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Dimensional Fund Advisors LP
6300 Bee Cave Rd., Building One
Austin, TX 78746

June 11, 2021

The Honorable Gary Gensler
Chair, US Securities and Exchange Commission
100 F Street NE
Washington, DC 20549

Re: Public Input Welcomed on Climate Change Disclosures

Dear Chair Gensler:

Dimensional Fund Advisors LP ("Dimensional") appreciates the opportunity to provide the US Securities and Exchange Commission (the "Commission") with our views on climate change disclosures. Dimensional is a privately held registered investment adviser that manages 133 US-registered mutual funds and exchange-traded funds, including 10 mutual funds which incorporate sustainability considerations. We collaborate with leading climate scientists and experts in climate data to stay at the forefront of environmental science. This science is central to our sustainability investing strategies, contributes to our research about the drivers of expected returns across securities, and helps to inform how we may engage with and vote proxies at portfolio companies held in our equity strategies. It also guides sustainability efforts in our own operations—in March 2021, climate solutions provider South Pole certified our worldwide operations as climate neutral. To achieve this certification, we offset all of our own 2020 scope 1, 2, and 3 operational greenhouse gas emissions by purchasing carbon offsets through South Pole, a company which supports climate action projects worldwide.[1] We are committed to sustainability, and we very much support the Commission's goal of facilitating the disclosure of consistent and reliable information on climate change. As an investment adviser, we rely on public disclosure made by portfolio companies to help us make investment decisions on behalf of our clients and the retail investors who have entrusted us with their savings.

In our view, consistent and reliable disclosure on climate change would be best achieved by leveraging the existing public company disclosure framework, which is rooted in the concept of materiality. Climate change does not pose the same level of risk for all companies. The costs of requiring a company to include climate change information can be high, and those costs are passed on to the company's investors, including funds and their shareholders. Accordingly, we strongly believe that the Commission should require disclosure of specific climate change information *only* where companies have determined that climate change may have a material impact to their business.

In this letter, we explain why we believe the existing disclosure framework should be enhanced to facilitate disclosure of consistent and reliable information on climate change; outline our recommendations as to what metrics and information a company should be required to disclose, in cases where the company has determined climate change is material to its business; and discuss why certain other climate change metrics may not be sufficiently useful to investors to justify the costs of requiring them.

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[1] For more information on Dimensional's climate neutral certification, see *Dimensional Receives Climate Neutral Operations Certification* (Mar. 22, 2021), Press Release, available at https://us.dimensional.com/about-us/media-center/dimensional-receives-climate-neutral-operations-certification.

We also note that while climate change may represent a very real, long term systemic risk, there are likely more appropriate administrative and legislative means to address the issue than through public company disclosure. Public company disclosures are vital in ensuring that investors have equal access to information that they need to make informed decisions, but attempting to use such disclosures to achieve purposes for which they were not intended may do more harm than good. In our view, climate change is an issue that should be more directly addressed by policies implemented by other federal agencies and Congress.

I. ***The existing public company disclosure framework should be enhanced to elicit consistent and reliable disclosure of material information on climate change.***

In her public statement requesting input on climate change disclosures, then Acting Chair Lee noted that there are questions as to whether climate change disclosures adequately inform investors about known material risks, uncertainties, impacts, and opportunities, and whether greater consistency could be achieved.[2] We agree that investors would benefit if public companies were more consistent in what they disclose regarding climate change. However, we strongly recommend that the Commission take a targeted approach and require disclosure of climate change information only where it is material to a company's business.

A. ***The existing framework has served investors well over many decades.***

In our view, the Commission could achieve its goal of facilitating the disclosure of consistent and reliable information on climate change by leveraging the existing framework, which is rooted in materiality. As the Commission indicated in its 2010 Guidance Regarding Disclosure Related to Climate Change, federal securities laws and regulations already require companies to disclose matters relating to climate change, where such matters are material to a company's business.[3] We believe the existing disclosure framework has served investors well over many decades—companies' regulatory disclosure documents generally contain the information that investors need to assess material risks to a company and their impact on a company's valuation. As support for our view, we note that market portfolios—*i.e.*, those that hold a broad representation of the market at individual security weights approximating their relative market capitalization—have been very competitive and difficult for most investment managers to consistently outperform.[4] This strongly suggests that the US securities market functions very efficiently, and that

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[2] Acting Chair Allison Herren Lee, *Public Input Welcomed on Climate Change Disclosures* (Mar. 15, 2021), available at https://www.sec.gov/news/public-statement/lee-climate-change-disclosures.

[3] *Commission Guidance Regarding Disclosure Related to Climate Change*, Release No. 33-9106 (Feb. 2, 2010) [75 FR 6290 (Feb 8, 2010)] ("2010 Climate Change Guidance"). For example, Item 503(c) of Regulation S-K requires registrants to include a discussion of the *material* factors that make an investment in the registrant or offering speculative or risky. Item 303 also states that the objective of the Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is to provide *material* information relevant to an assessment of the financial condition and results of operations of the registrant, and it directs registrants to focus specifically on matters that have had a *material* impact on reported operations or are reasonably likely to have a *material* impact on future operations.

[4] *See*, for example, Dimensional Fund Advisors, *Mutual Fund Landscape 2021: A Study of US-Based Mutual Fund Performance*, available at https://my.dimensional.com/xlink/6JZObWgaeCzj5SzFFo5UbD5C80mkJedkb2VDvzK8bL-gxa2PTLFYXzmiPd4CwYpMktavv6eiHAc3_JwtZkwhmY6UOniRqE63jicnLLZNd4xvcF58-SyRbJYZy3HYeZunN9snpwET40lrG7ynsg-gQfTSxqLQdPQLIX2cn4rbXMY1.

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existing disclosures have been sufficient for investors to assess company valuations.

Even so, there is room for improvement. While we have seen an increasing number of companies include information relating to climate change in their annual reports,[5] what these companies choose to disclose varies significantly, making it difficult for investors to make sense of the available information and to assess the reliability of what is provided. Companies could benefit from clear guidance on what disclosure the Commission expects to see from a company that views climate change as a material risk to its business, and investors would benefit from consistent disclosures from such companies. We also believe that companies will more carefully assess whether climate change is a material risk if the Commission has indicated that it intends to conduct reviews of the adequacy of climate change risk disclosure and pursue enforcement actions if necessary. For example, the Commission's recent Statement on the Review of Climate-Related Disclosure, which announced that the staff will enhance its focus on climate-related disclosure in public company filings, was a useful way to remind companies of their existing obligation to disclose material risks relating to climate change in their filings.[6]

B. The costs of requiring all companies—including those for whom climate change is not material to their business—to disclose climate change information may be high.

Under the current disclosure framework, only companies that are *materially* impacted by climate change must include disclosure relating to climate change, and we believe that this is an appropriate—and very important—distinction. Companies are not equally impacted by climate change. As the Commission acknowledged, "For *some* companies, the regulatory, legislative and other developments [relating to climate change] could have a significant effect on operating and financial decisions…(emphasis added)."[7] For other companies, climate change may simply not have a material impact on the value of the company. Requiring a company that has not determined climate change is a material risk to its business to disclose specific climate change-related information would undoubtedly increase costs for the company without providing much, if any, tangible benefit to the company or its shareholders. Ultimately it is the company's shareholders—including funds and their investors—who bear the costs of regulations that mandate additional disclosures. We urge the Commission to avoid adopting regulations where any perceived benefit will not outweigh the certain costs to companies and their shareholders.

We recognize that the Commission can—and does—require companies to include information that may be important to a reasonable investor, but which may not be material in every respect to every company making the disclosure. Certain types of information can be useful for investors to have, even if not necessarily material to all companies. But before imposing new disclosure requirements on companies, we believe that the Commission should always consider the potential costs to companies and to their

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5 Bloomberg Law found that the number of companies in the S&P 500 that cited climate change or greenhouse gas under risk factors in their annual 10-K filings almost quadrupled, from roughly 60 companies in 2019 to at least 220 companies in 2020. Bloomberg Law*, Climate Change Risks Surge in Companies' Annual Reports to SEC* (March 25, 2021), available at https://news.bloomberglaw.com/securities-law/climate-change-risks-surge-in-companies-annual-reports-to-sec.

6 Acting Chair Allison Herren Lee, *Statement on the Review of Climate-Related Disclosure* (Feb. 24, 2021), available at: https://www.sec.gov/news/public-statement/lee-statement-review-climate-related-disclosure.

7 2010 Climate Change Guidance at 5.

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shareholders. Corporate disclosure is expensive.[8] Companies must spend time and resources gathering and verifying information as well as considering how best to explain and present data and associated risk disclosure. Expected costs include:

- Internal costs, such as personnel time;
- Third-party costs, such as services provided by attorneys, auditors, other experts, data vendors, etc. to collect the information to be disclosed;
- Opportunity costs, such as time spent by management on disclosure, rather than on managing the company's business as discussed below in Section I(C); and
- Downstream costs, such as the potential for reputational risk and increased litigation.[9]

We believe it is imperative that the Commission weigh these inevitable costs against what the Commission seeks to accomplish by requiring disclosure of climate change information.

C. Requiring all companies to include specific climate change-related information could confuse or mislead investors and may divert management's attention away from managing material risks and generating value for their shareholders.

Imposing specific climate change disclosure requirements on all companies could also have unintended adverse consequences. First, the mere presence of mandatory climate change disclosure may confuse investors who are used to seeing disclosure only of risks that are material, and this may leave investors with the perception that climate change is a material risk and a risk of equal magnitude for all companies. Lengthy climate change disclosures may also distract investors' attention away from information that the company has deemed to be material to its financial condition and could hinder an investor's ability to assess the material risks faced by the company. In its 2010 Climate Change Guidance, the Commission noted that "the effectiveness of MD&A decreases with the accumulation of unnecessary detail or duplicative or uninformative disclosure that obscures material information" and instructed registrants to "eliminate immaterial information that does not promote understanding of registrants' financial condition."[10] For some companies, including climate change disclosure could obscure material information without adding to an investor's understanding of the company's financial condition. Worse, an investor may interpret climate risk to be a greater risk than it actually represents for that particular company. When it comes to disclosure, sometimes less is more.

Furthermore, as noted above, there are opportunity costs associated with additional disclosure

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8 For example, according to a survey of CFOs of public companies conducted by PwC, CFOs estimated that on average, financial reporting (a category separate from incremental auditing fees and legal costs) represented 18% of the annual costs of being a public company. The same survey found that two-thirds of CFOs estimated spending between $1 million and $1.9 million annually on the costs of being public. *See* PwC, *Considering an IPO to fuel your company's future?* (Nov. 2017), available at: https://www.pwc.com/hu/hu/szolgaltatasok/konyvvizsgalat/szamviteli-tanacsadas/kiadvanyok/cost_of_an_ipo_2017.pdf.

9 In a recent speech, Commissioner Roisman noted that any new disclosure requirements will inevitably come with costs, including "the costs of collecting (and in some cases, calculating) and preparing the information for submission" and "the costs of increased liability for making such disclosures." *See* Commissioner Elad Roisman, *Putting the Electric Cart before the Horse: Addressing Inevitable Costs of a New ESG Disclosure Regime* (June 3, 2021), available at: https://www.sec.gov/news/speech/roisman-esg-2021-06-03.

10 2010 Climate Change Guidance at 18.

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requirements. Complying with onerous disclosure requirements may divert senior management's time and attention away from managing the material risks faced by the company and from developing or improving products and services that could generate value for the company and its shareholders. Such developments or improvements—for example, making an existing product more energy efficient—could even have a tangible positive impact on the environment. For this reason, we believe that in general, a company's time and resources would be better spent pursuing important activities that could not only add value for the company and its shareholders, but which might even reduce the company's environmental impact.

D. A framework that imposes a "double materiality" standard may have negative effects on corporate governance.

Our concerns with requiring all companies to include climate change disclosures also highlight the potential dangers posed by frameworks that impose a "double materiality" standard with respect to climate change disclosure.[11] Under a double materiality framework, climate-related information should be disclosed for two separate and distinct reasons—first, if it is material to an investor's understanding of the company's business (*i.e.*, what we would think of as the existing materiality standard under US federal securities laws), or second, if it is material to an individual's understanding of the external impacts of the company on the environment and society. These two materiality standards are frequently intertwined, and in such cases, the first standard on its own is enough to elicit disclosure of material climate-related information. For example, a company that has polluted a city's water supply may face reputational and litigation risks as a result. Under the first materiality standard, if the reputational and litigation risks to the company are material, then the company would have to disclose its impact on the environment to fully explain the extent of those risks.[12]

But under a double materiality framework, the second materiality standard would require disclosure of climate change information even if it is does not result in a material impact or risk to the company itself. This standard tends to be aimed at satisfying demands for information from other "stakeholders" who are not necessarily shareholders of the company. Having to disclose information relating to the external impacts of the company on the environment, when it does not affect the company itself, could compel corporate leaders to spend a disproportionate amount of time managing the disclosure of climate change risk at the expense of other activities that could add value for the company and its shareholders, as well as lead to the disclosure of information that, while not material from an investment standpoint, may be misconstrued as such by investors.

We believe that climate change disclosure frameworks have gravitated toward a double materiality standard because of the rise of the theory of "stakeholder governance." Proponents of stakeholder governance advocate for a governance model that imposes additional responsibilities on directors to serve stakeholders, *i.e.*, all non-shareholder constituencies of the corporation, including employees, customers, suppliers, communities, and the environment. In *The Illusory Promise of Stakeholder Governance*, Lucian

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11 *See*, for example, European Commission, *Guidelines on non-financial reporting: Supplement on reporting climate-related information* (2019), available at https://ec.europa.eu/finance/docs/policy/190618-climate-related-information-reporting-guidelines_en.pdf.

12 Katz and McIntosh call this "the genius of the 'reasonable investor' definition of materiality." *See* Katz, David A. and Laura A. McIntosh, *Corporate Governance Update: "Materiality" in America and Abroad*, Harvard Law School Corporate Governance Forum (May 1, 2021), available at https://corpgov.law.harvard.edu/2021/05/01/corporate-governance-update-materiality-in-america-and-abroad/.

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Bebchuk and Roberto Tallarita explain the potential negative effects when corporate leaders are encouraged to serve the interests of stakeholders and not just those of the company's shareholders.[13] They argue that stakeholder governance relies on well-meaning corporate leaders to use their discretion to incorporate stakeholder interests into their objectives. This can contribute to increased insulation and reduced accountability by inducing institutional investors to become more deferential to corporate leaders, less willing to support challenges to the control of these leaders, and more willing to support or accept corporate governance arrangements that shield management from market pressure.[14] Entrenchment of management is associated with—and may even bring about—a reduction in a company's value, as research by Lucian Bebchuk and Alma Cohen suggests.[15]

To be clear, we recognize that directors can and do take non-investor stakeholders' interests into account when making corporate decisions, but generally, we believe this should only be done if consistent with the directors' fiduciary obligation to the company and its shareholders. Unlike shareholders, to whom directors of US companies owe a fiduciary duty of loyalty, directors do not owe a fiduciary duty to other stakeholders and therefore should not be forced to trade off, or seek to balance, the interests of stakeholders with shareholder interests.

Furthermore, we believe that powerful market forces already address the issues raised by stakeholder capitalism, including ESG issues. The process of negotiating contracts among a company's stakeholders, such as product prices, supplier contracts, and employee salaries, is a competitive one. Companies are incentivized to negotiate contracts with stakeholders that allow them to deliver the products and services demanded by customers at the lowest cost. When consumers demand products and services that seek to accommodate environmental or social concerns—electric cars, for example—markets respond by producing the right amount of that product or service. In this way, competition in markets provides solutions to some ESG problems.[16]

In our view, imposing a double materiality standard would invite directors to try to manage too many competing interests and could insulate directors by reducing their accountability to shareholders. We do not see a clear benefit to this approach, particularly when market forces already respond to the issues raised by stakeholder capitalism.

E. Markets already price climate risk.

We also believe that climate change disclosure should be required only where material to a company's business because of our conviction that markets already price climate risk. At Dimensional, our core investment philosophy is based on the belief that in liquid capital markets, security prices reflect available information about fundamental values and the aggregate expectations of market participants.

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13 Bebchuk, Lucian and Roberto Tallarita, *The Illusory Promise of Stakeholder Governance*, Cornell Law Review, Volume 106, 91-178 (Feb. 26, 2020), available at https://cornelllawreview.org/2020/12/01/the-illusory-promise-of-stakeholder-governance-2/.

14 *Id.* at 165.

15 *See* Bebchuk, Lucian and Alma Cohen, *The costs of entrenched boards*, Journal of Financial Economics 78, no. 2, 409-433 (2005), available at http://www.law.harvard.edu/faculty/bebchuk/pdfs/Bebchuk-Cohen_Costs-of-Entrenched-Boards.pdf.

16 Fama, Eugene F., *Market Forces Already Address ESG Issues and the Issues Raised by Stakeholder Capitalism*, Promarket (Sept. 25, 2020), available at https://promarket.org/2020/09/25/market-forces-esg-issues-stakeholder-capitalism-contracts/.

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Since the effects of climate change are uncertain and potentially long lasting, some worry that markets might struggle to incorporate information about climate risk. However, financial markets process complex information every day, and ample academic research has shown that financial markets are remarkably good at processing new information.[17] We believe that climate change is no exception—to the extent that climate change risks are material to a company, this will be reflected in the company's price. This is good news for investors. Generally speaking, it means that investors receive fair prices at the time they buy and sell securities, including securities of companies that may be exposed to climate change and other risks. It also means that if a company improves oversight and mitigation of relevant climate risks facing its business and discloses that information to investors, then, all else equal, we would expect that such positive governance practices would be reflected in higher prices for investors.

Furthermore, to understand the potential impact of environmental characteristics such as greenhouse gas ("GHG") emissions on a company's financial performance and returns, we have conducted extensive research on how company-level GHG emissions have been related to company financials as well as the returns of stocks and bonds. Our research has not shown that there is a reliable relation between the returns of stocks or bonds and GHG emissions.[18] This suggests that the impact of climate change on the expected returns of high-emissions firms, for example, is already captured by prices and proxies for expected future cash flows. Our findings are consistent with the broader literature, which observes that ESG variables are largely subsumed by known drivers of expected returns.[19] This research supports our view that markets already incorporate climate risk into prices.

F. Requiring all companies to include climate change disclosures may not be the best way to mitigate climate change or protect investors.

For these reasons, we strongly encourage the Commission not to impose climate change disclosure obligations on all companies. In our view, requiring all public companies to include climate change disclosures would not be the most effective or direct way to mitigate climate change or hold companies accountable for their impact on the environment. We believe that there are other ways that the federal government could more directly regulate companies' impact on the environment. This is not to suggest that the Commission has *no* part to play in addressing climate change. The Commission's mission, however, is to protect investors, which in the context of public company disclosure means making sure that investors

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17 *See*, for example, Fama, Eugene F., Lawrence Fisher, Michael C. Jensen, and Richard Roll, *The Adjustment of Stock Prices to New Information*, International Economic Review 10, no. 1, 1-21 (1969); Fama, Eugene F., *Two Pillars of Asset Pricing*, American Economic Review 104, no. 6, 1467-1485 (2004); Busse, Jeffrey A., and T. Clifton Green, *Market Efficiency in Real Time*, Journal of Financial Economics 65, no. 3, 415-437 (2002); Hasbrouck, Joel, *Intraday Price Formation in US Equity Index Markets*, Journal of Finance 58, no. 6, 2375-2400 (2003); Chordia, Tarun, Richard Roll, and Avanidhar Suburahmanyam, *Evidence on the Speed of Convergence to Market Efficiency*, Journal of Financial Economics 76, no. 2, 271-292 (2005); Kelley, Eric K. and Paul C. Tetlock, *How Wise Are Crowds? Insights from Retail Orders and Stock Returns*, Journal of Finance 68, no. 3, 1229-1265 (2013); Brogaard, Jonathan, Terrence Hendershott, and Ryan Riordan, *High-Frequency Trading and Price Discovery*, Review of Financial Studies 27, no. 8, 2267-2306 (2014); and Hendershott, Terrence, Dmitry Livdan, and Norman Schurhoff, *Are Institutions Informed About News?*, Journal of Financial Economics 117, no. 2, 249-287 (2015).

18 Dai, Wei and Philipp Meyer-Brauns, *Greenhouse Gas Emissions and Expected Returns* (Nov. 2020), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3714874.

19 *See*, for example, Polbennikov, Simon, et al., *ESG Ratings and Performance of Corporate Bonds*, Journal of Fixed Income 26, no. 1, 21-41 (2016); Blitz, David, and Frank J. Fabozzi, *Sin Stocks Revisited: Resolving the Sin Stock Anomaly*, Journal of Portfolio Management 44, no. 1, 105-111 (2017).

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have equal access to the information they need to make confident and informed investment decisions.[20] We believe that this goal can be achieved—and investors will be protected—if the Commission requires companies that have determined climate change is a material risk to disclose certain climate change information.

Climate change has the potential to profoundly impact our environment and society, and these potential risks are much broader than the financial risks posed to specific companies. While public company disclosures are important for investor protection, attempting to use such disclosures to achieve purposes for which they were not intended may do more harm than good. To complement the Commission's mission of protecting investors through disclosure of material financial risks, we believe that legislators and environmental regulators are better positioned to address the broader environmental and societal risks of climate change. For instance, the US federal government employs climate scientists and policy experts in the Department of Treasury, Council of Economic Advisers, the Environmental Protection Agency (the "EPA") and many other agencies who are actively evaluating potential climate policies in light of evolving information and political feasibility. Congress is doing the same, as are many states and localities. The policies to emerge from these activities are more likely to have a material impact on how companies operate, the choices consumers make, and spur innovation that would help reduce or sequester GHG emissions.

Finally, we note that the world's understanding of what drives climate change continues to mature, and with it, the availability of climate-related data, data providers, reporting frameworks, climate action project developers and verifiers, etc. Prematurely adopting rules regarding climate change disclosure may result in regulations that are not well-calibrated to adapt to the market's evolution in this area. Thus, we urge the Commission to proceed with caution and keep top of mind the costs associated with additional disclosure requirements.

II. ***Where climate change is material to a company's business, the company should be required to disclose a specific set of objective metrics and include certain narrative disclosure to promote consistency.***

For companies that have determined that climate change is material, we recommend that the Commission adopt requirements that would combine disclosure of specific, objective metrics with an MD&A style narrative to explain the climate change risks faced by the company and how they are managed. We believe this targeted approach would provide investors with consistent and reliable information and that this amount of information would be sufficient for investors to evaluate the impact of climate change on a company's business and operations. We also recognize that some companies, even if they determine that climate change is not a material risk to their business, may nevertheless wish to voluntarily comply with any Commission rules or guidance regarding climate change disclosures. In our view, such voluntary compliance would be appropriate as long as companies make it clear in their disclosure whether or not they view climate change as a material risk to their business.

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20 The Commission's website on the page *What We Do* states in relevant part that "[t]he federal securities laws we oversee are based on a simple and straightforward concept: everyone should be treated fairly and have access to certain facts about investments and those who sell them. To achieve this, we require public companies…to regularly disclose significant financial and other information so investors have the timely, accurate, and complete information they need to make confident and informed decisions about when or where to invest." *See* https://www.sec.gov/about/what-we-do.

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A. Where climate change is material to a company's business, the company should disclose its scope 1 and 2 emissions.

Where climate change is material to a company's business, we recommend that the Commission require such companies to disclose scope 1 and scope 2 GHG emissions. Scope 1 emissions are direct GHG emissions that occur from sources that are controlled or owned by the organization (*e.g.*, emissions generated by company facilities or vehicles), and scope 2 emissions are indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling.[21] Both scope 1 and scope 2 GHG emissions can be estimated objectively. It is also our understanding that this information is relatively easy for companies to estimate and report cost-effectively. In our experience, as of December 31, 2020, over 70% (as measured by market capitalization) and approximately 20% (as measured by number of companies) of companies that make up the Russell 3000 Index already voluntarily report scope 1 and scope 2 emissions. We believe this may represent a good portion of companies that have determined climate change is a material risk. For example, the Sustainability Accounting Standards Board ("SASB") has developed its own industry classification system and has identified 25 industries where GHG emissions are "likely a material issue for companies in the industry."[22] Of the companies in the Russell 3000 Index that SASB has classified in one of these 25 industries (and thus, in SASB's view, are likely to face GHG emissions as a material issue), about 85% (as measured by market capitalization) and almost 40% (as measured by number of companies) already voluntarily report scope 1 and scope 2 emissions.

We also believe that scope 1 and 2 GHG emissions should be calculated pursuant to GHG Protocol, which, for scope 2 emissions, includes presenting calculations based on both "market" and "location" methodology.[23] Where relevant, companies should also include scope 1 and 2 GHG emissions for assets that it partially owns. For example, a minority owner of an oil and gas facility that does not operate the facility should be required to include its equity-based share of scope 1 and 2 GHG emissions from that jointly owned facility. To minimize the risk of "greenwashing," we also suggest requiring companies to disclose details on the amount and type of any contractual arrangements used to lower a company's reported GHG emissions. For example, renewable energy certificates, known as RECs, can be used to lower a company's gross market-based scope 2 emissions from purchased electricity.[24] Companies may also seek to be certified by a third-party as "carbon neutral" or "climate neutral"—as Dimensional did—or may self-certify that they have offset some or all of their estimated emissions. In either case, companies typically make such climate-related claims by purchasing carbon credits or offsets, which support projects that seek to reduce, remove, or avoid GHG emissions.[25] Since companies that make climate-related claims may be incentivized to purchase low quality offsets with dubious climate value,[26] we believe that requiring

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21 *See* US Environmental Protection Agency, *Scope 1 and Scope 2 Inventory Guidance*, available at: https://www.epa.gov/climateleadership/scope-1-and-scope-2-inventory-guidance.

22 Sustainability Accounting Standards Board, *SASB Materiality Map*®, available at https://materiality.sasb.org/.

23 *See* Greenhouse Gas Protocol, available at: https://ghgprotocol.org/.

24 *See* EPA Green Power Partnership, *Offsets and RECs: What's the Difference?* (February 2018), available at https://www.epa.gov/sites/production/files/2018-03/documents/gpp_guide_recs_offsets.pdf.

25 A few examples of such projects include nature-based solutions, such as reforestation and land restoration; renewable energy solutions, such as hydropower, wind and solar power projects; community projects, such as improved cooking technology and access to safe water; and waste-to-energy projects.

26 *See*, for example, Temple, James and Lisa Song, *The climate solution actually adding millions of tons of CO2 into the atmosphere*, Technology Review (April 29, 2021), available at https://www.technologyreview.com/2021/04/29/1017811/california-climate-policy-carbon-credits-cause-

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companies to disclose details regarding the nature of such offsets would help investors to better assess a company's efforts to mitigate its impact on the environment.

If companies are required to disclose scope 1 and 2 GHG emissions, the Commission could also require disclosing the breakdown of those emissions across the different types of GHGs tracked by the EPA, *i.e.*, carbon dioxide, methane, nitrous oxide, and fluorinated gases. Such a breakdown should not be significantly more burdensome for a company to provide since the company would already be estimating and analyzing its overall emissions. Because the different GHGs vary in their potency as contributors to global warming and are regulated differently, information on which GHGs make up a company's emissions can be useful for investors. For example, if a company's GHG emissions are concentrated in one type of gas, and that gas is subject to regulations, that could increase the company's exposure to regulatory and other risks.

We also note that some funds, particularly those that pursue sustainability strategies, disclose aggregate GHG emissions of the companies held by the fund. Currently, such funds often must either purchase modeled data from third-party vendors, which increases costs to the funds and their shareholders, or undertake to estimate emissions levels on their own, which may not be reliable. Requiring companies to disclose scope 1 and scope 2 emissions would give funds that disclose aggregate GHG emissions of their portfolios a more reliable and cost-effective way to collect and provide this information to their investors.

B. Where climate change is material to a company's business, the company should include a narrative discussion of climate change-related risk, which would explain how the board oversees climate change risk.

In addition to disclosing scope 1 and 2 GHG emissions, we believe companies should be required to include an MD&A style narrative discussion of the nature of material climate change risks faced by the company. Companies vary in their exposure to the potential physical effects of climate change, referred to as "physical risk," such as increased severity of extreme weather events, higher temperatures, and rising sea levels, and in their exposure to the indirect effects of climate change, referred to as "transitional risk," such as shifts in government regulation and taxation and in consumer demand. Companies that face material physical or transitional risks from climate change should provide a discussion of how these risks might impact their business and how they manage those risks.

We also recommend that the Commission require companies to explain how the company's board of directors oversees material climate change risk. Specifically, we believe companies should disclose which board committee oversees risks relating to climate change, how the board or relevant committee is informed of material climate change risks, and the relevant experience of directors who oversee climate change matters. In proxy statements relating to the election of directors, some companies currently include a "skills matrix," which lists the skills and qualifications that the company views as relevant for overseeing its business and indicates how the nominated directors meet those needs. We believe that having access to this type of information as it relates to climate change, combined with disclosure of which board committees are responsible for overseeing climate change risk, would help investors to assess the efficacy of a

co2-pollution/; Brander, Matthew, Michael Gillenwater and Francisco Ascui, *Creative accounting: A critical perspective on the market-based method for reporting purchased electricity (scope 2) emission*s, Energy Policy 112, 29-33 (2018).

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company's approach to managing climate change risk.

C. No auditing or additional certification of climate change disclosure should be required.

Finally, we advise against requiring that scope 1 and scope 2 GHG emissions data be audited—requiring an audit would add costs without much added benefit. Similarly, we do not believe that additional certification for climate change disclosure by a CEO or other individual is necessary; the existing liability framework under the federal securities laws should be sufficient to prevent companies from including disclosure that is false or misleading.

III. Other climate change-related information may not be sufficiently useful to investors to justify the costs of requiring it.

Other than scope 1 and scope 2 GHG emissions, we are not aware of any objective, consistent, reliable, and cost-effective metrics that we believe companies should be required to include in their regulatory disclosures at this time. Many climate change-related metrics—such as scope 3 GHG emissions—depend on certain assumptions and variables and are thus prone to error, which can be costly both for the reporting company as well as for the market. That said, we believe companies—regardless of whether they view climate change as material or not—should be allowed to voluntarily include other climate change-related metrics or information in their regulatory materials. This may give the Commission insight into other metrics that may be worth requiring in the future. The availability of climate data, reporting frameworks, and our understanding of what drives climate change continues to mature, and thus we believe it makes sense for the Commission to reassess climate change disclosure on a regular basis. However, because it takes time to develop and collect data that is both cost-effective and meaningful to investors, we suggest that the Commission revisit the state of climate-related data not more frequently than every five years.

A. Reporting scope 3 GHG emissions can be costly and unreliable.

Scope 3 GHG emissions are the result of activities from assets not owned or controlled by the reporting company, but that the company indirectly impacts in its value chain.[27] Because scope 3 assessments can be extremely costly, we do not recommend requiring companies to disclose scope 3 GHG emissions. At Dimensional, we conducted a scope 3 assessment as part of our climate neutral certification with South Pole.[28] Estimating our scope 3 GHG emissions would appear to be a relatively straightforward task, given that we are an investment manager that neither manufactures nor distributes physical goods. Nevertheless, in our experience, it was still a costly and complex undertaking.

We believe that the bigger issue with requiring disclosure of scope 3 GHG emissions is that while in some industries, companies may be able to reliably estimate their scope 3 emissions, most companies are not able to estimate their actual scope 3 emissions with reasonable reliability at this time. Because scope 3 emissions measure activities from assets not owned or controlled by the reporting company, they can be subject to significant variation due to assumptions about a company's value chain. As a result, we do not

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27 *See* US Environmental Protection Agency, *Scope 3 Inventory Guidance*, available at: https://www.epa.gov/climateleadership/scope-3-inventory-guidance.

28 *See supra* note 1.

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currently recommend requiring disclosure of scope 3 GHG emissions; doing so would likely increase costs without providing reliable or meaningful information to investors. This is not to say that companies should not seek to undertake the process of assessing their scope 3 GHG emissions; doing so may provide the company with a general idea of the larger contributors to its scope 3 emissions, which may be helpful for evaluating its climate risk exposure. For companies that do have significant scope 3 emissions, we believe the risks associated with these emissions should be disclosed qualitatively to investors, as discussed above in Section II(B).

B. Disclosing the results of a company's climate change-related scenario analysis generally would not provide investors with reliable or meaningful information about the risks faced by the company.

Climate change scenario analysis—*i.e.*, when companies conduct internal assessments to evaluate the impact of certain climate scenarios—can be useful to help companies better understand the climate change risks that they might face in various potential future pathways. However, we do not believe it would be appropriate to require companies to conduct such analyses or to disclose the results of such exercises to investors.

Climate scenario models generally rely on many assumptions as to the timing, scope and magnitude of carbon taxes as well as assumptions as to the potential impact of physical risks of climate change.[29] As a result, the output of climate scenario models can be very sensitive to the assumptions made, resulting in potentially large variations in outcomes and limiting the usefulness of the data. Furthermore, the methodologies used by most commercially available climate scenario models are either not transparent or very complex and would be difficult to explain clearly and concisely to an average investor. While we do believe it may be helpful for companies to undertake climate scenario analysis, this is primarily to help companies better understand the general theme of interactions of one variable on potential outputs. But because of the many assumptions used in climate scenario models, it is highly likely that actual results will differ meaningfully from any predicted outcome from a climate scenario analysis.

We also note that companies conduct scenario analyses for many different situations outside of climate change—a company might conduct a scenario analysis to determine how it might fare during a global health pandemic, for example. However, to our knowledge, companies do not typically disclose the results of such hypothetical analyses in their disclosure documents. Requiring companies to include results of climate scenario analyses could also have a chilling effect. If companies are required to disclose results of their scenario analyses, they might purposely avoid conducting certain analyses that could be very important to the company's strategic planning. For all of these reasons, we do not believe that companies should be required to disclose the results of any climate scenario analyses.

C. If the Commission adopts rules requiring climate change-related disclosure, the Commission should give additional weight to a company's compliance with such rules when determining whether to grant no-action relief allowing a company to exclude a shareholder proposal requesting additional climate change-related disclosure.

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29 For a discussion of the challenges of assessing the economic costs of climate change, *see* Chi, Joseph, Mathieu Pellerin, and Jacobo Rodriguez, *The Economics of Climate Change* (Oct. 2020), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3715848.

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Over the last several years, we have seen an increasing number of shareholder proposals that ask companies to disclose a significant amount of climate change information, much of which goes far beyond the metrics and disclosure that we recommend in this letter. Such shareholder proposals can be costly for companies, and as we have explained above, we do not believe that requiring disclosure of additional metrics or information relating to climate change would benefit investors at this time.

If the Commission adopts rules requiring companies to include specific climate change-related disclosures, and a company that complies with such rules receives a shareholder proposal asking for disclosure of additional climate change-related information, we believe that in many cases, it will be appropriate for the company to exclude such a shareholder proposal. Rule 14a-8(i)(10) under the Securities Exchange Act of 1934 permits companies to exclude a shareholder proposal if the company has already substantially implemented the proposal. While this determination will ultimately depend on the specific facts and circumstances, we encourage the Commission to affirmatively state that, in determining whether to grant no-action relief to exclude a climate change-related shareholder proposal, it will give more weight to whether the company has complied with the Commission's rules regarding climate change disclosure.

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For the reasons above, we recommend that the Commission work within the existing disclosure framework, which is rooted in the well-established concept of materiality. Since climate change does not pose the same level of risk for all companies, the Commission should impose specific climate change disclosure requirements *only* on companies that have determined that climate change may have a material impact to their business. We believe that requiring disclosure of scope 1 and 2 GHG emissions and an MD&A style narrative on climate change risk would provide investors with sufficient information to evaluate the impact of climate change on a company's business and operations.

If we could be of further assistance, please do not hesitate to contact Stephanie Hui, Vice President and Counsel, at [redacted] or at [redacted]. We would welcome the opportunity to present an expanded discussion of our thoughts on these issues.

Sincerely,

Gerard O'Reilly
Co-CEO and Chief Investment Officer

Joseph Chi
Head of Responsible Investment and Senior Portfolio Manager