From:
Professor Robert S. Kaplan, Harvard Business School
Professor Karthik Ramanna, University of Oxford

To: Vanessa A. Countryman, Secretary, U.S. Securities and Exchange Commission

Date: 7 August 2023

Reference: S7-10-22, Further comments on “The Enhancement and Standardization of Climate-Related Disclosures for Investors”

Dear Secretary Countryman,

We offer the following updated comments to our original letter submitted on 16 June 2022 on the proposed rule on “The Enhancement and Standardization of Climate-Related Disclosures for Investors” (S7-10-22). Our comments are consistent with our original recommendation, and they offer additional arguments, specifics, and evidence to that end.

1. We wholeheartedly support initiatives to provide accurate, reliable, comparable, and timely information to investors on the climate-related impact of issuers. Such information is material to efficient asset allocation and stewardship of capital, not just because it alerts investors to issuers’ potential liabilities but also because it helps investors identify issuers with competitive advantages. For any such information to be decision-relevant to investors, it must be prepared in accordance with generally accepted principles of accounting, and it must be assured in accordance with generally accepted principles of auditing. This has been the longstanding practice of the SEC, dating back to its establishment in the 1930s and to the pioneering work of its first (acting) Chief Accountant Robert Healy.

2. We note, in contrast, that the SEC’s currently proposed standard for corporate reporting of entity-level climate performance (based on the Greenhouse Gas Protocol’s Scopes 1-3 approach) is a disclosure standard not designed to yield comparable data across entities. It also combines an entity’s upstream and downstream climate performance into a single metric, analogous to an approach where issuers can conflate delivered (historical) performance with future-earnings forecasts. Moreover, the proposed standard embeds, across entities in a value chain, multiple counting of the same emissions, and it permits the use of industry and regional average estimates in reporting an entity’s climate performance. Using this standard for SEC-backed climate reporting would be akin to the SEC permitting issuers to report as their own financial performance the performance of their suppliers, customers, and even competitors. For all these reasons, corporate climate reporting prepared under the proposed approach will not be auditable under the “reasonableness standard” currently expected of most issuers. Given all these concerns, and given the SEC’s own mandate and tradition of fostering rigorous

corporate reporting that protects investors and advances the efficient functioning of capital markets, we urge the SEC to take a different route to climate reporting, as outlined below.

3. First, we ask that the SEC separate upstream from downstream climate reporting. Downstream climate reporting is, by definition, prospective to an entity, as it depends on the how the entity's customers, and their customers (and so on), will use the entity's products, something the entity has little control over. By contrast, upstream climate reporting (so-called cradle-to-gate climate reporting) deals with actions that are historical (or delivered) in nature, and influenceable by the entity's own purchasing, design, and production decisions. Whereas upstream climate reporting can be accomplished under well-established principles of accounting and auditing (analogous to so-called Reg S-X reporting), downstream climate reporting involves descriptive, un-audited disclosure. While both upstream and downstream climate reporting can be material to investors, their conflation into a single reporting framework can be misleading. By separating upstream and downstream climate reporting, the SEC will provide investors with a rigorous foundation of issuers' *delivered* climate performance, and, also, for a limited set of issuers, prospective information about future emissions when those issuers' products and services are used. This approach would be similar to how audited financial statements and subjective disclosures, such as an MD&A section, can co-exist in companies' annual reports.

4. Second, we ask that the SEC embrace an upstream climate reporting system based on primary data, except where immaterial. Primary data means data specific to an entity's own emissions and data specific to the emissions embodied in its purchased inputs. Industry and regional average estimates are not primary data. This recommendation is consistent with the foundational principles of financial accounting.

5. Third, we ask that the SEC embrace an upstream climate reporting system that can be audited to the "reasonableness standard" expected in financial reporting. In practice, under internationally regarded auditing guidelines, this means that the subject-matter being audited is under issuer-management's control (downstream data would not qualify), that suitable criteria exist for the evaluation of issuer-management's actions (new climate accounting and auditing standards would have to be drafted), and that the evidence available for such an audit is actually suitable to draw such a "reasonable" conclusion (non-primary data would not qualify).

6. We acknowledge that what we propose above is a higher bar for climate reporting relative to the status-quo; but, we note that our proposals are not incongruent to what the SEC expects and has accomplished in the realm of financial reporting. Indeed, when the SEC was established in the 1930s, financial accounting was a mess, having been implicated in the market exuberance and Great Crash of the 1920s. Yet, in a period of about six years through 1940, the SEC cleaned up financial reporting by establishing what we today recognize as GAAP and GAAS. Those actions by the early Commission

served as the basis for robust accounting and audit practice worldwide, and the SEC established itself as the global vanguard of good market governance. Nearly a century later, a similar opportunity and necessity once again awaits SEC action, this time in the space of cleaning up corporate *climate* reporting.

7. We further acknowledge that what we propose will require some groundwork by the SEC and its supporting organizations, to prepare proper climate accounting and auditing standards. An article we published in November 2021 provides some of the conceptual basis for such standards. That article describes an accurate, auditable, comparable, and continuous accounting system for measuring a company's total cradle-to-gate (or upstream) GHG emissions. Using the proposed system, carbon emissions are measured once and only once, at the location where they occur, analogously to how companies' cost and inventory accounting systems function today. The system uses a decentralized, recursive algorithm that enables primary data to be transmitted across even the most complex supply chains. Adopting companies will be able (indeed, encouraged) to phase out the use of industry and regional average data as their own. The system also enables companies to easily produce a standardized company-level report of its complete cradle-to-gate carbon footprint by aggregating all their product-level emissions data in a process analogous to how they produce an inventory footnote for their financial statements. Reporting under this system (referred to as "E-liability accounting") can be validated by the mainstream "reasonableness" audits expected of issuers' financial reports.

8. The article describing the E-liability accounting system was recognized with the 2022 Harvard Business Review-McKinsey Award "for its practical and ground-breaking management thinking." Since then, we have created a non-profit learning organization, the E-liability Institute, to conduct pilot projects of the approach with several major organizations. In June 2023, we convened in London and online about 100 carbon measurement professionals from dozens of companies worldwide, who are exploring this bottom-up method to directly measure the embedded emissions in their supply chains. Early results from pilot adoptions in cement, steel, electrical, and automotive industries suggest that the improved emissions-accuracy from using the approach motivates now-accountable managers to embrace decarbonized alternatives in product design, production, and procurement. Promisingly, software providers such as SAP and EY are already developing solutions for such an approach to work at scale. We are happy to share relevant learnings from the pilots with any standard-setting effort.

9. Additionally, the accounting underlying the E-liability approach can be extended for entities to report verifiable carbon removal offsets. Rights to carbon removals can be recognized as an E-asset and be tradeable as a removal offset when the timing and magnitude of the offsets are both reasonably estimable and probable. A company can net a given quantity of E-assets against its E-liabilities account when that quantity of GHG has been actually removed from the atmosphere and indefinitely sequestered. Together, E-assets and E-liabilities provide the basic accounting tools for organizations

and governments to measure and manage their performance toward decarbonization targets, including net-zero goals. The E-ledgers on which they are recorded provide a fully auditable vehicle for stewarding an organization's environmental claims, mitigating the greenwashing that has plagued corporate reporting in this space.

10. With this background, we recommend that the SEC:

    a. Announce as soon as is practicable that all issuers (subject to pragmatic materiality qualifiers) will be expected, after a transition period of, say, three years, to prepare carbon accounts, consistent with E-ledger principles, for their delivered cradle-to-gate performance. This announcement will enable issuers to use the transition period to conduct pilot adoptions and prepare their suppliers.

    b. Also announce that after an additional transition period of, say, another three years, only primary data will be acceptable in issuer carbon accounts (except for immaterial GHG quantities) and that such accounts will be subject to reasonableness audits. This announcement will accelerate the development of rigorous primary-data measurement and transmission tools and help assurance providers prepare for the transition.

    c. Announce that reporting entities that purchase inputs from those not using the rigorous carbon accounting principles described in "a" and "b" will record the carbon content of those inputs at the 95th to 99th percentile of the input-category's emissions distribution. This requirement creates a turbo incentive for foreign suppliers and non-registrants to cooperate with reporting entities on robust carbon measurement (and decarbonizing actions) if they wish to remain competitive.

    d. Work at speed with accounting and auditing standard-setters to develop, in the first instance, implementation guidance for the actions described in "a" and "b", recognizing that full-fledged "standards" are still some years away but that consistent-reporting principles must nonetheless be available for near-term use.

Please do not hesitate to contact us if you have questions or seek any clarifications on this letter. We remain at your service.

Yours sincerely,

Robert S. Kaplan, Ph.D. (Cornell), Professor, Harvard Business School
Karthik Ramanna, Ph.D. (MIT), Professor, Oxford Blavatnik School of Government