Available data suggest that reliance by issuers on carbon offsets in climate transition plans is substantial: Over 5,000 companies in the UN’s Race to Zero initiative have made commitments to achieve net-zero GHG emissions by mid-century and the “net” in many of these commitments involves offsets purchases.

A November 2021 Bloomberg report finds that “Demand for offsets is soaring. More credits were traded in the first eight months of this year [2021] than in all of 2020, according to BloombergNEF, as companies and governments spend billions of dollars to meet net-zero emissions targets and burnish their green credentials.” Mark Carney, co-founder of the Integrity Council for Voluntary Carbon Markets, formerly Task Force on Scaling Voluntary Carbon Markets, projects a $100B/year market by 2030, not counting secondary and derivatives trading.

Yet a March 2021 Oxford University study of publicly-released climate commitments by the world’s 2,000 largest publicly traded companies finds that the majority fail to indicate whether they entail the use of carbon offsets and, of those expressing an intention to use offsets, only 87 of them set conditions on their use.

Similarly, this month New Climate Institute and Carbon Watch released a study of climate strategies of 25 major global companies, finding that although 24 of the 25 companies assessed have a net-zero or carbon-neutral target as their headline pledge, only three clearly commit to deep decarbonisation of over 90% of their full value chain emissions. 19 of the 25 companies have offsetting plans, and only one company explicitly plans not to use offsets. However, “[n]one of the assessed companies demonstrate good practice with regards to the transparency set out in their [beyond-value-chain] climate contributions or offsetting claims. In many cases, information could not be found in the public domain to understand or assess the approaches. In other cases, disclosure is limited to marketing soundbites and superficial descriptions. Only in a small minority of cases is more detailed information identifiable, through the compilation of information from public project registries or third-party news outlets.”
As discussed below, offsets markets have significant environmental, accounting and social integrity problems that jeopardize fulfillment of corporate climate pledges. Failure by companies to report their investments in primary and secondary market offsets and how they will address these integrity problems poses a material risk to investors and the financial system. To protect investors and the orderly, fair, and efficient functioning of markets, the SEC must include mandatory disclosures about issuers’ use of offsets in its climate risk disclosure rule.

In this memo, we provide our recommendations on how and where offsets should be disclosed and explain why such disclosures are critical for protecting investors and preserving financial stability. We welcome your questions about addressing this critical disclosure need.

I. How Offset Purchases Should Be Disclosed

Offsets (sometimes referred to as carbon credits) are units of greenhouse gas (GHG) pollution reductions, measured in metric tons of CO2 or CO2 equivalents, that are purchased by companies, governments and individuals so that they can claim credit for GHG reductions carried out by another actor. When companies are obligated by law to reduce GHG emissions, they are sometimes allowed to purchase offsets in compliance markets, where limited oversight is carried out by a regulatory agency. When no such obligation exists, they may purchase offsets from project developers in voluntary carbon markets, where a host of brokers, retail traders, derivatives traders, exchanges and private standard-setters are involved. In this memo, we focus solely on the disclosure obligations of offset purchasers in the compliance and voluntary markets and not the sellers and intermediaries.

Two key actions will be needed to ensure meaningful disclosures of offset purchases.

A. Reliance on Emissions Avoidance and Carbon Removal Offsets Must be Separately Disclosed

Numerous studies show that offsets sold in today’s global carbon markets are not delivering promised greenhouse gas (GHG) emissions reductions. See Appendix A. The growing outcry for action to counter the proliferation of low-quality offsets led the Net-Zero Asset Owners Alliance, a proponent of voluntary carbon markets, to acknowledge in September 2021 that these markets “require a significant quality boost.”
The SEC can help address growing investor concern about material risks from reliance on low-quality offsets and exposure to market reforms by requiring meaningful disclosures about offset quality. The material risks facing investors, and meaningful disclosures that would enable investors to assess the quality of offsets, are discussed below.

To date, no market reforms to boost offset quality have been promulgated by standard-setters or agreed to by market participants. However, this may soon be changing as a consensus emerges among leading offsets experts and carbon market participants that buyers should shift their purchases away from emissions avoidance offsets and toward long duration carbon removal offsets as much as possible — and only after making deep cuts to emissions through changes in business operations. This is the conclusion of leading academic experts in the Oxford Offsetting Principles as well as the Net-Zero Asset Owners Alliance, the Net-Zero Banking Alliance, and perhaps most importantly, the standard-setting entities Partnership for Carbon Accounting Financials and Science Based Targets Initiative (SBTi). SBTi allows carbon removal offsets only for “residual emissions” when tracking progress toward science-based targets, and does not count the contribution of emissions avoidance offsets to companies’ GHG reduction goals.

As explained in Haya et al, affirming the quality of emissions avoidance offsets is inherently problematic because it is virtually impossible for investors and others to determine whether such projects meet the “additionality” test. Demonstrating additionality requires elusive evidence that the promised GHG reductions wouldn’t happen in the absence of the project. If a claim of additionality is unfounded, climate damage is compounded by the avoided emissions project because the company is allowed to evade reducing its own emissions without compensating in any way for that inaction.

In contrast, investors can evaluate the quality of carbon removal projects by assessing whether they are storing carbon over a sufficient time to have a measurable impact on the global carbon cycle. For example, researchers at CarbonPlan recently developed a set of metrics for evaluation of the quality of carbon removal project proposals.

Given the importance to climate-savvy investors and others of shifting away from emissions avoidance offsets to carbon removal offsets, the SEC should require separate disclosures of total GHG emissions and GHG emissions reductions and, within the reported reductions, the amounts achieved through carbon removal versus amounts achieved from emissions avoidance.

Quantification of carbon removal and emissions avoidance in the Form 10-K is important for investors because a project proponent’s characterization of project
purpose may not fully reflect the relative roles of emissions avoidance and carbon removal. For example, in the above-referenced study of projects purporting to offer carbon removal, CarbonPlan found that "[s]ome projects exclusively perform carbon removal. Some include a component of avoided emissions. Some are exclusively avoided emissions at the moment, but could be part of a carbon removal system in the future." By requiring issuers to quantify the relative GHG reductions from emissions avoidance and carbon removal in their offsets purchases, and to explain the methodologies used to claim such reductions, the SEC will enable investors to objectively evaluate the quality of those projects and the risks they pose to fulfillment of corporate climate strategies.

B. Critical Information About Individual Offset Purchases Must Be Disclosed

In evaluating offsets projects, perhaps no metric is more important than permanence of carbon removal. As explained by CarbonPlan, temporary storage is inherently less valuable than permanent storage and does not fully compensate for ongoing emissions. Because "CO₂ emissions from fossil fuel use impact the atmosphere for hundreds to thousands of years," CarbonPlan writes, carbon removal counteracts the warming effect of ongoing emissions, "but only so long as the removal is permanent."

We recommend that the SEC ensure that investors have access to information about permanence of carbon removal by requiring disclosure of two critical details about individual offset purchases: the length of the offset contract and the natural system or technology being used to achieve such removal (e.g., whether the carbon is intended to be stored in forests, soils or geological formations). Requiring such disclosure would impose minimal burdens on issuers given that these details are typically already provided to exchanges.

II. Where Offset Purchases Should Be Disclosed

The SEC should require that offsets information be included in the following disclosures:

Reporting on Scope 1, 2 and 3 Emissions. Disclosure of GHG emissions today takes many forms, leading to significant confusion among investors and the public. The SEC must ensure clarity by insisting that produced emissions, avoided emission carbon credits, and carbon removal credits are reported separately from one another, without netting. To ensure reliability, these disclosures must be included in the Form 10-K and receive reasonable assurance from auditors.

Reporting on Climate Transition Plans. The disclosure of an issuer’s climate transition plan must include a detailed description of GHG emissions reductions targets, including
the extent to which the issuer is relying upon offsets to achieve those targets. Assumptions used to calculate the GHG emissions changes arising from offsets should be stated.

*Progress Reports on Climate Transition Plans.* Each issuer should be required to disclose its progress with implementing its climate transition plan at least annually and this progress report must include details on the procurement and holding of offsets as well as the GHG emissions reductions achieved and anticipated from these offsets projects. This should include a discussion of whether, and to what extent, an issuer has (1) purchased offsets over the reporting period and (2) retired offsets as compensation for any gross emissions during the reporting period.

### III. Detailed Offsets Disclosures Are Needed to Protect Investors

As discussed above, issuers today are largely failing to disclose the extent to which they are relying on offsets to achieve their GHG emissions reduction targets and the quality of any offsets on which they are relying. This failure to disclose means that at least the following material risks are being concealed from investors:

- The extent to which offsets may no longer be viable as instruments for hedging future compliance obligations
- The extent to which emissions reductions publicly pledged in climate transition plans will not be achieved and thereby exacerbate legal and reputational risk
- The extent to which offsets projects in the issuers’ portfolio may harm the Indigenous and other communities in which they are based and thereby exacerbate legal and reputational risk
- The extent to which reliance on low-quality offsets may have delayed an SEC registrant’s investment and/or operational changes to reduce GHG emissions, thereby exacerbating transition risk

### IV. Detailed Offsets Disclosures Are Needed to Preserve Fair, Orderly and Efficient Markets

A recent Bloomberg analysis highlights enormous uncertainty in today’s carbon markets. If the boosts to offset quality sought by market participants and other experts and advocates are realized, offset prices would skyrocket, potentially eliminating demand as companies refocus decarbonization efforts around internal operational changes. If the status quo of low-quality offsets is maintained, prices would plummet as the market is flooded with new projects. These scenarios potentially threaten the business models of a wide array of actors ranging from the offset buyers and sellers to
the exchanges and other intermediaries and the financial institutions creating and trading derivatives products.

Given the paucity of disclosures about offsets, it is impossible to know whether this instability represents a threat to fair, orderly and efficient capital markets. Registries rarely disclose who buys and retires offsets. Only recently did we learn that cryptocurrency firms are providing opportunities for speculation on the value of carbon credits. Derivatives markets for carbon markets, with a high degree of opaqueness that frustrates price discovery, are likewise serving as a platform for speculators. Disclosure of key details about offsets purchases would be an important first step to addressing this lack of transparency.

As the Financial Stability Oversight Council recognized in its October 2021 report, disclosure is essential to ensuring that climate-related financial risk does not jeopardize the stability of financial markets. To fulfill its mandate of protecting the integrity of capital markets, as well as its investor protection mandate, the SEC must insist upon detailed disclosures of reliance on offsets.

Appendix A

Among the studies highlighting integrity problems with carbon markets are the following:

Do Carbon Offsets Offset Carbon?
Raphael Calel et al., CESifo working paper No. 9368 (2021)

Overstated carbon emission reductions from voluntary REDD+ projects in the Brazilian Amazon
Thales West et al.
PNAS 117(39): 24188-94 (2020)
https://doi.org/10.1073/pnas.2004334117

How additional is the Clean Development Mechanism?
Martin Cames et al., Öko-Institut report for European Commission DG-CLIMA (2016)

Perverse effects on carbon markets on HFC-23 and SF6 abatement projects in Russia
Lambert Schneider and Anja Kollmuss
Systematic over-crediting in California's forest carbon offsets program
Grayson Badgley et al.
Global Change Biology 28(4): 1433-1445 (2022)
https://doi.org/10.1111/gcb.15943

Carbon Market Watch's Reply to the TSVCM's Second Public Consultation (2021)


Undoing Equivalence: Rethinking Carbon Accounting for Just Carbon Removal
Carton et al.
Frontiers in Climate 3 (2021)

Untangling the confusion around land carbon science and climate change mitigation policy
Mackey et al.
Nature Climate Change 3: 552-557 (2013)
https://www.nature.com/articles/nclimate1804