September 12, 2022

Ms. Vanessa A. Countryman,
Secretary U.S. Securities and Exchange Commission
100 F Street, NE
Washington, D.C. 20549-1090

RE: Comment Submission on Securities and Exchange Commission Proposed Rule, File Number S7-10-22: The Enhancement and Standardization of Climate-Related Disclosures for Investors

The Center for Negative Carbon Emissions (CNCE) appreciates the opportunity to provide comments on the Securities and Exchange Commission Proposed Rule to enhance and standardize climate-related disclosures for investors. The CNCE is a research center at Arizona State University focusing on advancing carbon management science, technology, and policy to manage climate change. We hope to bring Chairman Gary Gensler and the Commission valuable context from the perspective of climate science and carbon management.

The IPCC's most recent report makes clear that to limit global warming to the commitments made under the Paris Agreement, world emissions must stay within a finite allowance (i.e., a remaining carbon budget). Operating within this finite allowance means emissions must either halt completely (go to zero) or emissions must be matched by neutralization (a balancing). Purchasing credits that represent emission reduction or avoidance does not neutralize (balance) an emission. The math makes that clear: an emission (1 ton) minus an emission avoided (0 ton) does not equal zero, it equals 1 extra ton. Since tackling the climate change problem requires staying within a finite budget, this extra ton debits from the account. Buyers of such avoidance or reduction credits that then claim to have scrubbed their emission ledger are in fact continuing to contribute to climate change, and thus increasing their (and everyone else's) climate risk. The disclosure of the type of credit purchased would thus be a necessary step to meeting the public and climate-risk disclosure targets explored by the SEC.

While climate-related risk disclosure would in theory increase protection for investors, the approach to risk disclosure using an emission-based life cycle assessment to carbon accounting is inadequate. The idea of tracking carbon through all supply chains to hold myriad businesses accountable for climate change is based on a sub-optimal approach to carbon management. Its history is rooted in an environmental discourse too timid to acknowledge that the release of carbon into the environment must stop completely as previously described. Even if it were possible to equitably assign emissions to the appropriate party, most businesses and end-consumers are in no position to fix the problem.

As we submitted in a letter to the Economist, a much better approach starts from the premise that most of the climate problem, ocean acidification, and carbon eutrophication of the environment is caused by the massive release of excess carbon into the environment. Rather than spending futile efforts in tracing carbon through the supply chains, it would be much more effective to demand that the easily quantifiable extraction of fossil carbon from the ground must be matched immediately by an equal amount of sequestration. If for every ton of carbon coming out of the ground another ton is stored safely and permanently, the extracted carbon is rendered harmless. Rather than pondering over who is responsible for scope three emissions, a much better accounting framework would focus on developing trustworthy certificates of sequestration based on the initial extraction. Ideally the certificates would match the ton of carbon extracted with a ton of carbon permanently sequestered. If the storage mechanism is time limited the storage operator would be responsible for replacing carbon lost from storage. Businesses downstream of the extraction would see the cost of carbon management and thus have an incentive to avoid fossil carbon if they can. This approach avoids the development of a large industry of carbon trackers and a large lobbying industry trying to convince the SEC to shift the burden of carbon management somewhere else in the supply chain.

We are grateful for the leadership of Chairman Gensler and the Commission on this issue and appreciate the opportunity to contribute. Our hope is that, by requiring disclosure from the industries that can act on climate change, through an appropriate carbon accounting framework, the SEC will generate the simplest, most complete, and actionable path towards stopping climate change.

Respectfully,

Dr. Stephanie Arcusa, Dr. Klaus Lackner, Dr. Michael Hanemann, Robert Page, Dr. Matthew Green