

June 17, 2022

Submitted electronically

Vanessa A. Countryman, Secretary
US Securities and Exchange Commission
100 F Street NE, Washington, DC 20549

RE: Public Comment on the Enhancement and Standardization of Climate-Related Disclosures for Investors Proposed Rule— Release Nos. 33-11042; 34-94478; File No. S7-10-22

Dear Secretary Countryman:

I am pleased to submit the following comment on behalf of the US coalition of Publish What You Pay (PWYP-US) on the Proposed Rule published by the US Securities and Exchange Commission (SEC) on the Enhancement and Standardization of Climate-Related Disclosures for Investors.

Publish What You Pay (PWYP) is a global civil society coalition made up of over 1000 organizations operating in more than 70 countries. The US coalition was founded in 2004 and consists of 40 anti-corruption, financial transparency, anti-poverty, tax justice, environmental, faith-based, and human rights organizations representing over five million constituents across the United States. PWYP-US members have almost two decades of experience advocating for greater financial transparency in the oil, gas, and mining sectors, including specific experience with SEC rulemaking.

We welcome the Commission's Proposed Rule as a critical opportunity to ensure publicly listed companies disclose information about climate-related financial risks and their strategy to manage these risks responsibly. We commend the Commission for its efforts and appreciate the opportunity to comment on the Proposed Rule. The attached document contains a summary of our analysis and specific recommendations.

We welcome the chance to discuss our comments and recommendations with you in further detail. Please do not hesitate to contact us with any questions.

Sincerely,



Carly Oboth, Director
Publish What You Pay-US

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1. INTRODUCTION

There is a global consensus among policymakers, scientists, financial institutions, and market regulators that climate change is real and that its physical manifestations will devastate communities, ecosystems and economies.

The latest Intergovernmental Panel on Climate Change (IPCC) report predicts widespread economic impacts from climate change and related extreme weather events, which could cause significant economic instability, limited access to natural resources and disruptions in supply chains.

¹ Indeed, in the United States, in 2021 alone, there were a record 20 billion-dollar-or-greater “weather and climate disasters with losses exceeding \$1 billion each to affect the United States.” The US National Oceanic and Atmospheric Administration (NOAA) has identified 323 such events since 1980 which have resulted in damages “exceed[ing] \$2.195 trillion.”² As climatic events increase in frequency and severity, the associated costs that have been rising over the last two decades, will only continue to rise. Indeed, the IPCC’s August 2021 report noted, “there will be an increasing incidence of unprecedented extreme climate events even at a warming of 1.5°C, the limit set under the UN’s Framework Convention on Climate Change’s Paris Agreement, and that these extremes will get worse for every additional fraction of a degree of warming.”³

The impacts of climate change have serious consequences for virtually every sector of society. According to the US NOAA, “[d]rought can harm food production and human health. Flooding can lead to disease spread and damages to ecosystems and infrastructure. Human health issues can increase mortality, impact food availability, and limit worker productivity.”⁴ These consequences are interrelated and pose considerable risks, not only to those most directly in harm’s way, but to our entire economic system.

There is also global consensus that greenhouse gas (GHG) emissions will need to be substantially curtailed in order to ensure the global temperature does not exceed 1.5°C of warming.⁵ Like the physical impacts of climate change, this needed transition to a lower-carbon economy will also significantly alter economic modalities as future regulations and changes in consumer demand impact how energy is sourced and used. Indeed, some of the largest financial institutions and pension funds in the United States have already adjusted their own planning to prepare.⁶

¹ Intergovernmental Panel on Climate Change (IPCC). 2022. *Climate Change 2022: Impacts, Adaptation and Vulnerability Summary for Policymakers*. February 2022, pg. 21 para. B.5.3. PDF available for download here: <https://www.ipcc.ch/report/sixth-assessment-report-working-group-ii/>

² US National Oceanic and Atmospheric Administration (NOAA). *Billion-Dollar Weather and Climate Disasters*. National Centers for Environmental Information, <https://www.ncei.noaa.gov/access/billions/>. Accessed June 7, 2022.

³ IPCC Working Group I. 2021. *Climate Change 2021: The Physical Science Basis*, August 6, 2021, p.SPM-5, <https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/>

⁴ US NOAA. *Climate Change Impacts*. <https://www.noaa.gov/education/resource-collections/climate/climate-change-impacts>

⁵ IPCC. 2018. *Global Warming of 1.5°C: An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*. Summary for Policymakers, 2018, pg. 10, https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_HR.pdf.

⁶ See e.g., Streur, John. Calvert Research and Management. Comment to the SEC Re: Request for Public Input on Climate Change Disclosures. June 1, 2021, <https://www.sec.gov/comments/climate-disclosure/c112-8856988-239822.pdf>. See also Bless, Rudolf A. Bank of America. Comment to the SEC Re: Request for Public Input on Climate Change Disclosures. June 13, 2021, <https://www.sec.gov/comments/climate-disclosure/c112-8914492-244735.pdf>. See also Frost, Marcie. California Public

The energy transition will have sweeping impacts on nearly every corner of our economy, and there can be no question that those industries that require or benefit from a high carbon economy will – and in many cases already do – face substantial changes to their business models and financial prospects. Given the universal and transformational nature of climate change, and the necessary transition to a low carbon economy, it is therefore implausible that the securities markets and issuers will be unaffected.

The SEC’s Proposed Rule for the Enhancement and Standardization of Climate-Related Disclosures for Investors, hereafter referred to as the “Proposed Rule,”⁷ is a natural and appropriate regulatory response to these risks: it is responding to an existing set of market inefficiencies that represent systemic risk to the broader economy. It falls directly within the SEC’s statutory authority and stated mission of protecting investors; maintaining fair, orderly, and efficient markets; and facilitating capital formation.⁸ As the Financial Stability Oversight Council (FSOC) recognized in its October 2021 report, disclosure of this type of information is essential to ensuring that climate-related financial risk does not jeopardize the stability of financial markets.⁹

As BlackRock’s CEO Larry Fink succinctly put it: “climate risk is investment risk.”¹⁰ Climate change, and the transition to a low carbon economy, poses unprecedented systemic risk to financial markets,¹¹ impacting companies’ balance sheets, assets, and overall performance. The SEC has a responsibility to ensure investors have access to “the full financial impact of climate change on a company’s financial position and the quality of its earnings as it faces the future.”¹² Requiring covered issuers to disclose information about their climate-related financial risks and metrics, will help investors understand the risks and opportunities associated with their investments in order to make informed decisions about how to allocate capital. Likewise, information relating to climate-related risk governance and management processes, a company’s GHG emissions profile, and financial resilience are essential for investors to be more fully able to assess risks and the broader stability of financial markets.

Employees’ Retirement System. Comment to the SEC Re: Request for Public Input on Climate Change Disclosures. June 12, 2021, <https://www.sec.gov/comments/climate-disclosure/cil12-8914492-244735.pdf>

⁷ Securities and Exchange Commission (SEC). *Enhancement and Standardization of Climate-Related Disclosures for Investors*, Proposed Rule. 87 FR 21334, hereafter “Proposed Rule.” <https://www.federalregister.gov/documents/2022/04/11/2022-06342/the-enhancement-and-standardization-of-climate-related-disclosures-for-investors>

⁸ SEC. *About the SEC*. <https://www.sec.gov/about.shtml>. Accessed May 20, 2022.

⁹ US Department of Treasury. 2021. *Financial Stability Oversight Council identifies Climate Change as an Emerging and Increasing Threat to Financial Stability*. October 21, 2021, <https://home.treasury.gov/news/press-releases/jy0426>

¹⁰ BlackRock, 2020. *BlackRock’s 2020 Letter to Clients: A Fundamental Reshaping of Finance*. January 2020, <https://www.blackrock.com/us/individual/larry-fink-ceo-letter>

¹¹ US Commodity Futures Trading Commission. 2020. *CFTC’s Climate-Related Market Risk Subcommittee Releases Report*. September 9, 2020, <https://www.cftc.gov/PressRoom/PressReleases/8234-20>. See also US Department of Treasury. 2021. *Financial Stability Oversight Council identifies Climate Change as an Emerging and Increasing Threat to Financial Stability*. October 21, 2021, <https://home.treasury.gov/news/press-releases/jy0426>

¹² Ceres. 2021. *Lifting the Veil: Investor Expectations for Paris-Aligned Financial Reporting at Oil and Gas Companies*. June 17, 2021, pg. 20. PDF available for download here: <https://www.ceres.org/resources/reports/lifting-veil-investor-expectations-paris-aligned-financial-reporting-oil-and-gas>

The ubiquity of supportive comments from investors, representing trillions of dollars in assets, in response to the SEC’s March 2021 Request for Public Input on Climate Change Disclosures¹³ is already beyond sufficient to demonstrate the importance of this information to investors. According to SEC Chair Gary Gensler, “three out of every four” comments submitted during the Request for Information supported mandatory disclosures, including supportive comments by companies like Walmart, Chevron, and BlackRock.¹⁴

The Proposed Rule is carefully tailored to respond to the specific asks and needs of investors, as well as concerns raised by issuers. In particular, it does this by hewing closely to the widely accepted Task Force on Climate-Related Financial Disclosures (TCFD) framework,¹⁵ incorporating information into financial statements, and in providing assurance to ensure the information is decision-useful.

The SEC will no doubt receive another historic wave of comments from investors and other market participants by the close of this comment period illustrating the strong investor case for this information. In light of this overwhelming investor demand, and the considerable evidence of the risks posed to investors and our markets more broadly, the suggestion from those opposing the SEC’s efforts that it is stepping outside its lane with this rulemaking could not be farther from the truth. Indeed, it is the critics of the SEC’s Proposed Rule – who effectively seek a climate *exception* to SEC rulemaking authority – that are the ones seeking to alter its traditional authority.

The Proposed Rule covers a lot of ground, and will no doubt garner a lot of comments on its many aspects. This comment does not aspire to address the entirety of the Proposed Rule. Instead it will focus more narrowly on:

- The Particular Relevance of Disclosures for the Oil and Gas Sector;
- PWYP-US’ Analysis of Key Aspects of the Proposed Rule;
- The SEC’s Statutory Authority, and specifically responding to some of the primary arguments we have seen by critics of the SEC’s rulemaking; and
- Recommendations to Strengthen the Utility and Effectiveness of the Proposed Rule

2. RELEVANCE OF DISCLOSURES FOR THE OIL AND GAS SECTOR

In addition to addressing the SEC’s authority to implement a disclosure framework for climate-related financial risk, PWYP-US will focus primarily on the relevance of the Proposed Rule to the oil and gas sector because that is where our expertise lies. The oil and gas sector is one of the most significant and most immediately impacted by both physical and transition risk, and industry actors (and their allies) are likely to be among those that argue the loudest against some (or all) aspects of mandatory disclosures.

The SEC’s sector-agnostic approach to applying its proposed disclosure requirements represents a clear recognition of the broad, cross-sector, systemic impacts of climate-related financial risk. Applying the same requirements across all sectors helps to achieve consistent and comparable reporting and is a

¹³ SEC. 2021. *Public Input Welcomed on Climate Change Disclosures*. March 15, 2021, <https://www.sec.gov/news/public-statement/lee-climate-change-disclosures>

¹⁴ SEC. 2021. Chair Gary Gensler: *Prepared Remarks before the Principles for Responsible Investment ‘Climate and Global Financial Markets’ webinar*. July 28, 2021, <https://www.sec.gov/news/speech/gensler-pri-2021-07-28>

¹⁵ 70% of all investor commentators call for TCFD. Ceres. 2022. *Briefing on the SEC’s Climate Disclosure Rule, Keynote with SEC Chair Gary Gensler*. April 12, 2022, slide 9, <https://www.ceres.org/sites/default/files/SEC%20Proposed%20Rule%20-%20Chair%20Gensler%20Briefing%204.12.22.pdf>

critical first step towards generating comprehensive and detailed, meaningful disclosure of climate-related risk that investors have long been asking for. As a next step, however, we urge the SEC to complement the Final Rule with sector-specific guidance, beginning with the oil and gas sector.¹⁶

Climate-related risk information is most clearly and unquestionably material – indeed, it is existential – to oil and gas companies. There is broad, global consensus that in order to avoid the worst, and most costly, impacts of climate change, global warming must be limited to 1.5°C. In March, the Tyndall Centre for Climate Change Research found that in order to preserve even a 50-50 chance of keeping warming below 1.5°C, we need “immediate and deep cuts in the production of fossil fuels” with oil and gas production phased out no later than 2050 and in the wealthiest nations by 2034.¹⁷ The financial implications of failing to phase out fossil fuels and transition to less carbon-intensive energy sources is profound. Thus, suggestions from companies (or their allies) that climate risk disclosures fall outside SEC’s authority or are immaterial to investors should be viewed with substantial skepticism.

a. Emerging Consensus on Future Decline in Oil Demand

At the same time, evidence is growing that the oil industry’s business model has been under stress for some time. In 2020, North American and European oil and gas companies wrote down \$145 billion combined, or roughly 10% of the companies’ collective total market value, in the first quarter of 2020 alone because of uncertainty over future demand for products amid the rising popularity of electric vehicles, the proliferation of renewable energy, and growing concern about the lasting impact of climate change.¹⁸

According to a 2020 study by McKinsey, total returns to shareholders for the average oil and gas company, between 2005 to 2020, lagged the S&P 500 by seven percentage points.¹⁹ The study shows that over the same period, global capital investment by the sector amounted to more than \$10 trillion dollars in real terms. The promise of unconventional oil and gas development has resulted in over-investment in the oil and gas sector, which impacts the sector’s ability to earn productive returns.²⁰ While Russia’s attack on Ukraine has boosted oil prices in the short-term, the long-term transition risk signals are only becoming clearer.²¹

¹⁶ See our recommendations below for suggested climate-related financial risk disclosures for oil and gas companies.

¹⁷ The Tyndall Centre for Climate Change Research is a UK-based organization that works with several universities to bring together scientists to “research, assess and communicate from a distinct trans-disciplinary perspective, the options to mitigate, and the necessities to adapt to current climate change and continuing global warming, and to integrate these into the global, UK and local contexts of sustainable development.” Calverley, Dan and Kevin Anderson, “Phaseout Pathways for Fossil Fuel Production Within Paris-compliant Carbon Budgets,” *Tyndall Centre for Climate Change Research*, March 2022, pp. 6 and 49, [https://www.research.manchester.ac.uk/portal/en/publications/phaseout-pathways-for-fossil-fuel-production-within-pariscompliant-carbon-budgets\(c7235a8e-e3b1-4f44-99de-c27958c03758\).html](https://www.research.manchester.ac.uk/portal/en/publications/phaseout-pathways-for-fossil-fuel-production-within-pariscompliant-carbon-budgets(c7235a8e-e3b1-4f44-99de-c27958c03758).html).

¹⁸ Eaton, Collin and Sarah McFarlane. 2020. “2020 was one of the worst-ever years for oil write-downs,” *Wall Street Journal*, December 27, 2020, <https://www.wsj.com/articles/2020-was-one-of-the-worst-ever-years-for-oil-write-downs-11609077600>.

¹⁹ McKinsey & Company. 2020. *Oil and gas after Covid-19: The day of reckoning or a new age of opportunity*. May 15, 2020, <https://www.mckinsey.com/industries/oil-and-gas/our-insights/oil-and-gas-after-covid-19-the-day-of-reckoning-or-a-new-age-of-opportunity>

²⁰ *Id.*

²¹ Patterson, Scott and Sam Goldfarb. 2022. “Why Are Gasoline Prices So High? Ukraine-Russia War Sparks Increases Across U.S.” *The Wall Street Journal*. April 1, 2022, <https://www.wsj.com/articles/why-gas-prices-expensive-11646767172>

In 2021, a new consensus emerged among the largest and most prominent industry forecasters, including the International Energy Agency (IEA), Rystad Energy, and Wood Mackenzie, that 2050 demand for oil and gas will fall below current levels of about 100 million barrels per day.²² This is despite an expected doubling of global domestic product (GDP) by 2050,²³ severing the virtual lockstep growth in hydrocarbon demand and economic growth witnessed over many decades.²⁴

The COVID-19 pandemic also caused experts within the oil and gas sector and industry analysts to dramatically rethink previous economic models for forecasting when the world will reach peak demand for oil, or the point at which global oil and gas production reaches its maximum rate before declining. While there is significant debate around the specifics of the declining rate of oil production, analysts are largely in agreement that if we have not reached peak demand already,²⁵ it will happen within the next decade.

Through scenario analysis, BP speculates that peak demand for oil was reached in 2019, “while another of its scenarios sees a peak in 2035.”²⁶ Rystad Energy and Norwegian oil major Equinor both estimate that peak demand will occur around 2027, while TotalEnergies forecasts peak demand around 2030.²⁷ In its accelerated energy transition to 2050 scenario analysis, Wood Mackenzie concludes that terminal decline of the global price of oil could begin as soon as 2023, after which “the decline accelerates to year-on-year falls of 2 million [barrels per day].”^{28,29} Regardless of the exact timing, it is clear that the long-term demand for fossil fuels will significantly decline, and that the gas and oil sector must plan accordingly.

²² International Energy Agency (IEA). 2021. *Net Zero by 2050: A Roadmap for the Global Energy Sector*. May 2021, pg. 18, <https://www.iea.org/reports/net-zero-by-2050>; See also Wood Mackenzie. 2021. *Reversal of Fortune: Oil and Gas Prices in a 2-degree World*. 2021, pg.5, <https://www.woodmac.com/horizons/reversal-of-fortune-oil-and-gas-prices-in-a-2-degree-world/>; Rystad Energy. 2021. *Slowing down as electric vehicles accelerate, oil demand set to peak at 101.6 million bpd in 2026*. April 21, 2021, <https://www.rystadenergy.com/newsevents/news/press-releases/slowng-down-as-electric-vehicles-accelerate-oil-demand-set-to-peak-at-101p6-million-bpd-in-2026/>

²³ PWC. 2017. *The world in 2050: The long view: how will the global economic order change by 2050?* February 2017, <https://www.pwc.com/gx/en/research-insights/economy/the-world-in-2050.html>

²⁴ There was a 92% coefficient of determination between global GDP (in current USD) and daily oil demand in million barrels per day from 1965-2020, according to World Bank and BP Statistical Review data. BP. 2021. *Statistical Review of World Energy 2021*. July 2021, pg. 4, <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf>

²⁵ Nagle, Peter. 2020. “The Oil market Outlook: Lasting Scars from the Pandemic,” *World Bank Data Blog*, October 27, 2020, <https://blogs.worldbank.org/opendata/oil-market-outlook-lasting-scars-pandemic>. See also Lewis, Mark, *Big Oil: Staring down the barrel of an uncertain future*, *BNP Paribas Investors Corner*. June 16, 2020, <https://investors-corner.bnpparibas-am.com/investing/big-oil-staring-down-the-barrel-of-an-uncertain-future/>

²⁶ Browning, Noah, “Factbox: Pandemic brings forward predictions for peak oil demand,” Reuters, September 28, 2021, <https://www.reuters.com/business/energy/pandemic-brings-forward-predictions-peak-oil-demand-2021-09-28/>

²⁷ *Id.*

²⁸ For context, global production of oil in 2021 averaged 95.57 million barrels per day, according to the US Energy Information Administration. See US Energy Information Administration (IEA). *Short-term Energy Outlook*. https://www.eia.gov/outlooks/steo/report/global_oil.php. Accessed on June 8, 2022.

²⁹ Wood Mackenzie. 2021. *Reversal of fortune: Oil and gas prices in a 2-degree world*. April 2021, pg. 7, <https://www.woodmac.com/horizons/reversal-of-fortune-oil-and-gas-prices-in-a-2-degree-world/>.

Investors are increasingly concerned about the impacts of long-term demand issues, as highlighted in recent research from the Carbon Tracker Initiative.³⁰ As an example, a survey by Columbia University's Center on Global Energy Policy from April 2022 of 12 investors active in the oil and gas sector, with combined assets under management of nearly \$8 trillion dollars, found that, "[i]nvestors expressed uncertainty regarding oil and gas demand in the future."³¹

Another survey of 250 institutional investors in the oil and gas sector published by the consulting firm Boston Consulting Group's Center for Energy Impact found that while many investors are optimistic about short-term oil prices, two-thirds of survey participants agree that peak oil demand will occur by 2030—a slight increase from last year's estimates. Further, only 30 percent of the 250 investors surveyed think that oil and gas securities will take on an increasing role in their portfolios in the next decade, and nearly 60 percent feel pressure from their clients to divest their fossil-fuel investments.³²

A March 2022 survey by asset manager Robeco of 300 institutional and wholesale investors, with an estimated total of \$23.7 trillion assets under management, found that 22 percent of surveyed investors planned to completely divest from oil and gas companies in the next two years, because their carbon emissions conflict with their views on climate change. In the report Robeco Climate Strategist Lucian Peppelenbos notes, "[f]or oil and gas, the divestment appetite has doubled" since past surveys.³³

b. Oil and Gas Company Valuations are Heavily Based on the Viability of Future Reserves

The most common means of assessing the value of a public oil and gas company involves the estimation of the economic life or availability of its oil and gas reserves, especially proven reserves³⁴, over an investment horizon. In fact, IHS Energy analysis has found that about 80 percent of the value of most publicly traded oil and gas companies is based on the viability of proved reserves.³⁵

Underpinning companies' estimates of future cash flow are assumptions about long-term future demand and future commodity prices, which are largely based on historic oil prices. Because oil and gas companies' valuations are heavily influenced by historical data, very few oil and gas companies are currently factoring in the risks of decreased demand in the next 30 years and the potential impacts that seismic market shifts could have on the economic viability of different projects and overall reserves figures. Estimates of reserves quantities and the technological and economic factors that influence them

³⁰ Carbon Tracker. 2021. *Utilities risk losing billions as surging fuel prices compound problems facing gas industry*. October 19, 2021, <https://carbontracker.org/utilities-risk-losing-billions-as-surging-fuel-prices-compound-problems-facing-gas-industry/>

³¹ Wong, Hon Xing; Naomi Zimmermann; Erin Blanton; and Tim Boersma. 2022. "ESG investing and the oil and gas industry: An Analysis of Climate Disclosures," *Columbia University Center on Global Energy Policy*. March 2022, pg. 15, https://www.energypolicy.columbia.edu/sites/default/files/file-uploads/Upstream_ESG_Final.pdf

³² Berns, Maurice, and Rebecca Fitz, et al. 2022. "How Institutional Investors See the Future of Oil and Gas," *Boston Consulting Group*, January 6, 2022, <https://www.bcg.com/publications/2022/how-investors-see-future-of-oil-gas>

³³ Robeco. 2022. *2022 Global Climate Survey*. March 2022, pg. 21, <https://www.robeco.com/docm/docu-202203-robeco-global-climate-survey-report.pdf>

³⁴ According to the Society of Petroleum Engineers, a proven reserve refers to "quantities of petroleum which, by analysis of geological and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under current economic conditions, operating methods, and government regulations." Society of Petroleum Engineers, "Glossary of Terms Used in Petroleum Reserves/Resources Definitions," <https://www.spe.org/en/industry/terms-used-petroleum-reserves-resource-definitions/>

³⁵ Yergin, Daniel, Ph.D, and Elena Pravettoni. 2016. "Do investments in oil and gas constitute systemic risk?" *IHS Markit*. October 26, 2016, <https://ihsmarkit.com/research-analysis/do-investments-in-oil-and-gas-constitute-systemic-risk.html>

are also subject to constant change. According to Ceres, “these estimates dictate the value of proved oil and gas reserves. They are used to assess the carrying value of the property, plant and equipment needed to drill, produce, transport, refine and store such reserves.”³⁶

Another related area of concern is with respect to asset retirement. Oil and gas companies’ estimate of future cash flows “also affect the length of useful life of assets which in turn affects current depreciation expense as well as the timing and amount of expenditures needed to fulfill legally mandated asset retirement obligations (ARO) such as covering the cost of plugging and abandoning wells and posed by state and federal regulations.”³⁷

However, due to weak financial assurance requirements at the state level, companies have largely avoided posting bonds with state governments to cover these costs and instead have allowed cleanup liabilities to accumulate on their books.³⁸ This buildup of liabilities – calculated on a discounted present value basis and reported in company financial statements as AROs – will only accelerate over the course of the energy transition as the industry enters a state of permanent decline.³⁹ It’s also worth noting that “[a] commitment to achieve net zero emissions by 2050 for instance may require shortening the estimated life of certain assets which will increase current depreciation expense and may trigger or increase in ARO.”⁴⁰

Hundreds of billions of dollars will be needed to “close the estimated 3.3 to 4 million active, idle and abandoned but unplugged onshore wells in the US.”⁴¹ It is unlikely that the AROs in company financial statements will be sufficient to cover these costs, so lenders, investors and creditors could be left to pay. States will be forced either to ramp up enforcement against oil and gas companies or collect needed cleanup funds from taxpayers.⁴²

Given the significance of the assumptions that underpin the value of a company’s oil and gas reserves, such as future oil demand and commodity prices – and the myriad factors that can easily change them – it is essential that companies disclose their underlying assumptions to investors. This would allow investors to properly vet companies’ assumptions to ensure they are in line with external indications. The effect of climate risk on financial assumptions and estimates is not hypothetical. Investors would be better protected if they could understand how management is incorporating climate change into financial assumptions and estimates before an impairment happens. To do that, they need the disclosures required by current accounting standards and covered in the Proposed Rule.

³⁶ Ceres. 2021. *Lifting the Veil: Investor Expectations for Paris-Aligned Financial Reporting at Oil and Gas Companies*. June 17, 2021, pg. 5. PDF available for download here: <https://www.ceres.org/resources/reports/lifting-veil-investor-expectations-paris-aligned-financial-reporting-oil-and-gas>

³⁷ *Id.* at pg. 7

³⁸ Carbon Tracker. 2020. *Billion Dollar Orphans: Why millions of oil and gas wells could become wards of the state*. October 1, 2020, pg. 8. PDF available for download here: <https://carbontracker.org/reports/billion-dollar-orphans/>

³⁹ *Id.* at pg. 9

⁴⁰ Ceres. 2021. *Lifting the Veil: Investor Expectations for Paris-Aligned Financial Reporting at Oil and Gas Companies*. June 17, 2021, pg. 8. PDF available for download here: <https://www.ceres.org/resources/reports/lifting-veil-investor-expectations-paris-aligned-financial-reporting-oil-and-gas>

⁴¹ Carbon Tracker. 2020. *It’s Closing Time: The Huge Bill to Abandon Oilfields Comes Early*. June 18, 2020, pg. 13. PDF available here for download: <https://carbontracker.org/reports/its-closing-time/>

⁴² *Id.* at pg. 8

c. Current Valuations of Oil and Gas Companies do not Reflect Energy Transition Risks

In 2008, the SEC amended Regulation S-X §210.4-10 and Regulation S-K §229.1202 with its Modernization of Oil and Gas Reporting Rule to provide “a more meaningful and comprehensive understanding of oil and gas reserves to help investors evaluate the relative value of oil and gas companies.”⁴³ One of the most significant changes in the rule was including unconventional resources, such bitumen, shale and coalbed methane, to the Commission’s “oil and gas producing activities” definition.⁴⁴ In its Final Rule, the SEC noted that all commenters agree that such a change would, “greatly improve the quality and completeness of the disclosures.”⁴⁵

However, the Modernization of Oil and Gas Reporting regulation is again in need of an update because it is clear that current disclosures do not paint an accurate picture.⁴⁶ In particular, current reserves disclosures do not reflect the increased climate transition risk posed by oil and gas reserves, and especially by its many unconventional reserves. Additionally, not all reserves are created equally in terms of climate transition risk. For example, according to the IPCC, bitumen or oil sands reserves produce more than three to four times more CO₂ emissions upon combustion than crude oil and more than 30 percent more than natural gas.⁴⁷ Reserves disclosures that reflect the variance in climate transition risk between reserves types, for example, would provide more decision-useful information to investors.

As a study submitted to the SEC by WK Associates shows, current valuations from major oil and gas companies defy the consensus that an energy transition could ultimately bring oil and gas demand below current levels by 2050.⁴⁸ Indeed, WK Associates’ analysis shows that little to no climate transition risk is currently priced into the oil and gas sector today,⁴⁹ representing significant risks to their investors and other market participants.

Through a reverse discounted cash flow analysis on the S&P Oil and Gas Exploration and Production Select Industry Index (SPSIOP),⁵⁰ WK Associates found that the valuations of 80 percent of the companies in the index, including EQT Corporation, Hess Corporation, and Marathon Oil Corporation, are largely based on the assumption that oil and gas demand will continue to grow over the next 50 to 100 years, in line with global GDP growth.⁵¹

⁴³ SEC. 2008. *Modernization of Oil and Gas Reporting*: Final Rule, Release Nos. 33-8995; 34-59192; to be codified at 17 CFR parts 210, 211, 229, and 249, December 31, 2008, pg. 1, <https://www.sec.gov/rules/final/2008/33-8995.pdf>

⁴⁴ *Id.* at pp. 21-25

⁴⁵ *Id.* at pg. 22

⁴⁶ See our recommendations below for more details on strengthening the Modernization of Oil and Gas Reporting Rule.

⁴⁷ IPCC. 2007. *Climate Change 2007: Working Group III: Mitigation of Climate Change*. Chapter 4.3.1.4, https://archive.ipcc.ch/publications_and_data/ar4/wg3/en/ch4s4-3-1-4.html

⁴⁸ Schay, Alexander and Paul Bugala. 2022. *A Demanding Change: Oil & Gas in 2050*. March 22, 2022, pp. 24-29, <https://www.sec.gov/comments/s7-10-22/s71022-20129438-295567.pdf>

⁴⁹ *Id.* at pp. 24-29

⁵⁰ S&P Global. *S&P Oil & Gas Exploration & Production Select Industry Index*. <https://www.spglobal.com/spdji/en/indices/equity/sp-oil-gas-exploration-production-select-industry-index/#overview>

⁵¹ Schay, Alexander and Paul Bugala. 2022. *A Demanding Change: Oil & Gas in 2050*. March 22, 2022, pp. 24-29, <https://www.sec.gov/comments/s7-10-22/s71022-20129438-295567.pdf>

Despite the fact that there is now broad consensus that oil demand will no longer track global GDP, WK Associates' study shows this is not reflected in the valuation of nearly any of the 30 upstream companies included in the S&P's index for oil and gas exploration and production companies. In fact, even putting aside the consensus view of decreasing oil demand, current valuations appear to be based on assumptions about future growth that are not even supported by historical performance.

In 2019, the National Bureau of Economic Research examined the relationship between firm value and proved reserves for 600 oil and gas firms in North America from 1999 to 2018 and found that proved undeveloped reserves growth and firm value were significantly negatively correlated.⁵² WK Associates sought to expand on this research by examining the link between companies' valuations and the carbon intensity associated with their reserves. WK Associates' research shows that as oil and gas companies add proven undeveloped reserves to their resources, their enterprise valuation falls; the drop can be explained by the carbon intensity of those added undeveloped reserves, as indicated by both a regression analysis and a portfolio rebalancing demonstration included in the study.⁵³

WK Associates' study applied an emissions-embedded-in-reserves factor to the reserves disclosures of the 30 companies analyzed, which was calculated by multiplying a company's proven reserves totals in each reported category by the corresponding IPCC Effective CO₂ Emissions Factor⁵⁴ upon combustion.

Emissions-embedded-in-reserves disclosures data provides a straightforward shorthand for the oil and gas sector's Scope 3 GHG emission data, which represents about 88 percent of total GHG emissions.⁵⁵ Additionally, emissions-embedded-in-reserves data would not just be limited to Scope 3 emissions from a finite timeframe; it would represent the entire future emissions potential from all oil and gas companies' reserves.

If emissions-embedded-in-reserves data were included in oil and gas reserves reporting alongside the disclosures required by Regulation S-X §210.4-10 and Regulation S-K §229.1202 (see recommendation below), investors would have access to data that meaningfully reflects the material aspect of the long-term Scope 3 future emissions profile of the oil and gas sector. The resulting data could be included by reference in the Notes to the Consolidated Financial Statement to provide insight about the climate risk-related estimates and assumptions that impact line items such as long-lived assets and impairments as proposed in Regulation S-X Rules 14-01 and 14-02.⁵⁶

The result would provide substantial, forward-looking Scope 3 oil and gas emissions disclosures at least a year before Scope 3 disclosures are scheduled in the proposed rule. The emissions-embedded-in-

⁵² Atanasova, Christina and Eduardo S. Schwartz. 2019. "Stranded Fossil Fuel Reserves and Firm Value." *NBER Working Paper Series*. November 2019, https://www.nber.org/system/files/working_papers/w26497/revisions/w26497.rev0.pdf

⁵³ Schay, Alexander and Paul Bugala. 2022. *A Demanding Change: Oil & Gas in 2050*. March 22, 2022, pp. 25-39, <https://www.sec.gov/comments/s7-10-22/s71022-20129438-295567.pdf>

⁵⁴ The IPCC's emissions factors are a metric that was developed by the IPCC Change in 2005. Garg, Amit, Kazunari, Kainou, and Pulles, Tinus. 2006. "2006 IPCC Guidelines for National Greenhouse Gas Inventories." *UN Intergovernmental Panel on Climate Change*, pp. 1.23-1.24, https://www.ipccnggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf.

⁵⁵ Saiyid, Amena. 2021. "Oil, gas companies under pressure to manage Scope 3 emissions to reach net-zero goals: analysts," *IHS Markit*, June 22, 2021, <https://cleanenergynews.ihsmarkit.com/research-analysis/oil-gas-companies-under-pressure-to-manage-scope-3-emissions-t.html>

⁵⁶ Proposed Rule at pp. 21371-21372

reserves calculation process is also straightforward for reporting companies and it eliminates issues with reporting boundaries, because the reserves at the heart of the metric are an asset of each reporting company and are not shared between firms.

The forward-looking nature of embedded-emissions-in-reserves data is also an important benefit as a climate risk disclosure metric, something largely lacking in the financial services industry. Currently, investors approximate future climate risk in the oil and gas sector by, among other things, discounting long-lived assets in a manner that is inconsistent between investment targets, resulting in less accurate assessments. Additionally, emissions-embedded-in-reserves data could serve as a check on emissions goals of reporting companies as well as the carbon intensity benchmarks of funds and other financial products. Analysts can also make sure their discount rates reflect the idiosyncratic risk of either growing or declining emissions potential represented by a company's reserves.

Transition Pathway Initiative, a collaboration of 125 institutional investors with more than \$40 trillion dollars in assets under management, has compiled many investor use cases that demonstrate how emissions-embedded-in-reserves data could simplify investor's screening and valuation processes. For example, the Swedish asset manager Länsförsäkringar screens out fossil fuel energy companies that derive more than 5 percent of their revenue from oil sands.⁵⁷ Because annual revenue is a historical data point that can be influenced by factors other than transition risk, such as expenses, this approach currently has limitations. The availability of emissions-embedded-in-reserves data, or any Scope 3 oil and gas measure, would permit Länsförsäkringar and other investors to make portfolio decisions on a more consistent and comparable basis that would reflect their exposure to future transition risk without the distortions possible in accounting for revenues.

WK Associates' research also highlights the lack of preparation by the sector in identifying or mitigating climate-related transition risks which "represents an existential concern [for oil and gas companies]."⁵⁸ No other industry will be impacted to the same extent, and the impacts will be felt beyond the oil and gas sector. Wood Mackenzie notes that "no oil company is preparing for the scale of decline envisioned in this scenario."⁵⁹ An analysis of carbon-intensive sectors by Moody's reveals a similar finding: the "oil and gas sector as a whole is the least prepared"⁶⁰ to address climate-related financial risks. If these companies take "delayed action" it could increase default risks for individual firms and increase the likelihood of value destruction throughout the market.⁶¹ And as Carbon Tracker notes, inaction from oil and gas companies means the entire market is rife with "risk of fossil fuel producers making poor investments that destroy value as they misread future demand."⁶²

⁵⁷ Transition Pathway Initiative. *Case study: Länsförsäkringar define companies in transition.*

<https://www.transitionpathwayinitiative.org/case-study-helping-lansforsakringar-define-companies-in-transition>

⁵⁸ Carbon Tracker Initiative. 2020. *Fault Lines: How diverging oil and gas company strategies link to stranded asset risk.* October 9, 2020, pg. 4, <https://carbontracker.org/reports/fault-lines-stranded-asset/>.

⁵⁹ Wood Mackenzie. 2021. *Reversal of fortune: Oil and gas prices in a 2-degree world.* April 2021, pg. 12, <https://www.woodmac.com/horizons/reversal-of-fortune-oil-and-gas-prices-in-a-2-degree-world/>.

⁶⁰ Moody's. 2021. "Ready or Not? Sector Performance in a Zero-Carbon World." *Moody's on Climate.* November 8, 2021, pg. 4, https://www.moody's.com/sites/products/ProductAttachments/Moodys_ReadyOrNot.pdf.

⁶¹ *Id.* at pg. 7

⁶² Carbon Tracker Initiative. 2020. *Fault Lines: How diverging oil and gas company strategies link to stranded asset risk.* October 9, 2020, pg. 5, <https://carbontracker.org/reports/fault-lines-stranded-asset/>.

d. Continued Oil and Gas Sector Growth increases Financial Implications of Stranded Assets

Currently, oil and gas companies' valuations obscure material transition risks to investors precisely because their valuations are underpinned by industry's plans for continued growth. This is also despite the recent IEA conclusion that there is no room for new fossil fuel expansion beyond fields and mines already in development in their first ever full 1.5°C-aligned scenario.⁶³

An analysis by Global Witness of projections by Rystad Energy found that "the 20 largest oil and gas companies are expected to invest \$932 billion in developing new oil and gas fields – in just 9 years. By the end of 2040 the figure grows to a staggering \$1.5 trillion dollars."⁶⁴ The UN Environmental Program's 2021 Production Gap Report notes that "governments still plan to produce more than double the amount of fossil fuels in 2030 than what would be consistent with limiting global warming to 1.5°C."⁶⁵ The IPCC agrees, suggesting that "[w]ithout early retirements, or reductions in utilization, the current fossil infrastructure will emit more GHGs than is compatible with limiting warming to 1.5°C."⁶⁶

It is clear that the oil and gas industry's demand expectations are incompatible with global and US commitments to stabilize the global temperature. Phasing out oil and gas production will require a massive restructuring and a complete overhaul of current operations, significantly impacting every facet of the global economy, and particularly the extractives sector.

As a result, this planned growth carries immense financial risks associated with stranded assets. Stranded assets are defined by the IEA as "investments which have already been made but which, at some time prior to the end of their economic life (as assumed at the investment decision point), are no longer able to earn an economic return."⁶⁷ Building on this definition, Carbon Tracker also attributes asset stranding to the "result of [regulatory and social] changes associated with the transition to a low-carbon economy."⁶⁸ "[I]f governments more aggressively attempted to restrict the rise in temperatures to 1.5°C above pre-industrial levels for the rest of this century," according to the Financial Times' Lex research, the total amount of stranded assets could amount to "\$900 billion" – or one-third of the current value of big oil and gas companies."⁶⁹ Carbon Tracker estimates that "if the 2°C target is rigorously applied, then up to 80 percent of declared reserves owned by the world's largest listed coal, oil and gas companies and their investors would be subject to impairment as these assets become stranded."⁷⁰

⁶³ IEA. 2021. *World Energy Outlook 2021*. October 2021, <https://www.iea.org/reports/world-energy-outlook-2021>.

⁶⁴ Global Witness. 2022. *IPCC clarion call puts spotlight on fossil fuel industry's hypocrisy*. April 12, 2022, <https://www.globalwitness.org/en/campaigns/fossil-gas/ipcc-clarion-call-puts-spotlight-on-fossil-fuel-industrys-hypocrisy>

⁶⁵ UN Environmental Program. 2021. *Production Gap Report 2021*. October 21, 2021, pg. 3. PDF available for download here: <https://www.unep.org/resources/report/production-gap-report-2021>

⁶⁶ IPCC. 2022. *Climate Change 2022: Mitigation of Climate Change*. Working Group III contribution to the Sixth Assessment Report. April 2022, https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_FinalDraft_FullReport.pdf

⁶⁷ IEA. 2013. "Redrawing the Energy Climate Map." *World Energy Outlook Special Report*, 2013, pg. 134, <http://www.worldenergyoutlook.org/media/weowebiste/2013/energyclimatemap/RedrawingEnergyClimateMap.pdf>

⁶⁸ Carbon Tracker. 2022. *Stranded Assets*. August 23, 2017, <https://carbontracker.org/terms/stranded-assets/>. Accessed June 8, 2022.

⁶⁹ Livsey, Alan. 2020. "Lex in Depth: the \$900bn Cost of 'Stranded Energy Assets.'" *The Financial Times*. February 4, 2020, <https://www.ft.com/content/95efca74-4299-11ea-a43a-c4b328d9061c>

⁷⁰ Carbon Tracker Initiative. 2011. *Unburnable Carbon: Are the world's financial markets carrying a carbon bubble?* July 2011, pg. 2, https://www.banktrack.org/download/unburnable_carbon/unburnablecarbonfullrev2.pdf

In August 2021, researchers sought to estimate the full impact of financial losses associated with oil and gas asset stranding. One recent paper written by multiple economics and econometrics experts calculates that “global stranded assets as present value of future lost profits in the upstream oil and gas sector exceeds \$1 trillion under plausible changes in expectations through the effects of climate policy.” This figure was determined by tracing the “equity risk ownership from 43,439 oil and gas production assets through a global equity network of 1.8 million companies to their ultimate owners.”⁷¹

According to this paper from Gregor Semieniuk et al., “[i]nstitutionally, most losses [or about] \$1 trillion dollars, are booked by stock market-listed oil and gas companies.”⁷² In line with Carbon Tracker research, it found that the US market is particularly vulnerable to this issue; the risk of physical stranding “is largest in the United States and Russia about three hundred billion dollars each followed by China and Canada about a hundred billion dollars each.”⁷³

Further, financial markets are likely to “amplify equity losses as they propagate through ownership networks,” in particular through “a cascade of stock market losses.”⁷⁴ This study underscores the broad range of financial impacts to the oil and gas sector that would be felt throughout other industries and sectors, highlighting the cost of associated transition risks posed by the industry’s inaction to decrease production.

Semieniuk et al. conclude that “the rate of industrial change required for achieving a 2°Celsius – let alone 1.5°C – goal is so large that the rapid collapse of fossil fuels ‘sunset’ industries presents major transition risks.”⁷⁵ If “losses at every financial institution along the ownership chain are summed,” they estimate that “an upper bound of \$681 billion in potential losses could affect financial companies.” This calculation is significant, especially if compared “with the mispriced subprime housing assets of an estimated \$250 to \$500 billion on financial sector balance sheets that triggered the 2007 to 2008 financial crisis.”⁷⁶

In a context of inevitable oil and gas asset stranding, the disclosure of information regarding probable and possible reserves, as well as contingent resources,⁷⁷ is critically important for projects that are not yet developed and/or that require substantial capital expenditure to develop, given the increased

⁷¹ Semieniuk, Gregor; Holden, Philip B.; Mercure, Jean-Francois; et al. “Stranded fossil-fuel assets translate to major losses for investors in advanced economies.” *Natural Climate Change*, May 26, 2022, pg. 1. PDF available for download here: <https://doi.org/10.1038/s41558-022-01356-y>

⁷² *Id.* at pg. 3

⁷³ *Id.*

⁷⁴ *Id.* at pg. 3-4

⁷⁵ *Id.* at pg. 1

⁷⁶ *Id.* at pg. 6

⁷⁷ Probable reserves are defined by the Society of Petroleum Engineers as “unproved reserves which analysis of geological and engineering data suggests are more likely than not to be recoverable.” Possible reserves are “those unproved reserves which analysis of geological and engineering data suggests are less likely to be recoverable than probable reserves.” Contingent resources are “[t]hose quantities of petroleum which are estimated, on a given date, to be potentially recoverable from known accumulations but which are not currently considered to be commercially recoverable.” Society of Petroleum Engineers, “Glossary of Terms Used in Petroleum Reserves/Resources Definitions,” <https://www.spe.org/en/industry/terms-used-petroleum-reserves-resource-definitions/>

likelihood of these assets becoming stranded. Investors need to know whether or not the assets a company is investing in can produce adequate returns. This information is especially important regarding the exploration and development of new projects where the risks of stranding or impairment are more likely and more capital expenditure is at stake.

Carbon Tracker summarizes this need in their recommendations with respect to the disclosure of information regarding contingent resources: “to the extent that contingent resources are approved for development into producing reserves, they are most at risk of becoming stranded in the future since these quantities of oil and gas may not be capable of being burned in a climate-constrained world. [...] Disclosures should inform investors of the amount that is being invested, the assumptions that management are applying in setting their exploration and development plans, and the impact of changes in these assumptions.”⁷⁸

For upstream oil and gas companies, scenario analysis is often specifically linked to analysis of significant projects’ financials. Oil and gas companies often voluntarily share with investors their projections of revenue and expenses of major projects to demonstrate their profitability. However, each disclosure has its own unique format. To enable investors to fully and meaningfully evaluate project profitability (including the risk of stranded assets in a company’s asset portfolio) and determine project compatibility with Paris-aligned transition pathways and other scenarios, disclosures of project break-evens – or the oil price at which a project is no longer profitable – must be mandated (see recommendation below).

e. Detailed transition plans allow investors to fully assess climate-related financial risks

While many oil and gas companies have set some form of a net-zero target or carbon-neutral goal, “[n]ot all company targets of ambitions are created equal in the degree to which they reduce the impact of company activities on global temperature rise,” according to a 2022 analysis of 15 major oil and gas companies by Carbon Tracker.⁷⁹

While some oil and gas companies, including Shell, BP, ENI, Equinor, Repsol, and TotalEnergies, have begun to disclose some climate-related information, and/or created plans to transition to net-zero emissions,⁸⁰ these plans are usually limited to Scope 1 and Scope 2 emissions, and often fail to address Scope 3 emissions altogether, or fail to address them in a reasonable time frame, (i.e. before 2050).⁸¹

⁷⁸Carbon Tracker Initiative. 2019. *Reporting for a secure climate: A model disclosure for upstream oil and gas*. May 3, 2019, pg. 9, <https://carbontracker.org/reports/reporting-for-a-secure-climate-a-model-disclosure-for-upstream-oil-and-gas/>.

⁷⁹ Carbon Tracker Initiative. 2022. *Absolute Impact 2022: Why Oil and Gas Companies need Credible Plans to meet Climate Targets*. Analyst Note. May 2022, pg. 2, <https://carbontracker.org/reports/absolute-impact-2022/>

⁸⁰ Shell. 2021. *Shell Energy Transition Strategy*. 2021, https://www.shell.com/investors/shareholdermeetings/_jcr_content/par/expandablelist_copy/expandablesection_11.stream/1618407326759/7c3d5b317351891d2383b3e9f1e511997e516639/shell-energy-transition-strategy-2021.pdf. See also BP. 2022. *Net Zero: From Ambition to Action*. March 2022, <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/investors/bp-net-zero-report-2022.pdf>. See also ENI. 2021. *Eni’s strategy on climate change*. December 22, 2021, <https://www.eni.com/en-IT/low-carbon/strategy-climate-change.html>. See also Equinor. 2022. *2021 Sustainability Report*. March 18, 2022, <https://www.equinor.com/en/investors/annual-reports.htm>. See also Repsol. *Net Zero Emissions by 2050: Path Towards Decarbonization*. <https://www.repsol.com/en/sustainability/climate-change/net-zero-emissions-2050/index.cshtml>. See also TotalEnergies. 2020. *Getting to Net Zero*. September 2020, <https://totalenergies.com/sites/g/files/nytnzq121/files/documents/2020-10/total-climate-report-2020.pdf>

⁸¹ Oil Change International. 2022. *Big Oil Reality Check: Updated Assessment of Oil and Gas Company Climate Plans*. May 24, 2022, pp. 16-23. PDF available for download here: <https://priceofoil.org/2022/05/24/big-oil-reality-check-2022/>.

This renders the information largely meaningless, and likely misleading to investors, given Scope 3 emissions represent some 88% of the sector’s total emissions.⁸²

Moreover, even where such plans are noted, the details about *how* a company plans to achieve these goals are vague, and often rely on asset divestments or “emissions mitigation technologies.”⁸³ There are substantial concerns with the effectiveness of these strategies.⁸⁴ At a minimum, “[i]n order for net zero goals to be effective,” according to Carbon Tracker, “such ambitions must be linked to a specific scenario with a defined temperature outcome and an understanding of the emissions pathway and the required level of emissions mitigating technologies required.”⁸⁵

Last year, almost 50 percent of Chevron’s investors voted to require a report on the business impact of achieving net zero emissions by 2050, demonstrating investor support for more transparency about companies’ plans for meeting net-zero commitments.⁸⁶

In May of this year, 52 percent of ExxonMobil shareholders voted to support a resolution that requires Exxon to show how the IEA’s “Net Zero by 2050 Economy”⁸⁷ would affect the assumptions and estimates in its financial statements.⁸⁸ This further demonstrates investors’ interest not only in a company’s transition plans, but on the impacts such plans could have on the company’s future performance.

f. Climate-Related Disclosures from Oil and Gas Companies belie the Sector’s total Risk Profile

It is indisputable that the oil and gas sector is a key generator of risk that will reverberate throughout the market. As a result, detailed disclosures from the sector on climate-related transition risk is of significant value to prudent and efficient risk management by investors and other market participants.

In the face of this uncertainty, investors seeking the disclosures necessary to determine how issuers are managing transition risks are left wanting. In an April 2022 study, Columbia University’s Energy Policy Center surveyed 12 institutional investors that are active in the oil and gas sector, representing more than \$8 trillion in assets under management, and reported that surveyed investors believe “the data [about GHG emissions] being reported by companies themselves and from rating agencies is of

⁸² Saiyid, Amena. 2021. “Oil, gas companies under pressure to manage Scope 3 emissions to reach net-zero goals: analysts.” *IHS Markit*, June 22, 2021, <https://cleanenergynews.ihsmarkit.com/research-analysis/oil-gas-companies-under-pressure-to-manage-scope-3-emissions-t.html>

⁸³ Carbon Tracker uses emissions mitigation technologies to refer to carbon capture, utilization and storage as well as negative emissions technologies. Carbon Tracker Initiative. 2022. *Absolute Impact 2022: Why Oil and Gas Companies need Credible Plans to meet Climate Targets*. Analyst Note, May 2022, pg. 5, <https://carbontracker.org/reports/absolute-impact-2022/>

⁸⁴ See Appendix A for examples. Cushing, Ben; David Arkush; Alex Martin; and John Kostyack. Letter to the SEC Re: Offsets Disclosures in Climate Risk Disclosure Rule. February 10, 2022, pp. 6-7, <https://www.sec.gov/comments/climate-disclosure/cll12-20115318-267372.pdf>

⁸⁵ Carbon Tracker Initiative. 2022. *Absolute Impact 2022: Why Oil and Gas Companies need Credible Plans to meet Climate Targets*. Analyst Note. May 2022, pg. 11, <https://carbontracker.org/reports/absolute-impact-2022/>

⁸⁶ The proposal received 47.8% of votes. Chevron Corporation. 2021. “Form 8-K.” *EDGAR database*. May 26, 2021, <https://www.sec.gov/ix?doc=/Archives/edgar/data/0000093410/000009341021000020/cvx-20210526.htm>

⁸⁷ IEA. *Net Zero by 2050: A Roadmap for the Global Energy Sector*. May 2021, <https://www.iea.org/reports/net-zero-by-2050>

⁸⁸ Crowley, Kevin. 2022. “Exxon Investors Back more climate disclosures in surprise vote.” *Bloomberg*. May 25, 2022, <https://www.bloomberg.com/news/articles/2022-05-25/exxon-investors-back-more-climate-disclosures-in-surprise-vote>

insufficient quality.”⁸⁹ In the absence of consistent and comparable disclosures, the Columbia study noted that many investors are forced to request data from issuers bilaterally, which is a very costly and time-consuming way to build sufficient data sets.⁹⁰

The 250 investors surveyed by the Boston Consulting Group’s Center for Energy Impact expressed similar frustration with oil and gas transition risk disclosures. Specifically, 80 percent of investors said they want greater clarity on companies’ current plans for the energy transition and 78 percent of investors are already factoring in or are considering factoring climate risk into their valuations. In determining company valuations, 59 percent of surveyed oil and gas investors consider both Scope 3 disclosures and targets important.⁹¹

Despite oil and gas companies’ protestations about their lack of control over the use of their products further down the value chain, and thus a lack of responsibility for scope 3 emissions,⁹² the reality is that “their business model fundamentally depends on these emissions being released.”⁹³ Further, if oil and gas companies are going to publicly tout ambitious climate goals while also relying on a continuation of oil and gas production to underwrite their future performance, investors should be able to access the underlying information to reconcile whether and how companies are actually preparing for a low-carbon future.

3. KEY FEATURES OF THE PROPOSED RULE

PWYP-US welcomes the SEC’s proposed rule as a strong first step towards bringing much-needed transparency to the financial risks associated with the energy transition. We commend the SEC’s careful consideration of the Proposed Rule’s approach, which appropriately responds to the immense scale of climate-related financial risk. In particular, we note our strong endorsement of several essential aspects of the Proposed Rule, as discussed below.

a. The Proposed Rule’s Approach **Mandatory Disclosures**

We support the SEC’s approach to mandating disclosure of specific climate-related risk information, including emissions data and financial metrics. In the absence of SEC disclosure requirements, “investors and shareholders have undertaken an arguably unprecedented and massive campaign to obtain climate-related disclosure from issuers.”⁹⁴ But while investor demand has led to various voluntary initiatives,

⁸⁹ Wong, Hon Xing; Naomi Zimmermann; Erin Blanton; and Tim Boersma. 2022. “ESG Investing and the US Oil and Gas Industry: An Analysis of Climate Disclosures 16.” *Columbia University Center on Global Energy Policy*, March 2022, https://www.energypolicy.columbia.edu/sites/default/files/file-uploads/Upstream_ESG_Final.pdf.

⁹⁰ *Id.*

⁹¹ Berns, Maurice, and Rebecca Fitz, et al. 2022. “How Institutional Investors See the Future of Oil and Gas,” *Boston Consulting Group*, January 6, 2022, <https://www.bcg.com/publications/2022/how-investors-see-future-of-oil-gas>

⁹² See, e.g., Johnson, Katanga. 2022. “Companies worry U.S. SEC climate rule may require broad emissions disclosures.” *Reuters*. January 19, 2022, <https://www.reuters.com/markets/commodities/companies-worry-us-sec-climate-rule-may-require-broad-emissions-disclosures-2022-01-19/>

⁹³ Carbon Tracker Initiative. *Absolute Impact 2022: Why Oil and Gas Companies need Credible Plans to meet Climate Targets*. Analyst Note, May 2022, pg. 12, <https://carbontracker.org/reports/absolute-impact-2022/>

⁹⁴ Commissioner Allison Herren Lee. 2020. “*Modernizing*” *Regulation S-K: Ignoring the Elephant in the Room*. January 30, 2020, <https://www.sec.gov/news/public-statement/lee-mds-2020-01-30>

these are an inadequate substitute for SEC action.⁹⁵ Without a requirement to do so, many companies – including carbon-intensive companies – will continue to opt not to disclose. Even for those that do disclose, there is significant variation in what they disclose, where they disclose information, the quality of those disclosures, and the comparability of the information across issuers. Moreover, voluntary disclosures lack the verification and assurances necessary to make the information decision-useful for investors and ensure public trust in markets.⁹⁶

Additionally, there is now global consensus that mandatory disclosure requirements are needed in major capital markets around the world. In 2020, the Group of 30 (G30) urged all governments to take action to codify requirements for climate-risk disclosure. According to the G30, “[w]hile there is increasing momentum behind voluntary disclosure, there are limits to what decentralized private sector action can achieve.”⁹⁷ The G30 recommended that all governments set ambitious timelines for mandatory climate-risk disclosure requirements to build on the helpful but insufficient voluntary progress to date. In 2021, this recommendation was reinforced by G7 finance ministers and central bank governors who jointly agreed to mandate the TCFD-aligned climate-related disclosures in all G7 countries.⁹⁸ Today, many governments are working toward mandatory disclosure frameworks, including those in the United Kingdom, the European Union, and New Zealand.⁹⁹

The SEC’s Proposed Rule is consistent with this global consensus and is a vital step towards fixing the current information gap. As proposed, this disclosure framework will provide verifiable data to the whole market and ensure that companies use a standardized language in describing climate-related risk that can be compared over time, between companies, and across sectors, allowing investors to make prudent decisions about how to allocate capital. As we noted in our June 2021 submission to the SEC’s Request for Public Input on Climate Change Disclosures, a mandatory disclosure regime for climate is not only appropriate, but also “essential to ensure full compliance, to ensure comparability of

⁹⁵ See, e.g., TCFD, “Task Force on Climate-Related Financial Disclosures: 2020 Status Report,” 2020, https://assets.bbhub.io/company/sites/60/2020/09/2020-TCFD_Status-Report.pdf.

⁹⁶ See, e.g. FSOC Report at pp. 80-81 (explaining that “Although the growth in voluntary frameworks and standards has been an important development in the climate-related disclosure space, the lack of common standards is a significant problem. There remains a great deal of variance in the quality, coverage, and comparability of the disclosed information, due in large part to the voluntary nature of the disclosure and lack of mechanisms to assure consistency, comparability, and decision-usefulness. The insufficient quality and coverage of disclosures create difficulties for those using them to understand and compare companies’ exposure to and management of climate risks. These challenges could continue to exacerbate mispricing of climate-related risks and misallocation of capital.”)

⁹⁷ Group of Thirty’s Steering Committee and Working Group on Climate Change and Finance. 2020. *Mainstreaming the Transition to a Net-Zero Economy*. https://group30.org/images/uploads/publications/G30_Mainstreaming_the_Transition_to_a_Net-Zero_Economy.pdf, at pg. 29.

⁹⁸ UK Government. 2021. *G7 Finance Ministers and Central Bank Governors Communiqué*. UK Government, June 5, 2021, <https://www.gov.uk/government/publications/g7-finance-ministers-meeting-june-2021-communication/g7-finance-ministers-and-central-bank-governors-communication>.

⁹⁹ New Zealand Ministry for the Environment. 2021. *Mandatory Climate-Related Disclosures*. Updated December 1, 2021. <https://environment.govt.nz/what-government-is-doing/areas-of-work/climate-change/mandatory-climate-related-financial-disclosures/>. See also, John Glen MP, and The Rt Hon Greg Hands MP. 2021. *UK To Enshrine Mandatory Climate Disclosures for Largest Companies in Law*. UK Government. Department for Business, Energy & Industrial Strategy. HM Treasury. October 29, 2021, <https://www.gov.uk/government/news/uk-to-enshrine-mandatory-climate-disclosures-for-largest-companies-in-law>. See also Council of the European Union. *Council Adopts Its Position on the Corporate Sustainability Reporting Directive (CSRD)*. February 24, 2022, <https://www.consilium.europa.eu/en/press/press-releases/2022/02/24/council-adopts-position-on-the-corporate-sustainability-reporting-directive-csrd/>.

information, and to ensure reliability of information disclosed.”¹⁰⁰

For much of the past two decades, PWYP-US has advocated for and closely tracked disclosures of payments to governments by companies in the extractive industries. In this time, we have increasingly seen industry practice shift dramatically with the adoption of mandatory requirements.¹⁰¹ Although such reporting has not yet commenced in the US, the SEC’s early efforts to craft a fit-for-purpose reporting framework provided essential global leadership toward the development of aligned standards for disclosure in other major capital markets. We applaud the SEC for taking this opportunity to provide essential leadership with respect to a comprehensive, mandatory disclosure framework.

Requirement that disclosures be filed with the SEC

We strongly support the SEC’s proposed approach to treat climate disclosures as filed and subject to potential liability under Section 18 of the Exchange Act. This requirement will ensure the disclosures are widely perceived as reliable and decision-useful for investors.¹⁰²

Relies on widely accepted Standards

We support the SEC’s incorporation of two well-known, widely accepted reporting standards – the TCFD and the GHG Protocol – into its proposed disclosure requirements.¹⁰³

Notably, the TCFD has contemplated climate-related disclosures since it was created by the Financial Stability Board in 2015, and provides authoritative guidance on the subject, including on Governance, Strategy, Risk Management, and Metrics and Targets.¹⁰⁴ As of May 2022, the TCFD’s supporters include “1,384 financial firms, responsible for assets of \$215.6 trillion.”¹⁰⁵ Adopting TCFD-aligned definitions would reduce the costs of implementing disclosure requirements for registrants who already use TCFD or a TCFD-aligned frameworks, and would also facilitate future efforts at global harmonization, improving the cross-border comparability of climate-related disclosures.

For GHG emissions disclosure, the GHG Protocol’s Corporate Accounting and Reporting Standard (GHG Protocol) is by far the most comprehensively used global GHG accounting standard, and its concepts and vocabulary are widely understood by registrants and investors.¹⁰⁶

¹⁰⁰ See Brophy, Kathleen. 2021. Publish What You Pay-US Comment to the SEC Re: Request for Public Input on Climate Change Disclosures. June 13, 2021, pp. 29-30, <https://www.sec.gov/comments/climate-disclosure/cll12-8914437-244711.pdf>.

¹⁰¹ In 2010, when the US passed the landmark transparency provision, Section 1504 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, 15 USC 78m(q), voluntary disclosures were rare and lacking in meaningful detail. Although the mandatory requirement in the US did not take immediate effect, US leadership catalyzed a wave of other jurisdictions to adopt mandatory payment disclosure laws and regulations, including all EU member states, the UK, Canada, Norway, Ukraine, and Switzerland. Since these requirements began to take effect, starting in 2015, companies have disclosed over 37,000 payments to governments of over 150 countries across some 3200 reports, totaling some \$1.2 trillion. See Natural Resource Governance Institute. *Resource Projects Database*. <https://resourceprojects.org>. Accessed May 20, 2022.

¹⁰² Proposed Rule at pg. 21346.

¹⁰³ Proposed Rule at pg. 21349.

¹⁰⁴ TCFD. 2022. *Overview*. May 2022, https://assets.bbhub.io/company/sites/60/2022/05/TCFD_Overview_Booklet_Digital.pdf.

¹⁰⁵ TCFD. 2022. *Overview*. May 2022, pg. 36, https://assets.bbhub.io/company/sites/60/2022/05/TCFD_Overview_Booklet_Digital.pdf

¹⁰⁶ GHG Protocol. *Companies and Organizations*. <https://ghgprotocol.org/companies-and-organizations>

There is broad acceptance and endorsement of the TCFD’s and GHG Protocol’s approach across investor groups and other constituencies; both are recognized as effective and useful, and incorporation of key features of these existing regimes will have clear benefits. Moreover, many companies are already collecting and reporting information consistent with these standards, helping to minimize compliance costs and burdens for issuers. Notably, other major capital markets are considering a similar approach, and they are more likely to follow SEC’s leadership in this respect, as was the case for the initial US leadership on payments-to-governments disclosure under Section 1504 of the 2010 Dodd-Frank Act.¹⁰⁷ This will further maximize efficiencies, minimize costs for cross-listed issuers, and enhance comparability and consistency for investors.

b. Financial Disclosures

We strongly support the SEC’s decision to include climate-related disclosures in Regulation S-X, as proposed. This decision appropriately acknowledges that investors need to understand how climate-related risk actually affects a company’s financial performance, including the financial estimates and assumptions about future performance. This is also consistent with the TCFD’s recommendation that climate-related financial disclosures be made in “mainstream (i.e., public) annual financial filings” to “help ensure that appropriate controls govern the production and disclosure of the required information.”¹⁰⁸ The Proposed Rule is also consistent with the International Accounting Standards Board’s (IASB) draft Climate Standard.¹⁰⁹

The Proposed Rule also rightly acknowledges the financial impact that climate targets and goals can have on a registrant and gives investors and other market participants the information they need to assess whether a registrant is on track to meet its own goals. This requirement protects investors from misleading statements that falsely appear to inflate progress and helps them allocate capital and engage with firms in accordance with their investment thesis. Climate-related risk will likely affect numerous parts of a registrant’s financial statement and must be presented in context with other financial information to give investors full visibility into the impacts on the registrant’s business and financial condition.

Assumptions and Estimates

We support the SEC’s proposed approach to require disclosure of assumptions. As discussed above, financial statements include assumptions about the future. Declining demand for oil and gas, the transition to renewable energy sources, regulations to limit emissions, and the phasing out of internal combustion engines, for example, are all assumptions about the future that can directly and significantly affect financial statement results.

The estimates and assumptions that a company uses to inform their line-item disclosures have direct bearing on the accuracy of their conclusions and are subject to change based on changing circumstances and the availability of new data. In line with existing guidance from accounting standard setters, climate-

¹⁰⁷ After the adoption of the SEC’s 2012 final rule, other jurisdictions, including the EU, UK, Norway and Canada enacted mandatory disclosure requirements that mirrored the SEC’s approach.

¹⁰⁸ TCFD. 2017. *Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures*. 2017, pg. iv, <https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017TCFD-Report-11052018.pdf>.

¹⁰⁹ International Financial Reporting Standards (IFRS) Foundation. 2022. *Exposure Draft: Climate-Related Disclosures*. 2022, pg. 5, <https://www.ifrs.org/content/dam/ifrs/project/climate-related-disclosures/issb-exposure-draft-2022-2-climate-related-disclosures.pdf>.

related risks must be taken into account in developing assumptions, any material assumptions must be disclosed, and statements made elsewhere in a registrant’s annual filings must be consistent with those assumptions. It is imperative that investors have access to the information underpinning companies’ risk disclosures about the impacts of severe weather events and transition activities to be able to adequately assess the reasonableness of management’s projections of the future, and to further scrutinize whether and how organizations are taking climate risks seriously in business strategy.

We support the SEC’s requirement for issuers to include a note to the audited financial statements, and we recognize that having these metrics audited by an independent registered public accounting firm helps promote greater confidence and reliability of these disclosures.

c. Governance, Strategy and Risk Management Disclosures **Transition Plans**

We support the SEC’s proposed requirement for companies to disclose transition plans, if adopted. Partially in response to investor demand, companies of all sizes and across all sectors are increasingly setting ambitious climate goals focused on limiting their GHG emissions. A recent Oxford study found that more than 20 percent of the 2,000 largest public companies have net-zero commitments, with that subset of companies representing about \$14 trillion dollars in annual sales.¹¹⁰ On the surface, these goals appear to be significant commitments, but often, these goals are aspirational at best.

It is vital that companies disclose details about how they plan to meet their goals – they are meaningless without a clear plan to explain how they plan to meet their goals, along with regular progress updates. Access to transition plans and relevant metrics and targets is also essential for investors and market participants to evaluate the seriousness of corporate statements of intention to identify and manage risks. Broadly, transition plans are critical for enabling investors to understand how a company is preparing for the energy transition to a less-carbon intensive economy.

According to the NewClimate Institute and Carbon Market Watch’s Corporate Climate Responsibility Monitor 2022, which assessed 25 major multinational companies’ climate strategies, “targets for 2030 fall well short of the ambition required to align with the internationally agreed goals of the Paris Agreement.”¹¹¹ Collectively, the 25 companies assessed, had a “total self-reported GHG emission footprint” that “amounts to approximately 2.7 [gigatonnes of carbon emissions equivalent]” in 2019, which is “roughly equivalent to 5 percent of global GHG emissions.”¹¹²

All of the 25 companies assessed in this report pledge some form of zero-emission, net zero or carbon neutral target.¹¹³ However, only 13 companies “provide[d] specific details on what their headline net zero pledges mean,” and “commit to reduce their full value chain emissions from 2019 by only 40% on

¹¹⁰ Black, Richard; Kate Cullen; Byron Fay; Dr. Thomas Hale; et al. 2021. *Taking Stock: A Global Assessment of Net Zero Targets*. Energy & Climate Intelligence Unit and Oxford Net Zero. March 2021, pg.19, https://ca1-eci.edcdn.com/reports/ECIU-Oxford_Taking_Stock.pdf?mtime=20210323005817&focal=none

¹¹¹ NewClimate Institute and Carbon Market Watch. 2022. *Corporate Climate Responsibility Monitor 2022*. February 7, 2022. PDF available for download here: <https://newclimate.org/2022/02/07/corporate-climate-responsibility-monitor-2022/>

¹¹² *Id.*

¹¹³ *Id.*

average. The other 12 companies do not accompany their headline pledges with any specific emissions reduction commitment to their target year.”¹¹⁴

Another compelling reason for the Commission to require detailed disclosure of a registrant’s transition plan is the likelihood that many companies with high transition risks may conceal them from shareholders. In a 2020 report, the National Whistleblower Center applied the methods of professional fraud investigators – which entails analysis of incentives, opportunities and rationalizations to commit fraud – to the fossil fuel industry and concluded that there is a likelihood of fraudulent concealment of transition risks in the industry. The report reviewed the industry’s record of deceptions around climate risks and found that overstatements of reserves and other potential accounting frauds warranted attention from regulators, prosecutors and whistleblowers.¹¹⁵

Companies whose business models rely on continued fossil fuel production or those who are ill-prepared for the ongoing energy transition have an incentive to conceal some transition risks from investors. The SEC’s proposal to require companies to disclose transition plans, if they have adopted one, provides greater protection for investors by allowing public scrutiny of companies’ transition plans.

Disclosure of carbon offsets usage

We support the SEC’s proposal to require companies to disclose the role that carbon offsets and renewable energy certificates (RECs) play in its overall strategy, business model and outlook. Carbon offsets and RECs are common and often controversial mechanisms used by companies to meet climate targets to reduce their net carbon emissions.¹¹⁶ Despite their increasing popularity, there are significant concerns about governance as “regulations over those markets are still in infancy.”¹¹⁷ While standards are being developed to mitigate the risks associated with offset purchases, it’s unclear what impacts they could have on the costs and regulatory requirements. Additionally, numerous studies show that offsets sold in today’s global carbon markets are not delivering promised GHG emissions reductions.¹¹⁸

Companies are also 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 material risks are being concealed from investors,¹¹⁹ which underscores

¹¹⁴ *Id.*

¹¹⁵ Kostyack, John; Karen Torrent; Laura Peterson; and Carly Fabian. 2020. *Exposing a Ticking Time Bomb: How Fossil Fuel Industry Fraud Is Setting Us Up for a Financial Implosion—and What Whistleblowers Can Do About It*. National Whistleblower Center. <https://www.whistleblowers.org/wp-content/uploads/2020/07/NWC-Climate-Risk-Disclosure-Report.pdf>.

¹¹⁶ In its recent sixth assessment report, the IPCC clearly laid out the context for considering whether offsets are compatible with climate action when they noted the amount of estimated cumulative future carbon dioxide emissions committed in existing fossil fuel infrastructure from 2018 until the end of its lifetime is 660 Gt CO₂, which far exceeds the amount of carbon dioxide that could be emitted into the atmosphere within the remaining 1.5°C budget. The principle of offsetting – that one entity keeps emitting while another entity does something of purported climate benefit, such as avoiding emissions or removing emissions – is challenged in the very real context where all entities will need to reduce emissions to stay below Paris targets.

¹¹⁷ Baker, David R. 2022. “Carbon debate threatens to leave offset prices high or worthless.” *Bloomberg*. January 10, 2022, <https://www.bloomberg.com/news/articles/2022-01-10/carbon-debate-threatens-to-leave-offset-prices-sky-high-or-worthless>

¹¹⁸ See Appendix A for examples. Cushing, Ben; David Arkush; Alex Martin; and John Kostyack. 2022. Letter to the SEC Re: Offsets Disclosures in Climate Risk Disclosure Rule. February 10, 2022, pp. 6-7, <https://www.sec.gov/comments/climate-disclosure/cl12-20115318-267372.pdf>

¹¹⁹ *Id.*

the need for investors to have access to detailed transition plans to fully understand how significantly companies plan to rely on offsets and RECs within their emissions reduction strategies.

Scenario Analysis

We support the SEC’s proposed requirement for companies to disclose information about scenario analyses, if used, when describing the resilience of their climate-related business strategy. Scenario analysis is particularly useful in conducting long-term, forward-looking scenario planning using a variety of variables to inform strategy and business planning decisions, especially in the context of climate change given its uncertain trajectory.

Scenario analysis has emerged as a key analytical tool for assessing the potential impacts of climate change because it allows market participants to understand multiple possible outcomes while still reflecting a realistic level of uncertainty. According to Madison Condon, scenario analysis “delivers information about risk exposures in different future possible states of the world, without assigning probability to those futures.”¹²⁰

According to the International Sustainability Standards Board (ISSB), “[m]any entities use scenario analysis in risk management.”¹²¹ The ISSB also argues that for some sectors, specific climate-related scenario analysis is already common practice; “[s]ome sectors, such as extractives and minerals processing, have used climate-related scenario analysis for many years.”¹²² However, registrants often provide little to no detail to investors regarding the forward-looking assumptions used in these assessments, which further underscores the importance of disclosing key assumptions and estimates.

d. GHG Emissions Disclosure

We support the Commission’s proposed requirement that registrants disclose qualitative data made with reasonable assurance about the intensity of their Scope 1 and Scope 3 GHG emissions for the fiscal year, with separate calculations for the sum of Scope 1 and 2 emissions. The requirement to include attestation along with reasonable assurance can provide security that the information the company is reporting is reliable and based on realistic assumptions. However, as addressed further below, we are concerned by the Proposed Rule’s lack of a broad Scope 3 emissions disclosure requirement and the lack of assurance.

Disclosure of a registrant’s direct emissions (Scope 1) and emissions from electricity and heat (Scope 2) provides valuable context for certain important financial estimates and assumptions, particularly related to the value of long-lived assets and the sustainability of certain operating costs. Importantly, disclosure of emissions from entities in a registrant’s value chain (Scope 3) are perhaps even more critical, as they provide information about potential transition risks to a registrant’s supply chain or revenue base and about opportunities to partner with customers and suppliers on mitigating this risk.

Whereas Scope 1 and Scope 2 emissions are much more directly linked to a company’s operations, Scope 3 emissions are impacted by a number of external factors, including the physical risks of climate

¹²⁰ Condon, Madison. 2021. “Market Myopia’s Climate Bubble,” Boston University School of Law Research Paper, 2022 *Utah Law Review* 63, February 9, 2021, pg. 52, <http://dx.doi.org/10.2139/ssrn.3782675>

¹²¹ IFRS Foundation. 2022. *Exposure Draft: Climate-Related Disclosures*. 2022, pg. 17, <https://www.ifrs.org/content/dam/ifrs/project/climate-related-disclosures/issb-exposure-draft-2022-2-climate-related-disclosures.pdf>.

¹²² *Id.*

change, and the risks associated with the transition to a low-carbon economy, which can also affect entities up and down a company's value chain.¹²³

Emissions data allows investors to evaluate a registrant's vulnerability to, for example, GHG-related taxation, regulation, litigation and reputational damage, changes to consumer, employee, or other market participant behavior, and shareholder pressure, in addition to other aspects of transition risk. Many investors view a company's GHG emissions data—including Scope 3—as significantly correlated with financial performance.¹²⁴ Over time, as the transition to a low-carbon economy accelerates, investors seeking to evaluate competing low-carbon equity investment strategies will increasingly need comprehensive, reliable emissions data. Mandatory Scope 3 disclosures are crucial to meeting this investor need.

Similarly, in March 2022, investors representing \$4.7 trillion in assets under management called upon the Commission to mandate Scope 3 disclosures, stating: "Failure to require disclosure and reporting of Scope 3 emissions is ... likely to result in the largest source of emissions remaining unaccounted for in company reporting and unaddressed in company activities. This in turn impacts a wide variety of actors that rely on accurate and consistent emissions information including investors, banks, insurers, and policy makers. Partial reporting of Scope 3 emissions, which we are seeing today, can also be misleading to investors. Without rules requiring reporting on all 15 Scope 3 categories, investors may assume that a company reporting its Scope 3 emissions is reporting in full, while in reality, it is reporting only a fraction of such emissions."¹²⁵

Institutional investor Wellington Management explains succinctly the problems that registrants' failures to disclose Scope 3 emissions are posing for investors seeking to price transition risk: "Scope 3 emissions dwarf Scope 1 and Scope 2 in many industries, including outside of fossil-fuel-heavy sectors. With more than 80% of companies not yet reporting Scope 3, it's no wonder the market cannot assess — or price — risks associated with the low-carbon transition."¹²⁶

By mandating Scope 3 emissions disclosures for all registrants, with appropriate and reasonable timelines for compliance, the Commission would ensure that investors and others have the reliable information they need for investment and voting decisions in a timely fashion.

e. Benefits of the Proposed Rule Outweighs the Costs

We commend the SEC for providing a robust economic analysis of the rule's anticipated impact on capital markets and meeting the Commission's legal requirements to consider certain economic factors. The SEC has appropriately calculated the pitfalls of failing to disclose climate-related risks to investors

¹²³ Center for American Progress. 2022. *The SEC's Scope 3 Climate Emissions Rule should not be based on Materiality*. February 18, 2022, <https://www.americanprogress.org/article/the-secs-scope-3-climate-emissions-rule-should-not-be-based-on-materiality/>

¹²⁴ Whelan, Tensie; Ulrich Atz; Tracy Van Holt; and Casey Clark. 2021. *ESG and Financial Performance: Uncovering the Relationship by Aggregating Evidence from 1,000 Plus Studies Published between 2015–2020*. Rockefeller Asset Management and NYU Stern Center for Sustainable Business. https://www.stern.nyu.edu/sites/default/files/assets/documents/NYU-RAM_ESG-Paper_2021%20Rev_0.pdf.

¹²⁵ As You Sow. 2022. *75 Investors With \$4.7 Trillion AUM Weigh in on Upcoming SEC Climate Disclosure Rulemaking*. March 8, 2022, <https://www.asyousow.org/press-releases/2022/3/8/sec-climate-disclosure-rulemaking>.

¹²⁶ Murphy, Erika. 2021. *Has Climate Transition Risk Been Priced Into Equities?* Wellington Management, July 2021. <https://www.wellington.com/en-gb/intermediary/insights/green-equities-climate-change-stocks-funds>.

and fairly accounted for the relevant estimated costs and benefits, including related impacts and delivers a sound economic justification for the proposed rule.

The vast financial losses associated with the potential stranding of trillions of dollars' worth of oil and gas assets alone is staggering. However, the resulting fallout from these losses and the broader impacts of the energy transition will reverberate through every sector, fundamentally impacting the balance sheets of almost every company. The significance of the risk to investors and the broader systemic risk to financial markets likewise are of great significance to the SEC's economic analysis. While costs of compliance are a part of that consideration, so too is the cost of failing to act to provide this information to the market.

By taking a value chain approach, the Proposed Rule enables investors to assess not only climate-related risks from operations across the companies they invest in but also consider the impacts arising upstream and downstream along the value chain of companies. Understanding value chains' resilience to risks stemming from climate change is essential to minimize, among other things, operational disruptions. The SEC recognizes that the risks to companies and investors comes from emissions that extend beyond a company's own operations. Importantly, by taking a value chain approach, the Proposed Rule protects investors of private companies. Any private company that is a supplier to publicly listed companies will be under scrutiny and face pressure to comply as well. Even though private companies aren't under the purview of the SEC in this rule, the actions by the SEC to take a whole of value chain approach will impact private companies.

As the SEC acknowledges, non-disclosure continues to represent an increased cost of acquiring the climate-related information. Investors continue to rely on costly third-party data providers and on proxy voting and filing shareholder resolutions to get access to the information that is currently unavailable. Smaller investors especially lack access to reliable information.¹²⁷

Earlier this year, ERM's SustainAbility Institute¹²⁸ surveyed institutional investors and found that on average, it costs \$1.3 million annually to collect, analyze, and report climate data to inform their investment decisions. In addition to estimating the costs associated with filing proxy responses to climate-related proposals, the survey also assessed the "costs related to voluntarily developing low-carbon transition plans, stakeholder engagement, government relations, and the preparation of related disclosures. When these items which are not required by the SEC's Proposed Rule are taken into account, the survey finds that corporate issuers currently spend an average of \$677,000."¹²⁹

In response to the SEC's Request for Public Input, CalSTRS notes it has allocated several billion dollars to low-carbon index-like investments and a low-carbon transition readiness equity strategy.¹³⁰ The investment theses of these products reference that capital markets are currently mispricing long-term,

¹²⁷ Christensen, Hans B.; Luzi Hail, L; and Christian Leuz. 2021. "Mandatory CSR and sustainability reporting: economic analysis and literature review." *Review of Accounting Studies* 26. 2021, <https://doi.org/10.1007/s11142-021-09609-5>

¹²⁸ ERM SustainAbility Institute. 2022. *Cost of Climate Disclosure Survey Fact Sheet*. May 12, 2022, https://www.sustainability.com/globalassets/sustainability.com/thinking/pdfs/2022/climate-disclosure-survey_fact-sheet-12-may-2022.pdf

¹²⁹ *Id.*

¹³⁰ California State Teachers' Retirement System (CalSTRS). 2021. Comment to the SEC Re: Request for Public Input on Climate Change Disclosures. June 4, 2021, <https://www.sec.gov/comments/climate-disclosure/cll12-8888208-240907.pdf>

low-carbon transition risks and opportunities. However, as noted in the proposed rule, CalSTRS itself is unable to price risk efficiently, because of the inconsistent climate data it gets through third-party providers.¹³¹ Many others like CalSTRS would benefit from registrant-provided climate risk data that is consistent and comparable.

CalSTRS also outsources the management of some of its funds to external managers that charge higher fees for climate and sustainability data in part because they too must make use of third-party data aggregators and estimates. The organization notes, “If we had a complete set of publicly available climate data across our investable universe, we could more efficiently and cost-effectively allocate capital to lower climate risk assets in line with our investment objectives.”¹³²

Like many other public asset owners, CalSTRS is bound by law to report the climate-related financial risks exposure of its public market portfolio. The organization shares that 62 percent of companies in its public equity portfolio did not report emissions data for 2019. The comment notes, “Knowing, measuring, and understanding climate risks for our portfolio is an investment imperative, fiduciary duty, and a legal requirement for CalSTRS. Absent complete, comparable, and reliable climate data for our total portfolio, we must expend extraordinary resources to fulfill our duties.”¹³³

Costs and inefficiencies related to climate data consistency and reliability are also concerns to other large institutional investors that submitted letters during the initial climate comment period. For example, as noted in the proposed rule the June 2021 T. Rowe SEC submission¹³⁴ points out that estimated or modeled data makes up a very significant portion of the climate emissions information that is available from service providers. As a result, the firm has difficulty providing reliable carbon footprint reporting available to its institutional clients, who are increasingly focused on climate change risk. Of course, data quality is a priority in all of T. Rowe’s investment decisions. So, it and all investors would benefit greatly from climate risk data that originates from issuers and is provided on a consistent and comparable basis. British Columbia Investment Management Corporation (BCI) makes a similar point in its June 2021 comment¹³⁵, which notes while about 44% of the S&P 500 Index discloses some Scope 3 emissions data, BCI must rely on proxy data to estimate emissions in order to report in line with the TCFD.

4. THE PROPOSED RULE FALLS COMFORTABLY WITHIN THE SEC’S STATUTORY AUTHORITY

Certain critics of SEC’s Proposed Rule wrongly claim that it is stepping outside of its lane by requiring issuers to disclose information about climate-related risks. The premise underlying this argument would seem to be that climate change will not materially impact investment performance. But nothing could be farther from the truth. Climate change and the transition to a low carbon economy will clearly impact issuer’s balance sheets and the performance of their securities – particularly those in the oil and gas

¹³¹ Proposed Rule at pg. 21353

¹³² CalSTRS. 2021. Comment to the SEC Re: Request for Public Input on Climate Change Disclosures. June 4, 2021, pg. 2, <https://www.sec.gov/comments/climate-disclosure/cll12-8888208-240907.pdf>

¹³³ *Id.* at pg. 4

¹³⁴ T. Rowe Price. 2022. Comment to the SEC Re: Request for Public Input on Climate Change Disclosures. June 11, 2022, pp. 1-2, <https://www.sec.gov/comments/climate-disclosure/cll12-8906961-244220.pdf>

¹³⁵ BCI, Comment to the SEC Re: Request for Public Input on Climate Change Disclosures. June 10, 2022, pg. 2, <https://www.sec.gov/comments/climate-disclosure/cll12-8905907-244091.pdf>

sector, as discussed above.¹³⁶ Requiring issuers to disclose such risks and climate-related financial metrics in financial statements is consistent with SEC practice and falls squarely within the SEC’s mandate to protect investors and maintain fair, orderly, and efficient markets.

We respond here more specifically to a few of the critiques and criticisms we have seen with respect to the authority, and providence, of the SEC mandating the disclosure of information related to climate risk, all of which we believe are without merit.

a. There is no climate change exception to investor protection; the SEC has both the authority and responsibility to act to require disclosure of climate-related risk information.

The SEC’s stated mission is to protect investors, to maintain fair, orderly, and efficient markets, and to facilitate capital formation.¹³⁷ As part of that, the SEC “strives to promote a market environment that is worthy of public trust.”¹³⁸ The SEC has broad authority to promulgate rules for registrant disclosure “as necessary or appropriate in the public interest or for the protection of investors.”¹³⁹ As the DC Circuit Court of Appeals has observed, the SEC “has been vested by Congress with broad discretionary powers to promulgate (or not to promulgate) rules requiring disclosure information beyond that specifically required by statute. Rather than casting disclosure rules in stone, Congress opted to rely on the discretion and expertise of the SEC for a determination of what types of additional disclosure would be desirable.”¹⁴⁰

There is ample evidence that climate change will affect investment performance, and none showing it will not.

Despite this broad authority, certain critics of the SEC’s Proposed Rule to require climate-related risk disclosures nonetheless assert that the subject matter of climate change is somehow unrelated to SEC’s core mission of investor protection, and thus the whole subject area is outside SEC’s authority.¹⁴¹ To the extent this argument relies on the assumption climate change will not impact financial or investment performance, it is contrary to the absolute consensus of the international financial regulatory community that climate change *will* have financial impacts across economic sectors and asset classes.¹⁴² Indeed, for this reason, the President in Executive Order 14030 has declared a government-wide policy of advancing “consistent, clear, intelligible, comparable, and accurate disclosure of climate-related

¹³⁶ The SEC appropriately recognizes this risk. See e.g. Proposed Rule, 87 Fed. Reg. 21334, 21336-7 (explaining how “Climate-related risks can affect a company’s business and its financial performance and position in a number of ways.”)

¹³⁷ See, e.g. SEC. About the SEC. <https://www.sec.gov/about.shtml>. Last accessed May 20, 2022.

¹³⁸ *Id.*

¹³⁹ Business and Financial Disclosure Required by Regulation S-K, Release No. 33-10064; 34-77599, April 16, 2016, available at <https://www.sec.gov/rules/concept/2016/33-10064.pdf> at pp.22-23 & fn. 50 (quoting Sections 7, 10, and 19(a) of the Securities Act; Sections 3(b), 12, 13, 14, 15(d), and 23(a) of the Exchange Act).

¹⁴⁰ *Nat. Res. Def. Council*, 606 F.2d 1031, 1045 (D.C. Cir. 1979). See also *id.* at 1051 (examining the House Report and Senate Committee report on the Securities Exchange Act, and concluding that “[t]he SEC, charged with swiftly and effectively [regulating securities markets] was necessarily given very broad discretion to promulgate rules governing corporate disclosure.”).

¹⁴¹ See, e.g., American Exploration and Production Council, Comment Letter on Request for Public Input Regarding Climate Change Disclosures (Jun. 11, 2021), at pp. 2-3; Patrick Morrissey, Attorney General of West Virginia, Comment Letter on Request for Public Input Regarding Climate Change Disclosure (Jun. 14, 2021) at 2; Andrew n. Vollmer, Mercatus Center, George Mason University, Does the SEC have Legal Authority to Adopt Climate-Change Disclosure Rules? 18 (2021).

¹⁴² See, e.g., Financial Stability Oversight Council, Report on Climate-Related Financial Risk 3 (2021); U.S. Commodity Futures Trading Commission, Managing Climate Risk in the U.S. Financial System 1 (2022).

financial risk,” recognizing that “[t]he intensifying impacts of climate change present physical risk to assets, publicly traded securities, private investments, and companies” and that “the global shift away from carbon-intensive energy sources and industrial processes present transition risk to many companies.”¹⁴³

The record already amply demonstrates that physical and transition risks from climate change pose a virtually unprecedented threat to financial markets, to investors, and to capital formation.¹⁴⁴ Climate risk has been compared to the 2008 financial crisis, though the consequences are surely far more sweeping and longer-term.¹⁴⁵ And, as addressed further below, the SEC is seeking to address only one aspect of the broader climate change problem – the piece most directly tied to its mandate. Because there is no support for critics’ broad assumption that climate change will not bring financial and investment risk, they are better understood to be arguing for a climate exception to the SEC’s otherwise applicable authority. There is no basis for such a claim. Given the magnitude of the threat to investors and financial markets, the SEC has not only the authority to act to require disclosure of climate related risk information, but the responsibility to do so.¹⁴⁶

Some critics make a distinct but related assertion that climate change, and the attendant risks, are too uncertain or speculative.¹⁴⁷ To the extent this argument seeks to deny in whole or in part the global consensus around the existence of climate change, it is plainly not credible. To the extent it is focused on the uncertainty around the specifics of the attendant risks, it ignores the fact that many line items in an issuer’s consolidated statement, such as capitalized costs, rely in whole or in part on uncertain estimations factors that are extremely difficult to forecast, such as the price of oil. Further, these estimations factor into speculation on unpredictable considerations such as management quality,

¹⁴³ Executive Order 14030, Climate-Related Financial Risk (May 20, 2021).

¹⁴⁴ As SEC noted, “the impact of climate-related risks on both individual businesses and the financial system as a whole are well documented.” Proposed Rule at 21336. *See also id.* (“climate-related risks and their financial impact could negatively affect the economy as a whole and create systemic risk for the financial system. SEC reporting companies and their investors are an essential component of this system.”); *id.* at 21446 (discussing “important efficiency implications in relation to systemic risk” and risk of financial system destabilization, among other sweeping and far reaching risks)

¹⁴⁵ See, e.g. Matthew J. Belvedere, BlackRock’s Larry Fink: Risks from climate change are bigger than the 2008 financial crisis with no Fed to save us (Jan. 14, 2020) available at <https://www.cnbc.com/2020/01/14/larry-fink-risk-from-climate-change-bigger-than-2008-financial-crisis.html>. As Commissioner Lee put it, climate change risk is “one of the most momentous risks to face capital markets since the inception of this agency. The science is clear and alarming, and the links to capital markets are direct and evident.” See Statement of Commissioner Allison Lee, Shelter from the Storm: Helping Investors Navigate Climate Risk (March 21, 2022) <https://www.sec.gov/news/statement/lee-climate-disclosure-20220321>

¹⁴⁶ See Statement of Commissioner Lee, Shelter from the Storm (March 21, 2022) (“We have a responsibility to help ensure that investors have the information they need to accurately price risk and allocate capital as they see fit. We have a responsibility to millions of families with retirement savings and college funds whose economic well-being is linked to our financial markets. And we have a responsibility to stay firmly focused on facts and science and their implications for financial markets”)

¹⁴⁷ See e.g. American Enterprise Institute Comment Letter at 11 (“‘Uncertainty’ clearly is a more accurate term than ‘risk’ in this context, in that the mean and/or standard deviation of the relevant statistical distributions are very unlikely to be known.”); *id.* at 12 (“Because the perceived climate ‘risks’ confronting public companies are dependent upon crucial choices among alternative assumptions, the evaluation of such ‘risks’ would be largely arbitrary given that the ‘correct’ assumptions are very far from obvious.”); U.S. Oil & Gas Association, Comment Letter on Request for Public Input Regarding Climate Change Disclosures (Jun. 12, 2021), at 3, 5 (“[A]n even more confounding dilemma is the uncertainty in the scientific projections of risks from climate change, with IPCC using various modeling scenarios with very different results. Making meaningful business decisions under those uncertainties is difficult at best, if not impossible.”); Competitive Enterprise Institute Comment Letter (June 11, 2021) at 2 (“Climate risk assessments typically depend on multiple assumptions fraught with uncertainties. Speculative risk guesstimates are of little financial value to investors.”)

takeover threats, human capital, technology change, litigation outcomes and brand value, all of which have routine and significant impact on securities valuations without enjoying anywhere near the due diligence applied to the peer-reviewed scientific data that is the basis for our understanding of the material risk posed by climate change. Financial reporting and securities valuation has always been about estimations. Disclosure that makes this clear and gives all investors the information necessary to act based on their own assessment of risk and opportunity helps promote market efficiency, protects investors and facilitates capital formation. There is nothing unusual about the SEC's Proposed Rule in this regard.

That some investors may be interested in climate risk information for environmental, social and governance “(ESG)” purposes does not make those disclosures irrelevant to investment performance; nor is the SEC’s disclosure authority narrowly limited to only information directly related to financial performance.

Some commenters opposing the SEC’s decision to act with respect to climate-related risk seem to suggest that it is responding only to ESG pressure from climate activists or other “stakeholders,” and that the disclosures are therefore unrelated to financial performance and fall outside the SEC’s statutory authority.¹⁴⁸ Neither the factual nor legal premise of this criticism is sound.

First, the SEC is properly focused on the interests of investors and financial markets. That the information to be disclosed may also be of interest to other “stakeholders,” in addition to investors, is hardly surprising, given climate change will have sweeping impacts that touch all corners of our economy and society. But that other “stakeholders” might also be interested does not in any way undermine its relevance and importance to investors, nor is it a reason that the SEC cannot or should not act in the interests of investors.

Second, although climate-related risk disclosures are essential to understanding a company’s financial condition, we note that the SEC’s disclosure authority is not strictly limited to information that is narrowly (and exclusively) related to the financial performance of issuers. It can require disclosures that are “in the public interest *or* for the protection of investors.”¹⁴⁹ This disjunctive indicates that SEC is not so strictly bound to investor protection as some suggest. Regardless, this rule is directly responsive to the needs of investors *in addition to* advancing the public’s interest in maintaining fair, efficient and orderly markets.¹⁵⁰

¹⁴⁸ See, e.g., U.S. Oil & Gas Association Comment Letter (Jun. 12, 2021), at p 3; Eric S. Schmitt, Attorney General of Missouri, Comment Letter on Request for Public Input Regarding Climate Change Disclosure (Jun. 14, 2021) at 2; See also Statement of Commissioner Hester M. Pierce, We are Not the Securities and Environment Commission – At Least Not Yet (Mar. 21, 2022), <https://www.sec.gov/news/statement/peirce-climate-disclosure-20220321>

¹⁴⁹ Securities Exchange Act § 14(a)(1) (15 U.S.C.S. § 78(n)(a)(1))] (emphasis added). While the Supreme Court has recognized that authority to regulate in “the public interest” is not limitless, where the agency in doing so is acting consistent with the purpose of its authorizing statute, it is plainly on solid footing. See *NAACP v. FPC*, 425 U.S. 662, 669 (1976). In this case, mandating disclosure of climate risk information is in the public interest and relates directly to SEC’s authorizing statute; the information is critical for investors, and to market stability and efficiency more broadly, both of which are central to SEC’s core mandate and purpose.

¹⁵⁰ See e.g. Proposed Rule at 21335 (stating that SEC has “determined that disclosure of information about climate related risks and metrics would be in the public interest and would protect investors”); *Id.* at 21337 (discussing the benefits to investors and capital markets); *id.* at 21340 (explaining enhanced disclosures could “increase confidence in the capital markets and help promote efficient valuation of securities and capital formation by requiring more consistent, comparable, and reliable disclosure about climate related risks, including how those risks are likely to impact a registrant’s business operations and

b. No single regulator has (or could conceivably have) exclusive authority to address the entire subject of climate change, but the SEC is the agency charged with protecting securities investors.

Because climate change poses risks across almost every conceivable corner of our economy and society, the SEC is not alone in its interest in addressing climate change risk within its area of regulatory authority, and certainly not the only financial regulator to do so. As the FSOC’s 2021 Report on Climate-Related Financial Risk shows, nearly every possible regulator (at the federal, state and international level) is investigating and/or regulating aspects of climate-related financial risk within its authority, including Depository Institute Regulators; Federal Deposit Insurance Corporation; the Federal Reserve Board; the Office of the Comptroller of Currency; the National Credit Union Administration; State Banking Supervisors; the Federal Housing Finance Agency and government-sponsored enterprises; and insurance regulators.¹⁵¹ The Department of Labor is also in the process of looking at how climate risk will impact covered retirement savings accounts and pensions.¹⁵²

Some critics have nonetheless suggested that SEC is not the appropriate agency to address climate-related financial risk, either because it would encroach on the authority of other agencies, somehow acting as an environmental regulator, or because it allegedly lacks the requisite expertise on climate.¹⁵³ Each is without merit.

To begin with, these critiques typically base the argument on a significant mischaracterization of what the SEC is actually proposing.¹⁵⁴ The SEC is *not* – by either action or intention – trying to regulate

financial performance.”); *id.* at 21413 (“the proposed rules are expected to contribute to the efficient allocation of capital, capital formation, competition, and the maintenance of fair and orderly markets”)

¹⁵¹ Financial Stability Oversight Council, Report on Climate-Related Financial Risk 34-44 (2021) <https://home.treasury.gov/system/files/261/FSOC-Climate-Report.pdf>. One of the areas of focus of the FSOC is the need to provide “investors, financial markets, and financial entities” with information on risks in a “consistent, comparable, and decision-useful manner.” It specifically directs members to “take steps, within their regulatory mandates, to ensure that company disclosures on climate-related risks meet these criteria.” *Id.* at 24. SEC is doing precisely that.

¹⁵² *See, e.g.*, US Department of Labor. 2022. *Request for Information on Possible Agency Actions to Protect Life Savings and Pensions from Threats of Climate-Related Financial Risk*. <https://www.federalregister.gov/documents/2022/02/14/2022-02798/request-for-information-on-possible-agency-actions-to-protect-life-savings-and-pensions-from-threats>

¹⁵³ *See, e.g.*, Comment of Lawrence Cunningham et al at 13-14, <https://www.sec.gov/comments/s7-10-22/s71022-20126528-287180.pdf>; Eric S. Schmitt, Attorney General of Missouri, Comment Letter on Request for Public Input Regarding Climate Change Disclosure (Jun. 14, 2021) at 3.

¹⁵⁴ *See e.g.*, American Petroleum Institute, Comment Letter on Request for Public Input Regarding Climate Change Disclosures (Jun. 11, 2021), at 5 (“Under the major-questions doctrine, the Congress ‘speak[s] clearly if it wishes to assign to an agency decisions of vast economic and political significance’ heretofore untouched by the agency . . . In the absence of new Congressional authority, we believe it is important that the SEC adhere to established precedents regarding materiality -- which is an inherent requirement in protecting investors and evaluating costs and benefits -- to ensure that any eventual rule is on sound legal footing.”); U.S. Oil & Gas Association Comment Letter (Jun. 12, 2021), at 2 (“SEC appears to be going down the path of regulation despite the fact that the representatives of the American people have been unable and/or unwilling to pass into law legislation to address climate change. Certainly none has been passed granting SEC the authority to enact climate change regulation.”); *see also e.g.* Comment of Rep. Huizenga et al at 1 (March 18, 2022) (asserting that the SEC is not really attempting to “provide financially material information to investors for all companies; the real intent is to fight climate change.”); National Mining Association, Comment Letter on Request for Public Input Regarding Climate Change Disclosures (Jun. 11, 2022) at 7 (“The SEC must avoid disclosure obligations designed to further specific policy goals outside of the SEC’s tripartite mission to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation.”); Eric S. Schmitt, Attorney General of Missouri, Comment Letter on Request for Public Input Regarding Climate Change Disclosure (Jun. 14, 2021) at 1 (“Moreover, in light of Commissioner Lee’s recent public comments, this Proposed Rule appears to be an ill-advised first step in an attempt [to] politicize the SEC.”).

emissions or economic activity. The SEC is not proposing to set or change climate policy in any way.¹⁵⁵ The SEC is not telling issuers how much GHGs they can emit, or whether they need to change their operations to account for climate impacts or transition risks; it is merely requiring them to disclose information about what they are doing to investors. A disclosure regime does not regulate the underlying economic activity. The SEC is acting in a limited way consistent with its statutory authority and mandate.

At least one commenter has suggested more specifically that the SEC would be encroaching on the Environmental Protection Agency (EPA)'s ability to regulate greenhouse gasses, or that the EPA's Greenhouse Gas Reporting Program (GHGRP) somehow deprives SEC of authority to enact climate risk disclosures.¹⁵⁶ But the Proposed Rule in no way wanders into EPA's lane. The EPA and SEC have entirely different mandates; the SEC is the agency tasked with protecting investors and financial markets; the EPA is tasked with (among other things) regulating air pollution. Accordingly, GHG reporting under the EPA's GHGRP is quite different in purpose, in content, intended audience, as well as assurance and verification. In particular, the GHGRP only covers emissions from large greenhouse gas emission sources, fuel and industrial gas suppliers, and CO₂ injection sites in the United States.¹⁵⁷ The program doesn't cover emissions from other sectors, nor direct emissions from sources that are below a particular threshold, and the information reported is domestic facility-level direct emissions and facility-level supplied emission; it is not on an issuer-by-issuer basis and is not in any way useful in comparing emissions across issuers.¹⁵⁸ And, as the SEC notes, the data "does not allow a clean disaggregation across the different scopes of emissions for a given registrant."¹⁵⁹ In other words, information reported

¹⁵⁵ Indeed, SEC is clear about this. See Proposed Rule at 21336 ("While climate-related risks implicate broader concerns—and are subject to various other regulatory schemes—our objective is to advance the Commission's mission to protect investors, maintain fair, orderly and efficient markets, and promote capital formation, not to address climate-related issues more generally.")

¹⁵⁶ See e.g. Comment of Lawrence Cunningham et al at 13, <https://www.sec.gov/comments/s7-10-22/s71022-20126528-287180.pdf>. Moreover, although the author references the general principle that more recent and specific laws supersede earlier more general laws, that only applies where the relevant laws address the same subject, which is obviously not the case here.

¹⁵⁷ See Environmental Protection Agency, Greenhouse Gas Reporting Program (GHGRP), <https://www.epa.gov/ghgreporting> (last visited Jun. 6, 2022). We note that the commenter advancing this argument incorrectly asserts that the program "measures and reports on almost all [GHG] emissions in the United States from *all sources*." Cunningham Comment at 13 (emphasis added). This is false.

¹⁵⁸ We note that industry commenters too recognize that the GHGRP is not a substitute for the GHG reporting that would be necessary from a climate risk perspective. See, e.g. API 2021 Comment at 8 ("We recognize that there may be some limitations to the GHGRP scope in relation to some factors the SEC may consider important – specifically non-U.S. emissions and facilities owned by issuers that are not large greenhouse gas emitters").

¹⁵⁹ Proposed Rule at 21414. We note that one commenter made a related but distinct argument that emissions reporting might be "duplicative" of EPA's GHGRP, adding costs and contributing to unnecessary confusion. See Comment of Senator Joe Manchin at 2 <https://www.manchin.senate.gov/imo/media/doc/SECpercent20ClimateDisclosurepercent20Letter.pdf?cb>. To the extent there was any serious concern as to duplication, the SEC has appropriately addressed this by noting a registrant may use that EPA data in partial fulfillment of its GHG emissions disclosure obligations. See Proposed Rule at 21374. As to possible confusion by investors, this merely reinforces the value of *the SEC* promulgating mandatory disclosures that include emissions *for investors*. EPA's purpose and the purpose of the GHGRP specifically are not related to investors and the information provided is not done so with their interests in mind. As discussed further in this comment above, currently, investors have to attempt to piece together this sort of information from a myriad of sources that are not geared towards investors, that they may be less familiar with, that lack the assurances needed to make the information decision-useful and are not standardized in a way that allows for any sort of meaningful comparison. The SEC's Proposed Rule will provide this information in one place, in a manner and form intended for investors, in a way that is decision-useful, reliable and comparable.

under the GHGRP is not (and is not meant to be) useful to investors.

In its landmark October 2021 report on financial stability risks from climate change, the FSOC dismissed the notion that the EPA's inventory would suffice for investors and other market participants: "The EPA's data collections on GHG emissions may prove difficult for financial firms and regulators to use for financial analysis, reflecting challenges with merging datasets and other factors. For financial analysis, a broader view of emissions intensity—encompassing the full spectrum of direct and indirect, or upstream and downstream, emissions—would provide a fuller picture and enable companies to generate enhanced climate-related disclosures."¹⁶⁰

More generally, the fact that other agencies administer other regulations that relate in some way to the broad subject matter of climate change plainly does not limit SEC's authority to act to require disclosures of climate-related financial risk information and financial metrics. Indeed, in recognition of the enormity and interconnectedness of the risks posed by climate change, the President has directed a "whole-of-government approach to mitigating climate-related financial risk."¹⁶¹ The SEC's proposed rule is one small piece of the puzzle and it is specifically responsive to the needs of investors and ensuring the stability of financial markets, consistent with its mandate.

Finally, the suggestion that the SEC lacks climate science expertise,¹⁶² similarly, misses the point of (or intentionally mischaracterizes) what the SEC is actually doing. The SEC does not need to have the foremost expertise in climate science because it is not setting climate policy or reviewing climate plans or setting environmental standards. The SEC is only requiring disclosures of climate-related impacts and relevant financial risks, and the SEC has extensive technical expertise in administering complex disclosure frameworks on a broad array of subjects. The SEC already requires similar disclosures (where it also arguably lacks expertise): it is not an expert in geology, but it still requires oil production companies to disclose their proven/probable reserves in Regulation S-X;¹⁶³ nor is it necessarily an expert in litigation risk, but it still requires companies to disclose litigation that may materially impact the company's performance in Regulation S-K.¹⁶⁴ The SEC has the expertise necessary to implement and enforce disclosures of climate-related risk information and financial metrics.

¹⁶⁰ 2021 FSOC report at 56.

¹⁶¹ The White House, FACT SHEET: President Biden Directs Agencies to Analyze and Mitigate the Risk Climate Change Poses to Homeowners and Consumers, Businesses and Workers, and the Financial System and Federal Government Itself (May 20, 2021), <https://www.whitehouse.gov/briefing-room/statements-releases/2021/05/20/fact-sheet-president-biden-directs-agencies-to-analyze-and-mitigate-the-risk-climate-change-poses-to-homeowners-and-consumers-businesses-and-workers-and-the-financial-system-and-federal-government/>

¹⁶² See, e.g. Eric S. Schmitt, Attorney General of Missouri, Comment Letter on Request for Public Input Regarding Climate Change Disclosure (Jun. 14, 2021) at 3 ("the SEC has no expertise... to evaluate the scale of threatened climate change, the quantity or quality of potential impacts, and how corporate actions increase or decrease those impacts in any meaningful way"); See also Andrew N. Vollmer, Does the SEC Have Legal Authority to Adopt Climate Change Disclosure Rules? (August 2021) at 15-16 https://www.mercatus.org/system/files/vollmer_-_policy_brief__does_the_sec_have_legal_authority_to_adopt_corporate_disclosure_rules_on_climate_change_-_v1.pdf

¹⁶³ See, e.g., Rule 4-10(a) [17 C.F.R. § 210.4-10(a)].

¹⁶⁴ See, e.g., Item 103 [17 C.F.R. § 229.1118].

c. Unduly narrow views of “materiality” are unsupported, and the proposed disclosures involve information that is material to investors.

Those opposing climate risk disclosures have raised a number of related but distinct arguments around “materiality” in asserting that the SEC cannot, or should not, require climate-related risk disclosures. Each of these reflect unduly narrow views of materiality that lack sound support in the law and SEC practice. They are also at odds with the evidence already in the record – most notably, the views and interests of investors that overwhelmingly show the materiality of physical and transition risk information and the inadequacy of current disclosures.

The SEC’s disclosure authority is not limited to exclusively “material” information.

First, we note that despite frequent assertions otherwise, there is no materiality constraint on the SEC’s authority to promulgate disclosure regulations.¹⁶⁵ Neither a plain text reading of the 1933 and 1934 Securities Acts, nor the relevant case law typically cited for this proposition, limit the scope of SEC’s disclosure authority to only “material” information.¹⁶⁶ Arguments to the contrary conflate the materiality limitation on the SEC’s enforcement authority in the anti-fraud context with the SEC’s authority to establish a disclosure framework that protects investors across a broad range of securities.¹⁶⁷ As Commissioner Lee recently noted, “materiality places limits on anti-fraud liability; it is not a legal limitation on disclosure rulemaking by the SEC.”¹⁶⁸

Although the SEC’s authority is not so limited, climate risk is – and should be – considered material – and certainly for the Oil and Gas sector.

Even if SEC’s regulatory authority was strictly conditioned on a finding of materiality, which it is not, there is ample evidence (and SEC would certainly be within its permissible realm of discretion) to find that the required disclosures are material to investors.

Information is considered “material” if a reasonable investor would attach importance to it in deciding how to vote or make an investment decision or if it would have significantly altered the “total mix” of

¹⁶⁵ See, e.g. 2021 Patrick Morrissey Comment at 2; National Mining Association, Comment Letter on Request for Public Input Regarding Climate Change Disclosures (Jun. 11, 2022) at 7-8. <https://www.sec.gov/comments/climate-disclosure/cil12-9368667-261931.pdf>; See also e.g. API Comment at 5 <https://www.sec.gov/comments/climate-disclosure/cil12-8907327-244228.pdf>

¹⁶⁶ See e.g. 15 U.S.C.S. § 77g(a)(1); 15 U.S.C.S. § 77s(a); 15 U.S.C.S. § 78l(b)(1); 15 U.S.C.S. § 78m(a)(1). None of those provisions contain a materiality qualifier. Those arguing the SEC can only require disclosure of financially material information typically cite to *TSC Industries v. Northway*, 426 U.S. 438 (1976). But the Court in that case defined materiality to determine the scope of liability for misleading statements. The Court was addressing the question of whether an issuer had had a legal duty to disclose particular information after the fact, and the scope of SEC’s enforcement authority in that specific context. *Id.* at 441-46. Neither *TSC Industries*, nor *Basic v. Levinson*, 485 U.S. 224 (1988), concerned, nor in any way purported to limit, the type of information that the SEC can require in crafting disclosure regulations.

¹⁶⁷ See, e.g. 2021 Comment of Patrick Morrissey at 2 (asserting that the Rule 10b-5 materiality standard in the fraud context, as articulated in *Basic v. Levinson*, is the “correct standard that should Guide the Commission’s decision with respect to potential additional disclosure rules”).

¹⁶⁸ Commissioner Lee, Living in a Material World: Myths and Misconceptions about “Materiality” (May 24, 2021). <https://www.sec.gov/news/speech/lee-living-material-world-052421>. In establishing a disclosure framework, like that proposed here, the SEC is authorized to act as is “necessary or appropriate in the public interest or for the protection of investors.” There is no doubt significant overlap in what is considered “financially material” and what constitutes investor protection, but the inquiry is not – and need not be – the same.

information made available.¹⁶⁹ There is already overwhelming evidence in the record that this information *is* material to investors. Indeed, investor demand with respect to climate risk information appears virtually unprecedented in scale.¹⁷⁰ As the SEC recognized, “climate-related risks have present financial consequences that investors in public companies consider in making investment and voting decisions.”¹⁷¹ Even if there were outstanding questions as to the materiality of this information for other sectors, as discussed above, that cannot be said for the fossil fuel sector.¹⁷²

Critically, it is not required that each piece of information be individually and separately material to an issuer’s bottom line. Rather, it is appropriate – and consistent with SEC practice – for the SEC to identify a subject area that is broadly material to investors and to design a comprehensive and detailed framework for disclosing information that ensures such disclosures are standardized to be consistent, comparable and reliable.¹⁷³ Sometimes individual disclosure line items may include a qualification based on materiality, but not always.¹⁷⁴ If every line item and metric were to be individually tested against an individual line item materiality standard, a large majority of the SEC’s existing rules would fail.

Issuers’ failure to disclose climate-related risk information under existing rules is evidence the current rules are not working; it is not evidence that the information is immaterial

A different materiality argument advanced by some commenters is that existing SEC rules already cover any material risks, suggesting that all material climate information is already required to be disclosed, and any information not currently being reported is therefore not material.¹⁷⁵ This misstates securities law, overlooks the way materiality determinations are made, and prioritizes the desires of issuers over the clear interests of investors.

First, this is misleading in that securities law does not actually contain an affirmative requirement to disclose any and *all* material information. Without a specific duty to disclose, companies can and often

¹⁶⁹ See, e.g., 17 C.F.R. § 230.405; see also 17 C.F.R. § 240.12b-2.; see also *TSC Indus. v. Northway*, 426 U.S. 438, 449 (1976); *Basic v. Levinson*, 485 U.S. 224, 231-32 (1988).

¹⁷⁰ See, e.g. Statement of Commissioner Lee, Shelter from the Storm: Helping Investors Navigate Climate Change Risk (May 21, 2022) <https://www.sec.gov/news/statement/lee-climate-disclosure-20220321> (noting that “investors representing tens of trillions of dollars – more than the combined GDP of the top five ranked countries in the world – have been clear that they need more and better climate-related disclosure.”) And, as SEC appropriately acknowledges, “It is appropriate for us to consider such investor demand in exercising our authority and responsibility to design an effective and efficient disclosure regime under the federal securities laws.” Proposed Rule at pg. 21337

¹⁷¹ Proposed Rule at pp. 21335-21336

¹⁷² See also, e.g., CalSTRS comment, pp. 3-4 (identifying ExxonMobil as a “severe case[] of elevated investment risk” with which CalSTRS attempted to engage after its market capitalization halved and the company “missed its cash flow projections while failing to provide a credible strategy for the low carbon transition”).

¹⁷³ See, e.g., Statement of Commissioner Lee, Living in a Material World: Myths and Misconceptions about “Materiality” (May 24, 2021) (noting the example of exec compensation, which was material broadly, but a materiality determination was not made for each individual metric)

¹⁷⁴ See *id.* (citing 17 CFR § 229.402).

¹⁷⁵ See, e.g., U.S. Chamber of Commerce, Comment Letter on Request for Public Input Regarding Climate Change Disclosures (Jun. 11, 2021), at 4; National Mining Association, Comment Letter on Request for Public Input Regarding Climate Change Disclosures (Jun. 11, 2022) at 2; Comment of Senator Pat Toomey et al. at 1 (June 13, 2021) <https://www.sec.gov/comments/climate-disclosure/cl112-8911330-244285.pdf>; Statement of Commissioner Pierce, We are Not the Securities and Environment Commission – At Least Not Yet (March 21, 2022)

do remain silent.¹⁷⁶ The materiality of information alone is insufficient to ensure it is disclosed. Accordingly, it is a disservice to investors and the public to suggest that all material information is already required, and thus disclosed.

Second, the argument also assumes that management always gets the materiality determination right. Materiality is meant to be determined through the lens of a reasonable investor, but it is management who makes the materiality determination. And there is evidence that materiality determinations made by management under principles can and unfortunately often do differ from those determinations investors would make.¹⁷⁷ Under a principles approach in particular, corporations have significant discretion in deciding what information is material. There are no clear rules for how such determinations are made, nor do corporations traditionally explain the way in which they make those determinations. This makes it exceedingly challenging to evaluate decisions to withhold information. While SEC brings enforcement actions every year for negligence as a result of these materiality determinations,¹⁷⁸ that is merely a small sampling; more often, neither investors, the SEC, nor the public will know of the omission of material information.

With respect to climate-related risk information in particular, however, it is unnecessary to speculate; investors have made it abundantly clear that the current rules and regulations are *not* sufficient, and companies are not disclosing information investors consider material.¹⁷⁹ Even before the SEC first requested public input, Commissioner Lee observed that “investors are overwhelmingly telling us, through comment letters and petitions for rulemaking, that they need consistent, reliable and comparable disclosures of the risks and opportunities related to ... climate risk.”¹⁸⁰ And the SEC is not merely taking their word for it – it is appropriately basing its decisions in part on its own review of

¹⁷⁶ The duty to disclose only arises where there is an explicit requirement, such as in the line-item requirements in Regulation S-K, or where necessary to make statements by a company accurate or not misleading, as in *Basic v. Levinson*, 485 U.S. 224 (1988). Otherwise, companies can and do remain silent. See, e.g., Statement of Commissioner Lee, Living in a Material World: Myths and Misconceptions about “Materiality” (May 24, 2021).

¹⁷⁷ See discussion and associated literature examining this issue cited in footnotes 18-20 in Statement of Commissioner Lee, Living in a Material World: Myths and Misconceptions about “Materiality” (May 24, 2021).

¹⁷⁸ See, e.g., Securities & Exchange Commission, Selected Division of Enforcement Accomplishments: December 2016 - December 2020, <https://www.sec.gov/enforce/selected-division-enforcement-accomplishments-december-2016-december-2020>. Last accessed on June 5, 2022.

¹⁷⁹ Numerous investors have made this point already to the SEC in the original round of comments. See, e.g. 2021 Alliance Bernstein Comment at 1 (emphasizing the importance of climate risk in their investment strategy and explaining that “AB has observed significant challenges in integrating climate change considerations into the investment processes due to severe inconsistencies and weaknesses in corporate disclosures around climate change risks, opportunities and the strategy and management thereof. The variability and gaps in current disclosures frequently fail to capture material, financial climate risks faced by issuers and markets, thereby preventing investors from implementing efficient capital allocation and effective risk management.”). See also e.g. CalPERS p. 2 (“We expect companies to provide integrated representations of operational, financial, environmental, social, and governance performance in terms of both financial statement and non-financial statement results and prospects. However, the current disclosure regime for corporate reporting falls short of our expectations as investors, and we believe that companies should disclose better information in regulatory reports so that shareowners can more easily identify, assess and manage climate risk and opportunity.”); Calvert (Jun. 1, 2021) pp. 1-3, 6; State Street Global Advisors, pp. 2-4; New York State Common Retirement Fund pp. 2, 5, 11; Los Angeles County Employees Retirement Association, pp. 2-3; CalSTRS, pp. 4, 6; Vanguard, pp. 2-4.

¹⁸⁰ Commissioner Allison Herren Lee, “Modernizing” Regulation S-K: Ignoring the Elephant in the Room (Jan. 30, 2020) <https://www.sec.gov/news/public-statement/lee-mds-2020-01-30>

existing disclosures, and its finding that current disclosures are both inconsistent and inadequate.¹⁸¹

Critics of the Proposed Rule advancing this line of argument notably cite to *issuers'* views that this information is not material.¹⁸² That some *issuers* (or other industry actors advocating on their behalf) believe that climate risk is not material to investors and should not be required is hardly determinative, nor is it due any deference here when it stands so starkly at odds with the virtually unanimous view of investors. Such issuer assertions should be greeted with skepticism. The materiality inquiry is focused on what the reasonable investor wants and needs, not simply on what management believes their investors should know. Otherwise, there would be little need for the SEC and little protection for investors.

Whether information is material is meant to “be resolved in favor of [the interests] the statute is designed to protect,” namely investors’ and shareholders’ “informed choice[s].”¹⁸³ The Supreme Court has explained in the anti-fraud/enforcement context that “[t]he role of the materiality requirement is not to ‘attribute to investors a child-like simplicity, an inability to grasp the probabilistic significance of negotiations,’ but to filter out essentially useless information that a reasonable investor would not consider significant, even as part of a larger ‘mix’ of factors to consider in making his investment decisions.”¹⁸⁴ The emphasis on investors’ ability to make an informed choice (and the preference to resolve ambiguity in favor of the investors’ priorities) further indicates substantial weight must be given to the views of investors, not issuers.¹⁸⁵

Indeed, undue deference to issuers on the contours of climate-related disclosures in particular would risk substantially undermining public and investor trust given the role some issuers – and especially fossil fuel actors – are alleged to have played in denying the existence of climate change and deceiving

¹⁸¹ See, e.g. Proposed Rule at pg. 21340; *id.* at 21339 (noting that while climate change disclosures have increased since 2010, “there is considerable variation in the content, detail and location” of such information and SEC staff have “observed significant inconsistency in the depth and specificity ... across industries and within the same industry”); *id.* at 21335 (finding that “existing disclosures do not adequately protect investors”). PWYP-US’s analysis of oil and gas issuer disclosures has also revealed substantial inconsistency and insufficiency in how companies within the same industry report on the same things, looking specifically at climate change litigation as an illustrative example, given that so many companies face precisely the same type of lawsuits and yet vary dramatically in what (if anything) they say about it. See PWYP-US June 2021 Comment at pp. 31-34.

¹⁸² In asserting that existing rules are sufficient to cover material information, Commissioner Pierce, for example, notes that in response to SEC comment letters relating to climate risk disclosures, certain companies asserted that such information was “largely immaterial and inappropriate for inclusion in SEC filings.” Statement of Commissioner Hester M. Pierce, We are Not the Securities and Environment Commission – At Least Not Yet (Mar. 21, 2022). See also, e.g., Comment of Patrick Morrissey at 2 (“Under current, well-established reporting obligations, issuers uniformly do not include any statements regarding the quantity of their direct or indirect greenhouse gas emissions in the reports mandated by the Commission. ... The fact that none of the companies included quantified metrics regarding the extent of issuer-associated greenhouse gas emissions strongly indicates that information is not necessary to protect investors who are considering securities purchases.”); U.S. Oil & Gas Association Comment Letter (Jun. 12, 2021), at 6-7 (arguing that in favor of voluntary standards and asserting that allowing companies to continue “work[ing] through ESG and disclosure issues as laboratories” would allow “the best solutions to rise to the top”).

¹⁸³ *TSC Industries*, 426 U.S. at 448 (citing *Mill v. Electric Auto-Lite Co.*, 396 U.S. 375, 381 (1976)).

¹⁸⁴ *Basic, Inc. v. Levinson*, 485 U.S. 224, 234 (1988) (citing *TSC*, 426 U.S. at 448-49).

¹⁸⁵ To ignore this level of investor demand would both fail to fulfill the SEC’s investor mission and undermine its credibility as an agency meant to act in their interest. The SEC has sided with industry and regulated parties over investors on numerous recent occasions, “disfavor[ing] or even disregard[ing] investor views.” See Statement of Commissioner Lee, Statement on the Rollback of Auditor Attestation Requirements (Mar. 12, 2020) <https://www.sec.gov/news/public-statement/statement-lee-accelerated-filer-2020-03-12> As Commissioner Lee observed in discussing this concerning trend, “[t]here must be a limit to the number of times we can credibly assert to investors that we act in their best interests by making policy choices they directly oppose.”

the public about its causes and the risks it poses. As PWYP-US noted in our prior comment, significant information revealed in recent years has shown the extent to which many fossil fuel companies and other industry groups working on their behalf knew early on the role fossil fuels were playing in contributing to climate change, and yet for decades, are alleged to have actively sought to deceive the public about its causes, as well as the impacts – including the specific implications for the viability of their business plans.¹⁸⁶ Any suggestions that the SEC should now defer to the same such actors in determining what climate-related information to disclose should be treated with the skepticism it deserves.

d. The Proposed Rule does not implicate the First Amendment.

While “it has never been deemed an abridgment of freedom of speech” to regulate “the exchange of information about securities,”¹⁸⁷ some critics vaguely suggest that mandating the disclosure of climate risk information would violate the First Amendment. Indeed, some critics raised the argument that any regulations in this space at all would presumably pose First Amendment problems even before the SEC proposed what such disclosures might look like.¹⁸⁸ These arguments are meritless.

Most of these arguments are entirely unspecific as to why climate risk disclosure requirements would violate the First Amendment, but the Proposed Rule presents no such problems. It neither requires issuers to take or disclose a position on climate policy, nor does it distinguish between viewpoints on climate change; it requires only that issuers disclose information about what they are doing.¹⁸⁹ Simply put, the SEC is requiring issuers to disclose factual information, which is relevant to investment decisions

¹⁸⁶ See PWYP Comment at 30 & n. 104. See also Chris McGreal, Big oil and gas kept a dirty secret for decades. Now they may pay the price, *The Guardian* (Jun. 30, 2021), <https://www.theguardian.com/environment/2021/jun/30/climate-crimes-oil-and-gas-environment>; Amy Lieberman & Susan Rust, Big Oil braced for global warming while it fought regulations, *Los Angeles Times* (Dec. 31, 2015), <https://graphics.latimes.com/oil-operations/>. The most recent IPCC report notes the damaging impact that this deception has had. See, e.g. IPCC report, CH. 14 at p.14 (noting that “Rhetoric and misinformation on climate change and the deliberate undermining of science have contributed to misperceptions of the scientific consensus, uncertainty, disregarded risk and urgency, and dissent,” and that “[v]ested economic and political interests have organized and financed misinformation and ‘contrarian’ climate change communication”). As noted in our prior comment, there are numerous examples of pending litigation brought by states, counties and municipalities against fossil fuel companies and industry groups for their role in deceiving consumers, the public, and investors about climate change, which we referenced in our prior comment. See PWYP 2021 Comment at n. 104. In addition, we note that certain fossil fuel industry actors are also alleged to be engaged in ongoing efforts to mislead consumers, the public, and investors about their business strategy and the implications of the energy transition through false advertising and marketing. See, e.g. Valerie Volcovici, Green groups file FTC complaint against Chevron over climate claims, *Reuters* (Mar. 16, 2021) <https://www.reuters.com/article/us-usa-ftc-greenwashing/green-groups-file-ftc-complaint-against-chevron-over-climate-claims-idUSKBN2B82D7>. See also, e.g. Alvin Powell, Tracing Big Oil’s PR war to delay action on climate change, *The Harvard Gazette* (Sept. 28, 2021), <https://news.harvard.edu/gazette/story/2021/09/oil-companies-discourage-climate-action-study-says/>.

¹⁸⁷ *Ohralik v. Ohio State Bar Ass’n*, 436 U.S. 447, 456 (1978). See also *SEC v. Wall Street Pub. Institute, Inc.*, 821 F.2d 365, 373 (D.C. Cir. 1988) (“the First Amendment’s protections provided by the commercial speech doctrine do not detract from the government’s regulatory power over the securities market.”).

¹⁸⁸ See, e.g., Patrick Morrissey (W.V. Attorney General) Comment 3-4; API comment 5-6; Eric Schmitt (Missouri Attorney General) comment 4-5.

¹⁸⁹ The proposed Rule is significantly different from the “conflict minerals” rule that was struck down by the D.C. Circuit for at least two central reasons. First, the “conflict minerals” rule included an ideological message, *Nat’l Ass’n of Mfrs. v. SEC*, 748 F.3d 359, 371 (2013) (requirement to state whether a product was “conflict free” was problematic because “the label ‘conflict free’ is a metaphor that conveys moral responsibility for the Congo war. It requires an issuer to tell consumers that its products are ethically tainted.”). And second, it had nothing to do with protecting investors or providing information relevant to the sale of securities, *Nat’l Ass’n of Mfrs. v. SEC*, 800 F.3d 518, 522 (D.C. Cir. 2015).

and the financial performance of issuers.¹⁹⁰ It is thus indistinguishable from the litany of disclosures that the SEC already requires – such as requirements that Oil and Gas companies disclose their “proven and probable reserves,” and material and legal risk, among other things. And despite the ubiquity of similar disclosure requirements (and their clear constitutionality), SEC’s critics have offered no real or principled explanation for why *these* disclosures violate the constitution, but SEC’s other disclosure requirements do not.

Commissioner Pierce in her statement opposing the Proposed Rule suggested that “to qualify as uncontroversial and thereby stay within First Amendment bounds, our disclosures mandates must be limited to information that is material to the prospect of financial returns.”¹⁹¹ But this is not the legal standard; and even if it were, the minor premise is wrong. For something to be “controversial” in a First Amendment sense the “message [itself must be] controversial for some reason other than dispute about simple factual accuracy.”¹⁹² The factual information that the SEC proposes to require, such as emissions data and financial metrics, do not convey any message (controversial or otherwise).

Even if it were true that the requested information must be tied to protecting investors to survive under the First Amendment, the Proposed Rule here would be constitutionally sound. As discussed, above, the rule is, at bottom, designed to protect investors and inform investment decisions. The suggestion – that the SEC is responding to demands from stakeholders that are unrelated to “an interest in financial returns from an investment in a particular company, but by deep concerns about the climate”¹⁹³ – is wholly unsupported and no basis for tossing the Proposed Rule out on First Amendment grounds.

5. RECOMMENDATIONS

While we generally support the SEC’s approach in the Proposed Rule, there are certain areas that could be strengthened to maximize the benefits of disclosures under the rule to investors and financial markets.

a. Broader transition risk definition

We broadly support the SEC’s definitions as proposed, given their similarity to the definitions adopted by the TCFD and other existing reporting frameworks.¹⁹⁴ However, we note that in particular, the definition for “transition risk” fails to mention the intersection of climate-related risks and the adverse consequences to resource-rich, and resource-producing communities stemming from company operations. Without this necessary context, investors cannot fully understand the scope and impact of climate-related risks on a company’s financial performance.

¹⁹⁰ The SEC “is subject to lesser scrutiny – and therefore has greater leeway – when requiring companies to disclose ‘purely factual and uncontroversial information.’”. See also *Zauderer v. Office of Disciplinary Counsel of Sup. Ct.*, 471 U.S. 626, 629 (1985). And “[t]he self-evident tendency of a disclosure mandate to assure that recipients get the mandated information may in part explain why, where that is the goal, many such mandates have persisted for decades without anyone questioning their constitutionality.” *Am. Meat Inst. v. U.S. Dep’t of Agriculture*, 760 F.3d 18, 27 (2014) (“AMI”) (upholding country of origin labels).

¹⁹¹ Statement of Commissioner Hester M. Pierce, We are Not the Securities and Environment Commission – At Least Not Yet (Mar. 21, 2022).

¹⁹² *Am. Meat Inst. v. U.S. Dep’t of Agriculture*, 760 F.3d 18, 27 (2014) (“AMI”) (upholding country of origin labels).

¹⁹³ Statement of Commissioner Hester M. Pierce, We are Not the Securities and Environment Commission – At Least Not Yet (Mar. 21, 2022) (citing Letter from Julia Mahoney and Paul Mahoney, University of Virginia School of Law (June 1, 2021), <https://www.sec.gov/comments/climate-disclosure/cll12-8855236-238441.pdf>).

¹⁹⁴ Proposed Rule at pg. 21349.

Recommendation: The SEC should amend its proposed definition for “transition risk” to more accurately and comprehensively account for energy transition-related risks to communities that may be impacted by extraction or production. The SEC should adopt the following revision to the definition of transition risk:

Transition risks are the actual or potential negative impacts on a registrant’s consolidated financial statements, business operations, or value chains attributable to regulatory, technological, social, and market changes to address the mitigation of, or adaptation to, climate-related risks, such as increased costs attributable to changes in law or policy, reduced market demand for carbon-intensive products leading to decreased prices or profits for such products, the devaluation or abandonment of assets, risk of legal liability and litigation defense costs, competitive pressures associated with the adoption of new technologies, as well as reputational, operational, legal, and political impacts (including those stemming from a registrant’s customers or business counterparties as well as adverse social conditions such as increasing inequality, land and human rights violations, or shifts in community perceptions of a registrant’s contribution to or detracting from the transition to a lower-carbon economy) that might trigger changes to market behavior, consumer preferences or behavior, and registrant behavior.

b. Scope 3 Emissions Disclosures

Scope 3 disclosure should be required for all issuers

As discussed above, Scope 3 emissions information is essential to understanding a company’s total greenhouse gas emissions and thus its overall climate risk. This information enables investors to determine the risk of stranded assets in an organization’s asset portfolio. We do not believe that the Proposed Rule’s approach to requiring Scope 3 only where determined to be “material” is sufficient. Insufficient guidance is provided in the Proposed Rule as to when such information should be considered material, and thus to ensure that this determination would be consistent and reliable. In line with the FSOC’s conclusion that Scope 3 “provide[s] a more complete picture of the transition risks facing an organization,”¹⁹⁵ full disclosure of Scope 3 emissions by all publicly listed companies is critical.

Recommendation: The SEC should mandate disclosure of all Scope 3 emissions, not simply where an issuer determines it is material. Should the SEC keep the materiality qualifier, however, at a minimum, the SEC must add a requirement that issuers explain how they made the determination that Scope 3 was not material so that investors can evaluate that decision.

Expand Assurance for Scope 3 Emissions Disclosure

As noted above, we support the SEC’s proposal to require disclosures of Scope 1 and 2 emissions to be made with reasonable assurance, but we believe the SEC should extend this requirement for Scope 3 emissions reporting as well. Given the importance of GHG emissions data to enable investors to fully understand the climate-related risks of issuers, reasonable assurance is necessary to ensure that information is subjected to sufficient examination and verification such that it can be relied on by investors.

¹⁹⁵ US Financial Stability Oversight Council. 2021. *Report on Climate-Related Financial Risk 2021*. October 21, 2021, pg. 54, <https://home.treasury.gov/system/files/261/FSOC-Climate-Report.pdf>

Because Scope 3 disclosures are largely based on estimates, it is important for a third party to verify and challenge the company process, standardization, and inputs used in emissions calculations to test those estimates. Attestation and reasonable assurance for Scope 3 will ensure that reliability will play a critical role in assessing and enforcing rigorous sensitivity analyses to these disclosures.

For similar reasons, we do not think the SEC's proposal to provide registrants with a broad safe harbor for Scope 3 disclosures is appropriate as it would reduce the reliability of the data and the benefits and utility of the disclosed information. Where there may be some questions about data availability, quality, and accessibility for Scope 3, this area is rapidly evolving and it will become significantly easier to calculate Scope 3 emissions disclosures in the near future. Accordingly, we urge the SEC to reconsider the safe harbor provision; at a minimum, the SEC should make the Safe Harbor available only for a temporary initial period.

Greater safeguards are needed to ensure the reliability of this data given how critical it is to evaluating risk. It is also necessary to ensure investor and public confidence in such disclosures, particularly given widespread concerns of "greenwashing."

Recommendation: We urge the SEC to drop the broad safe harbor for Scope 3. Should the SEC decide to keep it, however, at a minimum, we strongly encourage the SEC to allow such a safe harbor for only a limited time phase-in period, and only for Scope 3 disclosures that have received reasonable assurance.

c. Specific disclosures for the oil and gas industry

As the ultimate source of the majority of greenhouse gas ("GHG") emissions¹⁹⁶, the industry harbors outsized transition risks whose impacts will be felt throughout financial markets if they are not adequately priced into investment and voting decisions.¹⁹⁷

Yet, a cross-sector analysis by Moody's found oil and gas to be the least prepared of the main carbon-intensive sectors to meet the rapid market transition implied by the Paris agreement.¹⁹⁸ Additionally, as discussed above, little to no climate transition risk is currently priced into the oil and gas sector.¹⁹⁹ Therefore we recommend that the SEC establish, as a priority, specific disclosures for oil and gas companies to help market participants account for these risks. Below, we identify four recommendations for fossil-fuel specific information that would achieve this purpose.

¹⁹⁶ Fossil fuel combustion (burning) for energy accounted for 74% of total U.S. GHG emissions and for 92% of total U.S. anthropogenic CO₂ emissions. US EIA. 2019. *Energy and the environment explained: Where greenhouse gases come from*. 2019, <https://www.eia.gov/energyexplained/energy-and-the-environment/where-greenhouse-gases-come-from.php>; See also B. Ekwurzel, J. Boneham, et al., "The rise in global atmospheric CO₂, surface temperature, and sea level from emissions traced to major carbon producers," 144 *Climatic Change*, September 7, 2017, pp. 579-590, <https://doi.org/10.1007/s10584-017-1978-0>

¹⁹⁷ According to Carbon Tracker, "the energy transition represents an existential concern [for fossil fuel companies] that goes right to the heart of strategy." See Carbon Tracker Initiative. 2020. *Fault Lines: How diverging oil and gas company strategies link to stranded asset risk*. October 9, 2020, pg. 4, <https://carbontracker.org/reports/fault-lines-stranded-asset/>.

¹⁹⁸ Moody's. 2021. "Ready or Not? Sector Performance in a Zero-Carbon World." *Moody's on Climate*. November 8, 2021, pg. 4, https://www.moody's.com/sites/products/ProductAttachments/Moodys_ReadyOrNot.pdf.

¹⁹⁹ Schay, Alexander and Paul Bugala. 2022. *A Demanding Change: Oil & Gas in 2050*. March 22, 2022, pp. 24-29, <https://www.sec.gov/comments/s7-10-22/s71022-20129438-295567.pdf>

Financial estimates and assumptions

Fossil-fuel companies disclose the financial estimates and assumptions that drive asset valuations. Building on this information, fossil-fuel companies also report the long term break-even price for major exploration and production projects.

While we welcome the requirement in the proposed rule for issuers to provide information about the impact of climate-related events and transition activities on the estimates and assumptions they use, we note that more needs to be done to ensure that companies actually disclose these estimates and assumptions in the first place. This information is essential for analysts to interpret and compare reporting made by companies. Key figures that should always be published by fossil-fuel companies include:

- The commodity prices, discount rates and estimates about the remaining useful lives of assets used in forecasting revenue and costs for impairment testing.
- The discount rates, estimated timelines and the undiscounted estimated costs used to calculate asset retirement obligations.

Though existing rules already require many these figures to be published,²⁰⁰ evidence suggests that these obligations are not consistently upheld. A study of 2020 financial statements by Carbon Tracker found that a majority of fossil fuel companies did not disclose the basic quantitative estimates and assumptions that were used to prepare their financial statements. This included failure to disclose commodity prices used for asset valuations and impairment testing, and absence of detail about undiscounted estimated costs and other assumptions used to calculate asset retirement obligations. In some cases where figures were provided, there were inconsistencies between the estimates and assumptions referenced in strategy discussions in the management report and those used in financial statements.²⁰¹

Building on these disclosures, we also call on the Commission to require fossil-fuel companies to provide an estimate of the average long-term commodity price that would be necessary for each project to generate a positive financial return.²⁰² Given that the inherent unpredictability of commodity prices is only made more uncertain by the prospect of a transition to clean energy, this information would help investors make well-founded estimates about the financial health of fossil-fuel issuers in line with investors' own assumptions about long-term fossil fuel demand. Fossil fuel companies often voluntarily disclose these projections with investors to demonstrate their profitability. However, this information is not provided on a systematic basis and there is no standard format for these disclosures. While companies have often argued that cost information is commercially sensitive, the growing materiality of project viability factors in climate risk assessments means that investors have legitimate and prevailing interests in such information.

²⁰⁰ Proposed Rule at pg. 21357

²⁰¹ Carbon Tracker and PRI. 2021. *Flying Blind: The glaring absence of climate risks in financial reporting*, <https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>

²⁰² In line with established international norms specified by the EU and Canada, we define "project" as operational activities that are governed by a single contract, license, lease, concession, or similar legal agreement, which form the basis for payment liabilities with a government. See SEC, File No. S7-25-15 Disclosure of Payments by Resource Extraction Issuers, pp. 71-72, <https://www.sec.gov/rules/final/2016/34-78167.pdf>

Options for SEC action:

Given the failure of fossil fuel companies to report estimates and assumptions used in preparing financial statements (despite the fact that these are already required), the SEC should emphasize in the proposed rules the importance of publishing commodity prices, discount rates, and estimates about remaining useful lives of assets in examples about revenue forecasting and impairment testing. It should do the same for discount rates, estimated timelines and undiscounted estimated costs in examples about the calculation of asset retirement obligations.

The SEC should require fossil fuel companies to publish break-even prices for major exploration and production projects, and related financial estimates and assumptions underpinning those prices.

The SEC may also wish to issue a Risk Alert, Staff Accounting Bulletin, or other authoritative guidance in tandem with the final rule, clarifying the requirements in existing GAAP to ensure that estimates and assumptions are published. Noncompliance with existing accounting rules relating to climate risk justifies focused attention from the Commission's Enforcement division.

Price sensitivity analysis

Fossil fuel companies should complete and disclose an analysis of the sensitivity of their reserves to a range of scenarios, including a scenario in which the economy aligns with Paris climate targets.

A price sensitivity table allows investors to understand how the company's reserve valuation would perform under different price scenarios and thus reach an informed judgment on the reliability of the reserve valuation as presented by management. The SEC has already developed an optional price sensitivity table that registrants may choose to use in their disclosures.²⁰³ To provide the market with up-to-date projections on the sensitivity of reserves to a range of possible scenarios, the SEC should now require that the table be completed and disclosed annually.

Options for SEC action:

The SEC should amend the Modernization of Oil and Gas Reporting Rule to require fossil fuel companies to complete and disclose an annual price-sensitivity analysis of reserves.

Project-level GHG Emissions

*Fossil fuel companies should disclose scope 1, 2 and 3 GHG emissions data required by the proposed rule at a project level, based on contract terms or relevant lease agreement.*²⁰⁴

Scope 1, 2 and 3 GHG emissions intensity varies markedly by project. Aggregated emissions figures may therefore enable issuers to obfuscate the extent of risk inherent in asset portfolios by hiding high-risk projects in pools of less risky assets. Moreover, aggregated figures also prevent investors from being able to see how companies are working to address emissions risks within their portfolios. With project-

²⁰³ SEC. 2008. *Modernization of Oil and Gas Reporting*: Final Rule, Release Nos. 33-8995; 34-59192; to be codified at 17 CFR parts 210, 211, 229, and 249, December 31, 2008, pg. 66, <https://www.sec.gov/rules/final/2008/33-8995.pdf>

²⁰⁴ Morgan, Jana L. 2016. PWYP-US Comment to the SEC Re: Disclosure of Payments by Resource Extraction Issuers. February 16, 2016, pp. 26-35, <https://www.sec.gov/comments/s7-25-15/s72515-45.pdf>

level data, an investor can determine whether a company is working to lower emissions by simply selling off dirty assets or by cleaning up operations.

An important feature of the global standard on extractives sector payments-to-governments disclosure has been the focus on project-level reporting with disaggregated payment information. This information has allowed investors and the broader public to understand individual mining, oil, and gas projects' fiscal impacts at the local level. Specifically, project disclosures in almost all jurisdictions include the specific amounts paid to specific disaggregated government recipients at all levels of government for each of a variety of different types of payments made.

These disaggregated disclosures, with project-level and locally relevant information, have facilitated better public understanding of the payments made and received, serving the rules' underlying anti-corruption function, but they have also served investors and analysts. As investor analysts noted in comments to the SEC, these aspects of the disclosures have helped promote market efficiency, competition, and capital formation.²⁰⁵ As just one example, such local level disclosures can provide an indication of project-level risks due any real or perceived breach of the social contract in the local community or of any violations of existing fiscal commitments under law or contract.

Project-level data also enables investors to determine how host-government actions impact transition risks faced by companies both positively (by cleaning up the electricity grid, for example) or negatively (by failing to create an enabling environment to bring emissions down). Data at this level of granularity is so useful that companies such as ExxonMobil are already sharing it with company decision makers.²⁰⁶ Making this information publicly available would allow investors to understand which projects are most at risk and plan accordingly.

Recommendation: In the proposed rule, the Commission should specify that registrants should provide location data for disclosed sources of Scope 1, Scope 2, and Scope 3 emissions if feasible. For the fossil-fuel industry the current proposed definition of location linked to a ZIP code or a similar subnational postal zone or geographic location, should be augmented to also require companies to provide the name of the specific project that is the source of the emissions. This should align with established global standards on payment transparency for extractive industries project-level reporting in the EU, Canada, and other jurisdictions.²⁰⁷

Emissions embedded in reserves

Fossil fuel companies should disclose projections of emissions embedded in reserves

Given that fossil fuel reserves represent the overwhelming majority of upstream oil and gas companies' valuations. Standardized projections of GHG emissions-embedded-in-reserves would generate critical

²⁰⁵ Schay, Alexander. 2020. Comment to the SEC Re: Disclosure of Payments by Resource Extraction Issuers, March 16, 2020, <https://www.sec.gov/comments/s7-24-19/s72419-6961611-212817.pdf>

²⁰⁶ Matthews, Christopher M. and Emily Glazer. 2021. "Exxon Debates Abandoning Some of Its Biggest Oil and Gas Projects," *Wall Street Journal*, October 20, 2021, <https://www.wsj.com/articles/exxon-debates-abandoning-some-of-its-biggest-oil-and-gas-projects-11634739779>

²⁰⁷ See SEC. 2016. File No. S7-25-15 Disclosure of Payments by Resource Extraction Issuers, pp.71-72 <https://www.sec.gov/rules/final/2016/34-78167.pdf>; see also Directive 2013/34/EU <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013L0034>; Extractive Sector Transparency Measures Act, S.C. 2014, c. 39, s. 376 <https://laws-lois.justice.gc.ca/eng/acts/E22.7/FullText.html>

forward-looking climate-risk metrics based on existing reserves disclosure requirements. This would be a low burden disclosure and would build upon existing practice already undertaken by the oil industry organization IPIECA²⁰⁸, Exxon²⁰⁹ and the EPA.²¹⁰

Just as the SEC's 2010 Guidance Regarding Disclosure Related to Climate Change has become what Commissioner Crenshaw called an "outdated and outmoded" framework for climate-related disclosures,²¹¹ so has the Commission's disclosure requirements under the Modernization of Oil and Gas Reporting Rule. To "improve the quality and completeness" of registrant disclosures, the SEC should require disclosure of emissions embedded in reserves as a note to the financial statements for fossil fuel companies in its final rule on climate-related disclosures. Emissions embedded in reserves are a material input into the financial statements and therefore, must be disclosed alongside other material inputs. This requirement aligns with the TCFD's energy group guidance which recommends that relevant firms in the energy group disclose a "breakdown of reserves by type and an indication of associated emissions factors to provide insight into potential future emissions."²¹²

Recommendation: The SEC should amend Regulation S-K §229.1202²¹³ to include the IPCC Default Tier 1 Effective CO₂ Emission Factor calculation in standard proven and probable reserves disclosure.

If emissions-embedded-in-reserves data were included in oil and gas reserves reporting as required by Regulation S-X §210.4-10 and Regulation S-K §229.1202, investors would have access to data that meaningfully reflects the material aspect of Scope 3 oil and gas sector emissions. The resulting data could be included by reference in the Notes to the Consolidated Financial Statement to provide insight about the climate risk-related estimates and assumptions that impact line items such as long-lived assets and impairments as indicated in Regulation S-X Rules 14-01 and 14-02 of the proposed rule.²¹⁴ The result would provide substantial, future-looking Scope 3 oil and gas emissions disclosures at least a year before historical Scope 3 data are scheduled in the proposed rule and on a basis that is both straightforward for reporting companies and that lessens issues with reporting boundaries.

²⁰⁸ IPIECA. *Estimating petroleum industry value chain (Scope 3) greenhouse gas emissions*. <https://www.ipieca.org/resources/good-practice/estimating-petroleum-industry-value-chain-scope-3-greenhouse-gas-emissions-overview-of-methodologies/> and <https://www.api.org/~media/Files/EHS/climate-change/Scope-3-emissions-reporting-guidance-2016.pdf>

²⁰⁹ ExxonMobil. *ExxonMobil 2020 Scope 3 estimates*. <https://corporate.exxonmobil.com/Sustainability/Energy-and-Carbon-Summary/Scope-3-emissions>

²¹⁰ US EPA. *Emission Factors for Greenhouse Gas Inventories*. <https://www.epa.gov/sites/production/files/2020-04/documents/ghg-emission-factors-hub.pdf>

²¹¹ SEC. 2022. Commissioner Caroline A. Crenshaw: *Statement on the Enforcement and Standardization of Climate-Related Disclosures for Investors*. March 21, 2022, <https://www.sec.gov/news/statement/crenshaw-climate-statement-032122>

²¹² TCFD. 2017. *Implementing the Recommendations of the Task Force on Climate-Related Financial Disclosures*. June 2017, pg. 55, <https://assets.bbhub.io/company/sites/60/2020/10/FINAL-TCFD-Annex-Amended-121517.pdf>

²¹³ Regulation S-X, Section §210.4-10

²¹⁴ Proposed rule at pp. 21371-21372