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The Goldman School
Berkeley Carbon Trading Project

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Gary Gensler
Chair, U.S. Securities and Exchange Commission
100 F Street, N.E.
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Re: Offset Disclosure Provisions under Proposed Rule on The Enhancement and Standardization of Climate-Related Disclosures for Investors [File No. S7-10-22]

Dear Chair Gensler,

Thank you for the strong proposed rule on the disclosure of carbon offsets and for the opportunity to provide public comment on this rule. I am a research fellow at the University of California Berkeley Goldman School for Public Policy where I direct the Berkeley Carbon Trading Project. I have conducted research on the quality of carbon offsets for two decades.

Summary of recommendations:
I strongly support the disclosure rules for carbon offsets proposed under items 1502, 1504, and 1506. These provisions provide crucial information that investors need to evaluate the risk associated with climate targets that may involve the use of carbon offsets.

In addition, I recommend one change—that the SEC be more specific in its disclosure requirements under 1506(d). Specifically, in addition to a description and location of the projects, I recommend requiring disclosure of the specific registry project IDs, or if those do not exist, sufficient information to identify the specific projects from which offsets are sourced. In the case of pooled credit portfolios, disclosure should identify the pool from which credits are purchased. To support investors in identifying risky activity, disclosure should note if a registrant has purchased offsets from block-chain based technologies like cryptocurrencies.

The quality of carbon offsets on the market today varies considerably across project types and individual projects, and some projects are associated with environmental and social harms. Each offset credit should represent one metric tonne of CO2-equivalent reduced or removed from the atmosphere, but most offset credits likely represent less than this amount, and many don't represent any additional mitigation.

Company reliance on carbon offsets, their procurement strategies, and their purchase choices can pose significant and differential price, reputational, regulatory, and legal risk to investors. The offset disclosure provisions under the proposed SEC climate disclosure rule reasonably require the disclosure of the minimum available information that investors need to assess these risks.

Answers to questions 2, 24, 101, 170, and 173:

In the below, I answer five questions related to offsets. Under question #2, I provide a detailed discussion drawing from published literature on offset quality challenges and the risk those quality challenges pose to investors.

> *2. If adopted, how will investors utilize the disclosures contemplated in this release to assess climate-related risks? How will investors use the information to assess the physical effects and related financial impacts from climate-related events?* ***How will investors use the information to assess risks associated with a transition to a lower carbon economy?***

Any climate target that relies on carbon offsets poses risk to investors due to the generally poor quality of credits on the market, variability in quality across project types and individual projects, and uncertainty in how the market and regulators will respond to offset quality concerns.

Studies have found high rates of over-crediting (or inflated credits) from multiple generations of carbon offset programs—cases where offsets were sold that did not represent any environmental impact or represented significantly less real impact than credited to the project. Studies of the world's largest offset program, the UN's Clean Development Mechanism, found that large portions of credits do not represent real additional emissions reductions.[1] One overarching study estimates that the environmental quality of 85 percent of the program's projects are unlikely to ensure environmental integrity and that only two percent of projects have a high likelihood of ensuring environmental integrity.[2] High rates of over-crediting have also been found in California's offset program. The state's forest offset protocol, generating 82 percent of the state program's offset credits, and half of all offset credits from projects in the United States, has been found to over-credit from the methods used to define common practice (resulting in 30 percent over-crediting) and leakage (resulting in 51 to 82 percent over-crediting).[3] Studies of other voluntary and compliance

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[1] He, Gang, and Richard Morse. 2014. "Addressing Carbon Offsetters' Paradox: Lessons from Chinese Wind CDM." *Energy Policy* 63, (December): 1051–5. https://doi.org/10.1016/j.enpol.2013.09.021; Wara, Michael. 2008. "Measuring the Clean Development Mechanism's Performance and Potential." *UCLA Law Review* 55, (August): 1759–803. https://www.uclalawreview.org/measuring-the-clean-development-mechanisms-performance-and-potential/; Fearnside, Philip M. 2013. "Credit for Climate Mitigation by Amazonian Dams: Loopholes and Impacts Illustrated by Brazil's Jirau Hydroelectric Project." *Carbon Management* 4, no. 6: 681–96. https://doi.org/10.4155/cmt.13.57; Haya, Barbara. 2010. "Carbon Offsetting: An Efficient Way to Reduce Emissions or to Avoid Reducing Emissions? An Investigation and Analysis of Offsetting Design and Practice in India and China." Doctoral dissertation. Energy & Resources Group, University of California. https://escholarship.org/content/qt7jk7v95t/qt7jk7v95t.pdf.

[2] Cames, Martin, Ralph O. Harthan, Jürg Füssler, Michael Lazarus, Carrie M. Lee, Pete Erickson, and Randall Spalding-Fecher. 2016. *How Additional Is the Clean Development Mechanism?* Freiburg, Germany: Institute for Applied Ecology. https://ec.europa.eu/clima/system/files/2017-04/clean_dev_mechanism_en.pdf.

[3] Badgley, Grayson, Jeremy Freeman, Joseph J. Hamman, Barbara Haya, Anna T. Trugman, William R. L. Anderegg, and Danny Cullenward. 2021. "Systematic Over-Crediting in California's Forest Carbon Offsets Program." *Global Change Biology* 28, no. 4 (October): 1433–45. https://doi.org/10.1111/gcb.15943; Haya, Barbara. 2019. "Policy Brief: The California Air Resources Board's U.S. Forest Offset Protocol Underestimates Leakage." University of California, Berkeley, May 7, 2019. https://gspp.berkeley.edu/assets/uploads/research/pdf/Policy_Brief-US_Forest_Projects-Leakage-Haya_4.pdf.

market protocols have also found high rates of over-crediting across many other project types, including soil projects, cookstoves, avoided deforestation, and landfill gas capture.[4]

Offset projects can also have negative impacts on marginalized communities where safeguards and informed consent are not adequately applied. Some projects that support activities meant to protect forests in the global south have negatively impacted forest communities, including by denying access to traditional lands and sources of livelihoods, and in the worst cases with evictions and criminalization.[5]

These quality issues have also been widely covered by media outlets.[6]

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[4] Macintosh, Andrew. 2022. "The Emissions Reduction Fund's Landfill Gas Method: An Assessment of its Integrity." The Australian National University, Canberra, March 16, 2022. https://law.anu.edu.au/sites/all/files/erf_landfill_gas_method_-_an_assessment_of_its_integrity_16_march_2022.pdf; Zelikova, Jane, Freya Chay, Jeremy Freeman, and Danny Cullenward. 2021. "A Buyer's Guide to Soil Carbon Offsets." CarbonPlan, July 15, 2021. https://carbonplan.org/research/soil-protocols-explainer; West, Thales A. P., Jan Börner, Erin O. Sills, and Andreas Kontoleon. 2020. "Overstated Carbon Emissions Reductions from Voluntary REDD+ Projects in the Brazilian Amazon. *Proceedings of the National Academy of Sciences* 117, no. 39 (September): 24188–194. https://www.pnas.org/doi/full/10.1073/pnas.2004334117; Bailis, Rob, Yiting Wang, Rudi Drigo, Adrian Ghilardi, and Omar Masera. 2017. "Getting the Numbers Right: Revisiting Woodfuel Sustainability in the Developing World." *Environmental Research Letters* 12, no. 11 (October): 115002. https://doi.org/10.1088/1748-9326/aa83ed.

[5] Kansanga, M. M., & Luginaah, I. 2019. Agrarian livelihoods under siege: Carbon forestry, tenure constraints and the rise of capitalist forest enclosures in Ghana. *World Development*, *113*, 131–142. https://doi.org/10.1016/j.worlddev.2018.09.002; Sarmiento Barletti, J. P., & Larson, A. M. 2017. *Rights abuse allegations in the context of REDD+ readiness and implementation: A preliminary review and proposal for moving forward*. Center for International Forestry Research (CIFOR). https://doi.org/10.17528/cifor/006630; Beymer-Farris, B. A., & Bassett, T. J. 2012. The REDD menace: Resurgent protectionism in Tanzania's mangrove forests. *Global Environmental Change*, *22*(2), 332–341. https://doi.org/10.1016/j.gloenvcha.2011.11.006.

[6] e.g. White, Natasha, and Akshat Rathi. 2022. "China Says the 2022 Winter Olympics Are Carbon Neutral. They Aren't." *Bloomberg*, February 16, 2022, sec. Energy & Science. https://www.bloomberg.com/news/articles/2022-02-16/beijing-olympics-carbon-neutral-claim-is-based-on-junk-offsets; Song, Lisa, and James Temple. 2021. "A Nonprofit Promised to Preserve Wildlife. Then it Made Millions Claiming it Could Cut Down Trees." *MIT Technology Review*, May 10, 2021. https://www.technologyreview.com/2021/05/10/1024751/carbon-credits-massachusetts-audubon-california-logging-co2-emissions-increase/?truid=f0bbe964b0ec5551e17eadca3e0e4e35; Hodgson, Camilla. 2021. "Rush for Carbon Credits Spurs Surge in Power Company Schemes." *Financial Times*, April 17, 2021. https://www.ft.com/content/93cb7744-529d-4c74-bbb8-5a9bc8d6b321; Elgin, Ben. 2020. "These Trees Are Not What They Seem: How the Nature Conservancy, the World's Biggest Environmental Group, Became a Dealer of Meaningless Carbon Offsets." *Bloomberg Green*, December 9, 2020. https://www.bloomberg.com/features/2020-nature-conservancy-carbon-offsets-trees/; Mider, Zachary R., and John Quigley. 2020. "Disney's Jungle Cruise: High-Emission Vacations Lead to Trouble in a Rainforest Far, Far Away." *Bloomberg*, June 9, 2020. https://www.bloomberg.com/graphics/2020-disney-peru-deforestation/; Song, Lisa. 2019. "An (Even More) Inconvenient Truth: Why Carbon Credits For Forest Preservation May Be Worse Than Nothing." *ProPublica*, May 22, 2019. https://features.propublica.org/brazil-carbon-offsets/inconvenient-truth-carbon-credits-dont-work-deforestation-redd-acre-cambodia/.

These quality issues, and evolving responses from researchers, media, private credit quality assessors, private offset program administrators, and government regulators pose significant price, reputational, regulatory, and legal risk to investors. Disclosure by registrants about their emissions targets, current emissions, and expected and actual use of offsets helps investors understand the risk posed by registrant offset needs, approaches, and purchases.

Price risks: Market response to current concerns and new findings on offset quality can result in price risks to investors. Offset credits understood to be poor quality can lose value, and offset credits understood to be high quality can increase in price as supply and demand for credits understood to be quality shift. These risks apply to companies that develop offset projects or work as intermediaries in the offset industry, companies that buy offsets for future use or resale, companies with climate targets that rely on offset purchases in the future, and companies that market products as carbon neutral.

Reputational risks: Companies commonly take on climate targets because of the reputational benefits associated with climate action and to sell products that buyers perceive as having low climate impact. If it is found that credits used by companies do not represent their claimed climate benefit or are associated with negative outcomes for communities and ecosystems, this can reduce the value of a climate commitments and even become a reputational liability.

Regulatory risks: If governments respond to current understand and new analysis about offset quality with new restrictions on the use of offsets, this can also impose risk to companies that rely on offsets for mandatory commitments, or to make claims that become regulated.

Legal risks: Companies that use offsets to meet legal obligations—such as to cover greenhouse gas emissions increases from new construction under the California Environmental Quality Act (CEQA)—face litigation risks from using offsets. For example, building developers in San Diego County, California, were sued based on the lack of substantial evidence that the offsets they purchased from the voluntary offset market mitigated their greenhouse gas emissions.[7]

All of the items identified here indicate that investors need consistent, comparable, and reliable disclosures of carbon offset use amounts, approaches, and source projects, to assess their transition risks. I believe the SEC's proposed provisions will greatly improve the information available to investors.

> *24. If a registrant has used carbon offsets or RECs, should we require the registrant to disclose the role that the offsets or RECs play in its overall strategy to reduce its net carbon emissions, as proposed? Should the proposed definitions of carbon offsets and RECs be clarified or expanded in any way? Are there specific considerations about the use of carbon offsets or RECs that we should require to be disclosed in a registrant's discussion regarding how climate- related factors have impacted its strategy, business model, and outlook?*

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[7] *Golden Door Properties, LLC v. County of San Diego.* 2020. Cal. Ct. App.; *Elfin Forest Harmony Grove Town Council v. County of San Diego.* 2021. Cal. Ct. App.; Smith, Joshua Emerson. 2020. "Court Tosses San Diego County Climate Plan, Calls Carbon-Offset Program 'Unlawful.'" *Los Angeles Times*, June 17, 2020. https://www.latimes.com/california/story/2020-06-17/court-san-diego-carbon-offset-plan.

Yes, the SEC should require that registrants disclose the role that offsets play in its overall strategy to reduce its net carbon emissions. As described in question 2, it is materially important to investors in assessing transition risk to know how significantly companies expect to rely on offsetting within their emissions reduction strategies.

> *101. Should we require a registrant to exclude any use of purchased or generated offsets when disclosing its Scope 1, Scope 2, and Scope 3 emissions, as proposed? Should we require a registrant to disclose both a total amount with, and a total amount without, the use of offsets for each scope of emissions?*

Yes, the SEC's proposal should require registrants to exclude any use of purchased or generated offsets when disclosing its Scope 1, Scope 2, and Scope 3 emissions. For investors to understand the risk associated with climate targets it is important to know the company's absolute emissions and how that compares with the climate target. It is important for registrants to disclose its emissions without offsets, and the total amount of offsets used. Net emissions with offsets can be calculated from those two figures and therefore does not need to be disclosed.

> *170. Should we require a registrant to discuss how it intends to meet its climate-related targets or goals, as proposed? Should we provide examples of potential items of discussion about a target or goal regarding GHG emissions reduction, such as a strategy to increase energy efficiency, a transition to lower carbon products, purchasing carbon offsets or RECs, or engaging in carbon removal and carbon storage, as proposed? Should we provide additional examples of items of discussion about climate-related targets or goals and, if so, what items should we add? Should we remove any of the proposed examples of items of discussion?*

Yes, for investors to understand the risk associated with company transition plans it is important to require that a registrant discuss how much it plans to meet a target with internal reductions versus how much it expects to rely on offsets.

> *173. If a registrant has used carbon offsets or RECs, should we require the registrant to disclose the amount of carbon reduction represented by the offsets or the amount of generated renewable energy represented by the RECS, the source of the offsets or RECs, the nature and location of the underlying projects, any registries or other authentication of the offsets or RECs, and the cost of the offsets or RECs, as proposed? Are there other items of information about carbon offsets or RECs that we should specifically require to be disclosed when a registrant describes its targets or goals and the related use of offsets or RECs? Are there proposed items of information that we should exclude from the required disclosure about offsets and RECs?*

Yes, for investors to assess the registrant risk from the use of offsets it is important to require registrants to disclose enough information about the projects associated with the offset credits purchased and used to identify the specific project. Location and description is not sufficient because some risks vary by more refined project characteristics or by individual project. In addition, I recommend that the SEC be more specific in its disclosure requirements under 1506(d) to require that companies disclose information that investors need to identify the specific projects associated with any offset credits they procure or use. Specifically, in addition to a description and location of the projects, I recommend requiring disclosure of the specific registry project IDs, or if those do not exist, sufficient information to identify the specific projects from which offsets are sourced. In the case of pooled credit portfolios, disclosure should identify the pool from which credits are

purchased. To support investors in identifying risky activity, disclosure should note if a registrant has purchased offsets from block-chain based technologies like cryptocurrencies.

Please do not hesitate to be in touch about any of the material in this comment.

Most sincerely,

Barbara Haya