "[Accounting for Climate Change](#)" *Harvard Business Review* 99, no. 6 (November-December 2021): 120-131.

The value the GHG Protocol has been as a framework to motivate spending on climate action. Its problem is the inefficiency and waste of the budgets dedicated to Scope 3 accounts. Higher frequency Scope 2 would expand creditable actions to a wider toolbox of measures that better accelerate the transition of systems. In the meantime, emissions are not going to zero anytime soon. Incentives to drive carbon removal and storage, particularly nature-based solutions, are critical. However, current practice depends far too much on “managing” emissions with purchases of cheap (and low-quality) offsets.²⁸ Scope 3 ledgers are the primary driver behind demand for low-quality offsets. With few exceptions, offsets suffer from fictional permanence, ambiguous property rights, and questionable additionality. While buyers can and should expect the quality of offsets to improve over time,²⁹ none of us can depend on the offset market to resolve these issues at scale, let alone in time to avoid the risks current practice is loading onto the climate system.

Conclusion

For the reasons stated above, we support the Commission requiring disclosures for climate-related information. We strongly encourage the Commission to protect the rule from litigation risk. We support many of the elements of the proposed rule including the disclosure of Scope 1 and Scope 2 emissions, transition plans, carbon pricing, and physical risks. We recommend Scope 3 emissions disclosure remain voluntary. Finally, we support improvements Scope 2 accounting and efforts to construct a proper carbon accounting system – both areas of our research agenda.

Sincerely,

Alicia Seiger
Managing Director, Stanford Sustainable Finance Initiative
Stanford University
Stanford, CA 94305

Marc Roston
Research Fellow, Stanford Steyer-Taylor Center for Energy Policy and Finance
Stanford University
Stanford, CA 94305

Thomas Heller
The Charles and Nadine Shelton Professor of International Legal Studies (emeritus)
Stanford Law School
Stanford, CA 94305

²⁸ Elgin, Ben. “[This Timber Company CEO Sold Millions of Dollars of Useless Carbon Offsets,](#)” Bloomberg, March 17, 2022.