

June 17, 2022

VIA Electronic Submission

Vanessa A. Countryman, Secretary
Securities and Exchange Commission
100 F Street NE
Washington, DC 20549-1090

Re: Earthjustice Comments on the Proposed Rule on *The Enhancement and Standardization of Climate-Related Disclosures for Investors*, File Number S7-10-22

We support the SEC’s proposed amendments to Regulations S-K and S-X to require mandatory disclosures of climate-related risks and their financial impacts in the proposed rule “Enhancement and Standardization of Climate-Related Disclosures for Investors.” As an environmental law non-profit, Earthjustice understands that the SEC does not set climate policy or enforce public health and environmental laws. However, our work affords us a deep understanding of how climate change affects our communities and the businesses that operate in them. From that viewpoint, we believe it is imperative that the SEC foster the development of comprehensive, consistent corporate disclosures so that investors get the information they need about the financial impacts of climate-related risks, how companies evaluate and manage them, and the costs of doing so. If not, the market will continue to misvalue climate change risk, putting individual investors as well as the broader financial system in peril. Current voluntary disclosure efforts, while important in developing appropriate disclosure practices, cannot engender the reliability and quality needed to properly inform the market.

Congress gave the SEC the authority and obligation to require disclosures that are needed or appropriate for informing investors of risks relevant to their investment decisions. Such disclosures help protect investors, encourage more efficient markets, and ultimately contribute to the financial stability of our economy. Climate-related risks, as any other risks with tangible impacts on companies and the economy, have identifiable financial impacts. Allowing the continued obfuscation of these risks does not serve the SEC’s mission and puts ordinary investors at increased risk. The SEC does not make policy to address climate change. Rather, it recognizes the increasingly apparent and quantifiable impacts of climate change that risk distorting our markets if not properly disclosed and accounted for.

Below we discuss (I) the reality of the already apparent financial impacts of climate change arising from physical and transition risks, (II) the failure of current disclosure practices to address these risks, (III) investors’ efforts to fill the gaps in disclosures as a result, and (IV) how the Commission’s proposed rule begins to address the current market asymmetries and inefficiencies with tried and true disclosure methods based in its established authority.

I. Climate-related financial risks are here, and here to stay.

Climate-related financial risks are not hypothetical; the economy and federal budget, individual companies, and communities already experience them. Evaluations quantifying the potential impact of climate change on the U.S. economy and federal budget have noted billions of dollars of likely impacts. We are already experiencing the physical risks of climate change, including natural and chemical disasters. Similarly, transition risks including the enactment of climate-related policies to limit these impacts, shifting economics as cleaner technologies become competitive, and consumer demand shifts are already occurring. This section discusses these realities, realities that demonstrate the need to better manage and disclose climate-related risks.

A. Climate change is already impacting the U.S. economy and federal budget and will increasingly do so as climate change becomes more severe.

Climate change is already impacting our economy and the federal budget, and these impacts “will increasingly and severely impact communities, businesses, and governments.”¹ The federal government embarked on a “whole-of-government” effort to mitigate and manage climate change and its impacts in 2021, with every agency considering how to address climate change in its work.² A series of reviews on climate-related financial risk have found significant concerns stemming from climate change. The Office of Management and Budget (OMB) and Council on Environmental Quality (CEQ) assessed the federal government’s climate-related financial risk and quantified this risk in long-term budget projections for the first time this year, an exercise to be repeated annually.³ The federal budget “is directly and substantially at risk from expected lost revenues and increasing expenditures due to climate change damages in coming decades.”⁴ The impact of climate change on the economy is expected to increase as

¹ OMB, *Federal Budget Exposure to Climate Risks 1*, https://www.whitehouse.gov/wp-content/uploads/2022/04/ap_21_climate_risk_fy2023.pdf.

² *Executive Order 13990, Executive Order on Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis*, 86 Fed. Reg. 7037 (Jan. 20, 2021), <https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis>; see also, Hana Vizcarra and Hannah Perls, BIDEN’S WEEK ONE: MAPPING AMBITIOUS CLIMATE ACTION (March 3, 2021), <https://eelp.law.harvard.edu/portfolios/environmental-governance/bidens-week-one-mapping-ambitious-climate-action/>. President Biden specifically addressed the need to mitigate climate-related financial risk to government programs, assets, and liabilities in an Executive Order on Climate-Related Financial Risk. *Executive Order 14030, Executive Order on Climate-Related Financial Risk*, 86 Fed. Reg. 27,967, 27,967 (May 20, 2021).

³ Candace Vahlsing, *Quantifying Risks to the Federal Budget from Climate Change*, THE WHITE HOUSE BRIEFING ROOM (April 4, 2022); Office of Management and Budget, CLIMATE RISK EXPOSURE: AN ASSESSMENT OF THE FEDERAL GOVERNMENT’S FINANCIAL RISKS TO CLIMATE CHANGE (April 2022); Council of Economic Advisers and Office of Management and Budget, CLIMATE-RELATED MACROECONOMIC RISKS AND OPPORTUNITIES (April 4, 2022); Office of Management and Budget, FEDERAL BUDGET EXPOSURE TO CLIMATE RISK (April 2022); Office of Management and Budget, LONG-TERM BUDGET OUTLOOK (April 2022) (including a new section on climate change).

⁴ OMB, *CLIMATE RISK EXPOSURE: AN ASSESSMENT OF THE FEDERAL GOVERNMENT’S FINANCIAL RISKS TO CLIMATE CHANGE 1* (April 2022), https://www.whitehouse.gov/wp-content/uploads/2022/04/OMB_Climate_Risk_Exposure_2022.pdf.

climate change worsens and natural disasters become more frequent and more extreme. OMB found that the federal government could spend between an additional \$25 billion to \$128 billion annually due to only six climate-related financial risks: disaster relief, flood insurance, crop insurance, healthcare expenditures, wildland fire suppression spending, and flood risk at federal facilities. This figure considers only a limited scope of total potential damages to those programs and does not include other climate-related financial risks such as “risks to national security, changes to ecosystems, and infrastructure expenditures which can each have wide-ranging and diffuse effects to the budget.”⁵ OMB’s “long-range budget projections found that Federal revenues could be 7.1 percent lower annually by 2100 (about \$2 trillion in today’s terms) under a scenario in which climate change reduced U.S. GDP by 10.0 percent compared to a no-further-warming counterfactual, as projected by the Network for Greening the Financial System as the tail risk under current policies.”⁶

In addition to the budget-related assessments, the Financial Stability Oversight Council (FSOC) has assessed the climate-related risk to the U.S. financial system.⁷ Calling climate change “an emerging threat” to financial stability, FSOC found that “climate-related impacts in the form of warming temperatures, rising sea levels, droughts, wildfires, intensifying storms, and other climate-related events are already imposing significant costs upon the public and the economy.”⁸ It recommended that financial regulators take additional actions “to understand, assess, and manage climate-related risks to the entities or markets within their statutory jurisdiction,” specifically calling out the need for better data for investors and market participants.⁹ The U.S. Commodity Futures Trading Commission’s Market Risk Advisory Committee similarly concluded that these risks “are already impacting, or are anticipated to impact, nearly every facet of the U.S. economy.”¹⁰ BlackRock “is firmly convinced that climate risk—physical and transition risk—presents one of the most significant systemic risk[s] to the long-term value of our clients’ investments.”¹¹

⁵ OMB, *Federal Budget Exposure to Climate Risks* 1, https://www.whitehouse.gov/wp-content/uploads/2022/04/ap_21_climate_risk_fy2023.pdf.

⁶ The White House, *Quantifying Risks to the Federal Budget from Climate Change* (Apr. 4, 2022), <https://www.whitehouse.gov/omb/briefing-room/2022/04/04/quantifying-risks-to-the-federal-budget-from-climate-change/>.

⁷ Financial Stability Oversight Council, *Report on Climate-Related Financial Risk* (October 2021), <https://home.treasury.gov/news/press-releases/jy0426>.

⁸ *Id.* at 3.

⁹ *Id.* at 3-4.

¹⁰ U.S. Commodity Futures Trading Commission, Market Risk Advisory Committee, Subcommittee on Climate-Related Market Risk, *Managing Climate Risk in the U.S. Financial System* 11 (Sept. 9, 2020), <https://www.cftc.gov/sites/default/files/2020-09/9-9-20%20Report%20of%20the%20Subcommittee%20on%20Climate-Related%20Market%20Risk%20-%20Managing%20Climate%20Risk%20in%20the%20U.S.%20Financial%20System%20for%20posting.pdf>.

¹¹ BlackRock, *Our 2021 Stewardship Expectations* 14 (Jan. 2021), <https://www.blackrock.com/corporate/literature/publication/our-2021-stewardship-expectations.pdf>.

B. Companies and the communities in which they operate are already experiencing physical risks from climate change, and those risks are projected to grow.

Companies and communities already experience acute and chronic “physical risks” from climate change—“risk[s] that arise[] from the material, operational, or programmatic impairment of economic activity and the corresponding impact on asset performance from the shocks and stresses attributable to climate change.”¹² Acute physical risks include “event-driven risks related to shorter-term extreme weather events, such as hurricanes, floods, and tornadoes.”¹³ Chronic risks are “risks that the business may face as a result of longer term weather patterns and related effects, such as sustained higher temperatures, sea level rise, drought, and increased wildfires, as well as related effects such as decreased arability of farmland, decreased habitability of land, and decreased availability of fresh water.”¹⁴ Physical risks can cause substantial losses to critical infrastructure, “shorten the lifecycle of infrastructure and degrade its operational reliability,” disrupt supply chains, escalate costs, cause revenue loss, and slow economic growth.¹⁵

Climate-related extreme weather events are increasing in frequency and intensity.¹⁶ Between 2012 and 2021, 142 separately natural disasters caused at least **\$1.0 billion** in damages each and at least **\$1.0 trillion in total**.¹⁷ The number of billion-dollar disasters has increased: 2021 was the seventh consecutive year (2015–21) in which 10 or more billion-dollar disaster events occurred in the United States.¹⁸ In 2021 alone, twenty billion-dollar, climate-related disasters occurred; together, they caused approximately \$145 billion in damage.¹⁹ The twenty billion-dollar disasters in 2021 were also “unusually deadly,” causing at least 688 fatalities, more than double the fatalities in 2020.²⁰ For example, Category 4 Hurricane Ida caused 96 deaths and

¹² U.S. Commodity Futures Trading Commission, *Managing Climate Risk in the U.S. Financial System* 11 (Sept. 9, 2020), <https://www.cftc.gov/sites/default/files/2020-09/9-9-20%20Report%20of%20the%20Subcommittee%20on%20Climate-Related%20Market%20Risk%20-%20Managing%20Climate%20Risk%20in%20the%20U.S.%20Financial%20System%20for%20posting.pdf>.

¹³ SEC Proposed Rule at 57.

¹⁴ *Id.* at 57-58.

¹⁵ *Id.* at 12. See OMB, *CLIMATE RISK EXPOSURE: AN ASSESSMENT OF THE FEDERAL GOVERNMENT'S FINANCIAL RISKS TO CLIMATE CHANGE* 1 (April 2022), https://www.whitehouse.gov/wp-content/uploads/2022/04/OMB_Climate_Risk_Exposure_2022.pdf; U.S. Global Change Research Program, *Fourth National Climate Assessment, Chapter 1: Overview* (2017), <https://nca2018.globalchange.gov/chapter/1/>.

¹⁶ Adam Smith, *2021 U.S. billion-dollar weather and climate disasters in historical context* (Jan. 24, 2022), <https://www.climate.gov/news-features/blogs/beyond-data/2021-us-billion-dollar-weather-and-climate-disasters-historical>; OMB, *CLIMATE RISK EXPOSURE: AN ASSESSMENT OF THE FEDERAL GOVERNMENT'S FINANCIAL RISKS TO CLIMATE CHANGE* 1 (April 2022), https://www.whitehouse.gov/wp-content/uploads/2022/04/OMB_Climate_Risk_Exposure_2022.pdf.

¹⁷ *Id.*

¹⁸ Adam Smith, *2021 U.S. billion-dollar weather and climate disasters in historical context* (Jan. 24, 2022), <https://www.climate.gov/news-features/blogs/beyond-data/2021-us-billion-dollar-weather-and-climate-disasters-historical>.

¹⁹ *Id.*

²⁰ *Id.*

\$75 billion in damages; the historic cold wave in Texas caused 225 deaths and \$24 billion in damages; and the Western wildfire season caused 8 deaths and \$10.6 billion in damages.²¹

As climate change “supercharg[es] the increasing frequency and intensity of certain types of extreme weather,” companies and communities will suffer more extreme physical impacts.²² Droughts have become more severe: 2000–2021 was the driest 22-year period in the Southwest in over a millennium.²³ Wildfire season is longer, and the U.S. Fourth National Climate Assessment noted that “[b]y the middle of this century, the annual area burned in the western United States could increase 2–6 times from the present, depending on the geographic area, ecosystem, and local climate.”²⁴ Smoke from Western wildfires have traveled to the East Coast, leading to air quality warnings across the country.²⁵

As extreme weather events become more frequent and intense, so too will “double disasters” or “natech disasters”—“disasters that arise from the coincident effects of a natural hazard, like a storm or earthquake, and the failure or disruption of technological infrastructure, such as chemical plant spills, releases, and explosions.”²⁶ Natural disasters are a common contributing factor to chemical incidents due to facilities’ inadequate preparation for foreseeable risks.²⁷ Currently, over 11,000 facilities are regulated by EPA for using extremely hazardous substances, and about one third of them (3,856) are located in areas exposed to an increased risk of natural disasters.²⁸ For example, 872 highly hazardous chemical facilities are located within 50 miles of the hurricane-prone U.S. Gulf Coast, with over 4.3 million people, 1,717 schools, and 98 medical facilities in near proximity (within 1.5 miles).²⁹

Natural and chemical disasters cause significant financial damage. As discussed above, a single disaster can cause billions of dollars in damage. “Wildfires pose a particularly acute threat to utilities” because “they can be held responsible for actually causing fires.”³⁰ Wildfires can impact utility companies by “causing physical damage to energy infrastructure, disrupting power

²¹ *Id.*

²² *Id.*

²³ A. Park Williams et al., *Rapid intensification of the emerging southwestern North American megadrought in 2020–2021*, 12 NATURE CLIMATE CHANGE 3, 3 (Feb. 14, 2022), <https://www.nature.com/articles/s41558-022-01290-z>.

²⁴ U.S. Global Change Research Program, *Fourth National Climate Assessment: Volume II* 6 (revised March 2021), https://nca2018.globalchange.gov/downloads/NCA4_2018_FullReport.pdf.

²⁵ Nadja Popovich and Josh Katz, *See How Wildfire Smoke Spread Across America*, N.Y. TIMES (July 21, 2021), <https://www.nytimes.com/interactive/2021/07/21/climate/wildfire-smoke-map.html>.

²⁶ Center for Progressive Reform, et al., *Preventing Double Disasters: How the U.S. Environmental Protection Agency can protect the public from hazardous chemical releases worsened by natural disasters* 3 (July 2021), <https://www.ucsusa.org/sites/default/files/2021-07/preventing-double-disasters%20FINAL.pdf>.

²⁷ See, e.g., Chemical Safety Board, *Organic Peroxide Decomposition, Release, and Fire at Arkema Crosby Following Hurricane Harvey* 122-23 (May 2018), <http://www.csb.gov/file.aspx?DocumentId=6068>.

²⁸ Preventing “Double Disasters” at 7.

²⁹ S. Anenberg & C. Kalman (Milken Inst. of Pub. Health, Geo. Wash. Univ.), *Extreme Weather, Chemical Facilities, and Vulnerable Communities in the U.S. Gulf Coast: A Disastrous Combination* (Apr. 16, 2019), <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2019GH000197>.

³⁰ John MacWilliams et al., *PG&E: Market and Policy Perspectives on the First Climate Bankruptcy* 18, 20 (Aug. 2019), https://www.energypolicy.columbia.edu/sites/default/files/file-uploads/PG&E-CGEP_Report_081519-2.pdf.

service, and even leading to severe financial distress.”³¹ For example, in 2019, PG&E declared bankruptcy, estimating at the time that it could face liabilities surpassing \$30 billion from the 2017 and 2018 Northern California wildfires.³²

Extreme drought and waning water supply are stranding assets and putting billions of dollars’ worth of assets in the coal, utilities, metals and mining, and oil and gas sectors at risk.³³ The World Wide Fund for Nature concluded in 2016 that “[c]urrent business-as-usual water management practices and levels of water productivity will put approximately US\$63 trillion at risk by 2050,” which is 45% of the projected 2050 GDP.³⁴ Droughts have also threatened hydropower production and led the U.S. and state governments to impose strict water restrictions and take other unprecedented measures.³⁵ For example, in April of 2022, the federal government announced it would retain water in one of the Colorado River’s major reservoirs, an “extraordinary action to temporarily stave off increased uncertainty in water and electricity supplies in the West.”³⁶ Seven states—Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming—depend on the Colorado River for water supply and hydropower production.³⁷

Sea level rise, storm surges, shoreline erosion, and wildfires have transformed the housing market, mortgages, and insurance. Physical risks of climate change impact all stakeholders in the housing market, including consumers (homeowners and renters), landlords, builders, appraisers, originators, servicers, insurance companies, government agencies and GSEs, and mortgage investors.³⁸ As a result of climate-related events, homes have already fallen into the ocean³⁹ and property values have fallen.⁴⁰ By 2100, nearly 2.5 million residential and commercial properties, collectively valued at \$1.07 trillion, will be at risk of chronic flooding,

³¹ Columbia Center on Global Energy Policy, *Congressional Testimony of John J. MacWilliams* 3 (Jan. 28, 2020), https://www.energypolicy.columbia.edu/sites/default/files/file-uploads/JohnMacWilliams-Testimony_CGEP_Commentary_012720-3.pdf.

³² *Id.*

³³ Planet Tracker, *High and Dry: How Water Issues are Stranding Assets* 3 (May 2022), https://cdn.cdp.net/cdp-production/cms/reports/documents/000/006/321/original/High_and_Dry_Report_Final.pdf?1651652748.

³⁴ World Wide Water Foundation, *WWF Asian FMCG Guide* 72 (April 2016), http://awsassets.panda.org/downloads/wwf_fmcg_2016_web.pdf.

³⁵ Somini Sengupta, *City Living, With Less Water*, N.Y. TIMES (April 29, 2022), <https://www.nytimes.com/2022/04/29/climate/drought-water-scarcity.html>.

³⁶ Henry Fountain, *Colorado River Reservoirs Are So Low, Government Will Delay Releases*, N.Y. TIMES (May 3, 2022), <https://www.nytimes.com/2022/05/03/climate/lake-powell-mead-water-drought.html>.

³⁷ Bureau of Reclamation, *Colorado River Basin*, <https://usbr.gov/ColoradoRiverBasin/>.

³⁸ Mortgage Bankers Association, *The Impact of Climate Change on Housing and Housing Finance* 11 (Sept. 2021), https://img03.en25.com/Web/MortgageBankersAssociation/%7B66e37863-0f2e-45c7-8526-04d615d395e9%7D_22847_Research_RIHA_September_2021_Report.pdf?utm_campaign=MBA%20RIHA%20Climate%20Change%20Report%209-23-21&utm_medium=email&utm_source=Eloqua.

³⁹ Zoya Teirstein, *North Carolina house that collapsed into the sea is a warning for millions Americans*, GRIST (May 16, 2022), <https://grist.org/housing/north-carolina-house-that-collapsed-into-the-sea-is-a-warning-for-millions-of-americans/>.

⁴⁰ Justin Worland, *The Climate Real Estate Bubble: Is the U.S. on the Verge of Another Financial Crisis?* TIME (April 19, 2021), <https://time.com/5953380/climate-housing-crisis/>.

according to a 2018 report by the Union of Concerned Scientists.⁴¹ Additionally, chronic flooding associated with climate change may “exceed the capacity of insurance and government assistance to sustain some areas.”⁴² The National Flood Insurance Program will not have the capacity to address all flood risks when: “(1) the actuarially-fair price of insurance becomes too expensive to purchase; (2) the probability distribution of the event to be insured against is impossible in practice to estimate; or (3) the event to be insured against is no longer a risk, that is, it is a certainty (or near certainty).”⁴³ Banks are increasingly requiring larger down payments in coastal areas and selling mortgages to government-backed buyers.⁴⁴

Climate-related changes to our natural environment have direct, physical impacts on companies, communities, and our economy. They present significant risks for companies that operate in areas directly affected by acute climate-related disasters and chronic phenomena, like sea-level rise, higher average temperatures, and changes in precipitation patterns. As the impacts of climate change become more severe, so too will the physical risks they present.

C. Governmental efforts to respond to climate change already present transition risks for companies and will continue to do so.

As the economy transitions to a net-zero emissions economy, companies will face “transition risks”—risks “associated with the uncertain financial impacts that could result from a transition to a net-zero emissions economy,” including risks arising from changes in law and policy, technology, and consumer preferences and social norms.⁴⁵ Federal, state, and local governments are implementing policies designed to mitigate the worst climate outcomes by reducing emissions and adapting to the changing physical environment. Policies to encourage development of clean and renewable energy sources also aim to diversify energy sources, reduce carbon emissions, promote domestic energy production, and encourage economic development. Governments will continue to respond to changing flood, heat, wildfire, drought, and rain patterns by amending water use rules, zoning and development requirements, and more.

⁴¹ Union of Concerned Scientists, *Underwater: Rising Seas, Chronic Floods, and the Implications for US Coastal Real Estate 2* (June 2018), <https://www.ucsusa.org/sites/default/files/attach/2018/06/underwater-analysis-full-report.pdf>.

⁴² Mortgage Bankers Association, *The Impact of Climate Change on Housing and Housing Finance* 14 (Sept. 2021), https://img03.en25.com/Web/MortgageBankersAssociation/%7B66e37863-0f2e-45c7-8526-04d615d395e9%7D_22847_Research_RIHA_September_2021_Report.pdf?utm_campaign=MBA%20RIHA%20Climate%20Change%20Report%209-23-21&utm_medium=email&utm_source=Eloqua.

⁴³ *Id.* at 14-15.

⁴⁴ Christopher Flavelle, *Rising Seas Threaten an American Institution: The 30-Year Mortgage* (updated March 2, 2021), <https://www.nytimes.com/2020/06/19/climate/climate-seas-30-year-mortgage.html>.

⁴⁵ .S. Commodity Futures Trading Commission, *Managing Climate Risk in the U.S. Financial System* 11 (Sept. 9, 2020), <https://www.cftc.gov/sites/default/files/2020-09/9-9-20%20Report%20of%20the%20Subcommittee%20on%20Climate-Related%20Market%20Risk%20-%20Managing%20Climate%20Risk%20in%20the%20U.S.%20Financial%20System%20for%20posting.pdf>.

1. Federal Greenhouse Gas Regulations

The federal government is correctly exercising its authority to regulate GHG emissions to address climate change. Since 2020, EPA has finalized or proposed stronger standards for GHG emissions from passenger cars and light-duty vehicles, heavy-duty vehicles, and commercial airplanes. In 2021, EPA strengthened GHG emission standards for new passenger cars and light-duty trucks for model years 2023-26.⁴⁶ According to EPA, these “standards are the strongest vehicle emissions standards ever established for the light-duty vehicle sector, and . . . result in avoiding more than 3 billion tons of GHG emissions through 2050.”⁴⁷ EPA is planning on initiating separate rulemakings to establish emission standards for model years 2027 and later that “will speed the transition of the light-duty vehicle fleet toward a zero-emissions future.”⁴⁸ Regarding heavy-duty vehicles, EPA recently proposed stronger GHG emission standards for heavy-duty vehicles to support the transition to a zero-emissions future.⁴⁹ EPA finalized GHG emission standards for commercial airplanes and large business jets in 2020 and is “evaluating what opportunities for greater regulatory ambition exist” under the Clean Air Act.⁵⁰ The federal government’s Aviation Climate Action Plan in 2021 established a whole-of-government approach to achieving net-zero emissions from the sector by 2050.⁵¹ EPA has also finalized regulations to reduce emissions of hydrofluorocarbons (HFCs), highly potent GHGs.⁵² The American Innovation and Manufacturing Act of 2020, 42 U.S.C. § 7675, requires the phase down of U.S. production and consumption of HFCs by 85% by 2036.⁵³ EPA finalized its rule implementing this directive in 2021.⁵⁴ In 2021, EPA proposed new standards to reduce methane and other harmful pollution from the oil and natural gas industry.⁵⁵ It is also in the process of

⁴⁶ EPA, *Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards*, 86 Fed. Reg. 74,434 (Dec. 30, 2021), <https://www.govinfo.gov/content/pkg/FR-2021-12-30/pdf/2021-27854.pdf>.

⁴⁷ EPA, *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026*, <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions> (last visited June 15, 2022).

⁴⁸ *Id.*

⁴⁹ EPA, *Control of Air Pollution From New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards* (Mar. 28, 2022) <https://www.govinfo.gov/content/pkg/FR-2022-03-28/pdf/2022-04934.pdf>.

⁵⁰ EPA, *Control of Air Pollution From Airplanes and Airplane Engines: GHG Emission Standards and Test Procedures* (Jan. 11, 2021) <https://www.govinfo.gov/content/pkg/FR-2021-01-11/pdf/2020-28882.pdf>; EPA, *Statement on Airplane Greenhouse Gas Emissions Standards Litigation*, <https://www.epa.gov/regulations-emissions-vehicles-and-engines/statement-airplane-greenhouse-gas-emissions-standards> (last visited June 15, 2022).

⁵¹ Federal Aviation Administration, *United States Aviation Climate Action Plan* (Nov. 9, 2021), https://www.faa.gov/sites/faa.gov/files/2021-11/Aviation_Climate_Action_Plan.pdf.

⁵² See EPA, *SNAP Regulations*, <https://www.epa.gov/snap/snap-regulations> (last visited June 14, 2022).

⁵³ 42 U.S.C. § 7675(e)(2)(c);.

⁵⁴ EPA, *Phasedown of Hydrofluorocarbons: Establishing the Allowance Allocation and Trading Program Under the American Innovation and Manufacturing Act* (Oct. 5, 2021), <https://www.govinfo.gov/content/pkg/FR-2021-10-05/pdf/2021-21030.pdf> (implementing provisions of AIM Act).

⁵⁵ EPA, *Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review* (Nov. 15, 2021), <https://www.govinfo.gov/content/pkg/FR-2021-11-15/pdf/2021-24202.pdf>.

developing new GHG emissions standards for power plants and has finalized rules on GHG emissions from municipal solid waste landfills.⁵⁶

In addition to direct GHG emissions regulation, agencies are doing what they can to reduce energy demand, encourage more climate conscious purchasing, and address technical challenges to reducing emissions and reliance on fossil fuels. For example, the Department of Energy is implementing energy efficiency measures to reduce energy demand and is funding research and development of new technologies to address GHG emissions that will impact product development and competitiveness.⁵⁷ The Department of Housing and Urban Development (HUD)'s climate action plan includes changes to funding and housing programs to encourage low-carbon development and climate resilience.⁵⁸ The Department of Defense "will consider how crises exacerbated by climate change are likely to increase demand for defense missions and impact critical supply chains, infrastructure, and readiness."⁵⁹ The federal government has also begun integrating climate change considerations into agency procurement processes.⁶⁰ The Federal Acquisition Regulatory Council is considering requiring suppliers to disclose GHG emissions and climate-related risk and set science-based targets, and giving preference to bids with the lowest social cost of GHG emissions in amendments to the Federal Acquisition Regulation (FAR).⁶¹ The Department of Labor is seeking public comments on what actions it should take to protect retirement savings and pensions from climate-related risks.⁶² These are just some of the ways that the federal government is integrating climate resilience concerns into all aspects of its work in ways that can impact communities, companies, and the economy.

2. State Renewable or Clean Energy Requirements and Targets

States are increasingly establishing and strengthening renewable and clean energy requirements and targets. As of August 2021, thirty states, Washington, D.C., and two territories

⁵⁶ EPA, Climate Change Regulatory Actions and Initiatives, <https://www.epa.gov/climate-change/climate-change-regulatory-actions-and-initiatives>.

⁵⁷ Energy.gov, Climate Change, <https://www.energy.gov/science-innovation/climate-change>.

⁵⁸ HUD's Climate Action Plan, <https://www.hud.gov/climate>.

⁵⁹ Department of Defense, *Department of Defense Climate Risk Analysis 5* (Oct. 2021), <https://media.defense.gov/2021/Oct/21/2002877353/-1/-1/0/DOD-CLIMATE-RISK-ANALYSIS-FINAL.PDF>.

⁶⁰ Exec. Order No. 14030, Sec. 5(d).

⁶¹ *Id.* at Sec. 5(a). Proposed Rule, Federal Acquisition Regulatory Council, Minimizing the Risk of Climate Change in Federal Acquisitions, 86 Fed. Reg. 57404 (Oct. 15, 2021); *see also*, David Johnson and Margaret Peloso, *FAR Council Seeks Comments on Amendments to Address Climate Risk*, JD SUPRA (Oct. 18, 2021).

⁶² *Executive Order 14030* at 27,968; Department of Labor, Request for Information on Possible Agency Actions to Protect Life Savings and Pensions from Threats of Climate-Related Financial Risk, 87 Fed. Reg. 8289 (Feb. 14, 2022), [2022-02798.pdf \(govinfo.gov\)](https://www.govinfo.gov); Employee Benefits Security Administration, Request for Information on Possible Agency Actions to Protect Life Savings and Pensions from Threats of Climate-Related Financial Risk, 87 Fed. Reg. 8292 (Feb. 14, 2022), <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>.

have active renewable or clean energy requirements.⁶³ As of August 2021, ten states, Washington, D.C., Puerto Rico, and Guam have set 100% clean or renewable portfolio requirements with deadlines ranging between 2030 and 2050. An additional three states and the U.S. Virgin Islands have goals of 50% or greater.⁶⁴ More than half of states have established renewable energy targets, and fifteen of those states passed legislation to establish or strengthen targets since 2018.⁶⁵

California law has addressed climate change mitigation and adaption for nearly two decades and was recently strengthened to meet the increasing threat of climate change. California's 100 Percent Clean Energy Act of 2018 requires 100% of all retail sales of electricity to California customers and electricity procured to serve all state agencies to come from renewable energy resources and zero-carbon resources by 2045.⁶⁶ The Act requires the following percentage of electricity to come from eligible renewable energy sources: 33% by 2020, 50% by 2026, and 60% by 2030.⁶⁷

New York has also recently strengthened its RMP goals and requirements. In 2019, New York's Climate Leadership and Community Protection Act established the following goals:

- 100% reduction in greenhouse gas emissions from all sources over 1990 levels by 2050
- 100% carbon-free electricity by 2040
- 70% of electricity generation from renewable energy sources by 2030.
- 40% reduction in climate pollution by 2030
- 9 gigawatts of offshore wind electricity generation by 2035
- 6 gigawatts of photovoltaic solar generation by 2025
- 3 gigawatts of statewide energy storage capacity of 2030
- 185 trillion BTU increase in on-site energy savings by 2025

NY S.B. 6599 (June 18, 2019) (enacted).

⁶³ Adam Smith, *2021 U.S. billion-dollar weather and climate disasters in historical context* (Jan. 24, 2022), <https://www.climate.gov/news-features/blogs/beyond-data/2021-us-billion-dollar-weather-and-climate-disasters-historical>.

⁶⁴ *Id.*

⁶⁵ National Conference of State Legislatures, *State Renewable Portfolio Standards and Goals* (Aug. 13, 2021), [https://www.ncsl.org/research/energy/renewable-portfolio-standards.aspx#:~:text=Renewable%20Portfolio%20Standards%20\(RPS\)%20require.production%20and%20encourage%20economic%20development](https://www.ncsl.org/research/energy/renewable-portfolio-standards.aspx#:~:text=Renewable%20Portfolio%20Standards%20(RPS)%20require.production%20and%20encourage%20economic%20development).

⁶⁶ Cal. S.B. 100 (Nov. 8, 2018) (enacted), https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB100.

⁶⁷ *Id.* at Sec. 2.

3. Government Responses to Physical Threats of Climate Change

The federal government and state governments are increasingly addressing the physical threats of climate change. More states have enacted stronger rules designed to prepare for, prevent, and mitigate the increasing threat of natech disasters. EPA is currently reconsidering its Risk Management Program rule, which regulates facilities using highly hazardous substances.⁶⁸ State and local governments have enacted laws and developed plans that address natech disasters⁶⁹ and, more generally, the role of climate change in hazard mitigation plans.⁷⁰ Western states have changed water use policies by, for example, restricting water use⁷¹ or mandating the removal of turf.⁷² Local governments in coastal areas are accounting for climate change and sea level rise by, for example, encouraging shoreline alteration projects to be functionally resilient and to mitigate coastal hazards.⁷³

D. Interaction of Physical and Transition Risks Increases Overall Climate-Related Risks.

Although often discussed separately, physical and transition risks interact on the ground. As the figure below shows, companies' and financial institutions' responses to the impacts of physical and transition risks on the economy could create a feedback loop of further economic disruption.⁷⁴

⁶⁸OMB, *View Rule, Accidental Release Prevention Requirements: Risk Management Program Under the Clean Air Act*, <https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202110&RIN=2050-AH22> (last visited June 14, 2022).

⁶⁹ See, e.g., California Accidental Release Prevention (CalARP) Program, Cal. Code Regs. tit. 19, §§ 2735-2785 (requiring certain owners or operators stationary sources with a regulated substance to develop hazard prevention programs that consider seismic events) (§§ 2745.7(q)(1), 2760.2(c)(8)); Richmond Municipal Code 8.16.035(2) (Fire Code) (acknowledging that “[f]ire following an earthquake has the potential of causing greater loss of life and damage than the earthquake itself” and that “[h]azardous materials, particularly toxic gases, could pose the greatest threat . . . should a significant seismic event occur”); S.B. No. 1026, 87th Leg. (Tex. 2021) (considering a bill requiring performance standards for aboveground storage tanks prone to “accidents, fires, explosions, hurricanes, [and] floods”).

⁷⁰ See Mass. Exec. Off. Of Energy and Env’t. Affairs, *Massachusetts State Hazard Mitigation and Climate Adaptation Plan* (Sept. 2018) 12, <https://www.mass.gov/files/documents/2018/09/18/SHMCAP-September2018-Executive-Summary.pdf> (addressing how climate change will exacerbate natural disasters and impact hazard mitigation).

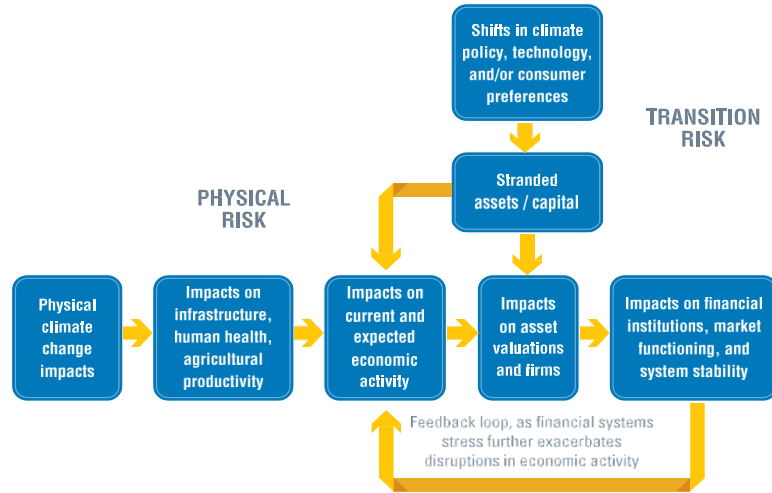
⁷¹ Somini Sengupta, *City Living, With Less Water*, N.Y. TIMES (April 29, 2022), <https://www.nytimes.com/2022/04/29/climate/drought-water-scarcity.html>.

⁷² Nevada Assembly Bill 356 (effective June 4, 2021), <https://www.leg.state.nv.us/App/NELIS/REL/81st2021/Bill/7910/Overview>.

⁷³ See Virginia Marine Resources Commission, *Tidal Wetlands Guidelines* 9 (May 2021 Update), https://mrc.virginia.gov/Regulations/Final-Wetlands-Guidelines-Update_05-26-2021.pdf.

⁷⁴ U.S. Commodity Futures Trading Commission, Market Risk Advisory Committee, Subcommittee on Climate-Related Market Risk, *Managing Climate Risk in the U.S. Financial System* 12 (Sept. 9, 2020), <https://www.cftc.gov/sites/default/files/2020-09/9-9-20%20Report%20of%20the%20Subcommittee%20on%20Climate-Related%20Market%20Risk%20-%20Managing%20Climate%20Risk%20in%20the%20U.S.%20Financial%20System%20for%20posting.pdf>.

Figure 2.1: Relationship Between Physical and Transition Risks



For example, investing in adaptation strategies without regard for carbon management could amplify transition risks.⁷⁵ Ultimately, “[t]he public and private sectors must simultaneously advance both climate mitigation and adaptation to effectively manage both physical and transition risks.”⁷⁶ In the real estate sector, assets could be devalued both because of damage from physical risk and because consumer preferences shift away from assets that are not sustainable or resilient.⁷⁷

II. Current disclosure practices do not adequately inform investors of climate-related risks.

Current disclosure practices do not provide investors with the information needed to properly account for these existing and future risks. Despite sustained engagement from investors, corporate disclosures still fall short. Without adequate, reliable disclosures, the climate-related physical and transition risks to companies could cause unnecessary market losses. The disclosures the SEC rule would require would instead allow investors to decide what level of risk they are comfortable with by incorporating climate-related risk information into their investment decisions.

Companies, investors, and other financial institutions grappled in earnest with how to assess and disclose climate-related financial risks since Mark Carney’s Lloyds of London speech on the “tragedy of the horizon,” and the formation of the Financial Stability Board’s “Task Force on Climate-Related Financial Disclosure” (TCFD) in 2015.⁷⁸ Investor and corporate recognition

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ See Task Force on Climate-related Financial Disclosures (TCFD), *About the Task Force*, <https://www.fsb-tcfd.org/about/> (establishing good alignment between firms and their investors as part of their mission).

of the financial risks associated with the physical risks of climate change and transition to a low carbon economy spurred the development of a constellation of voluntary reporting frameworks and rating systems.

The TCFD released its recommendations for decision-useful, climate-related corporate disclosures in 2017 and, as an industry-led effort, achieved buy-in from major companies and financial entities in the process.⁷⁹ Other reporting frameworks and rating systems have aided in improving disclosures, but the sheer number and diversity of efforts created a confusing landscape.⁸⁰ Through engagement between investors and companies and the work of efforts like the TCFD and others, consensus began to build around how to disclose climate-related information. Recognizing the need to provide more unified guidance around best practices, many of these groups have also aligned their work and even consolidated.⁸¹

However, while important in laying the groundwork, voluntary frameworks have not achieved the level of quality or consistency investors need. As the SEC correctly notes in its proposal, “existing disclosures of climate-related risks do not adequately protect investors.”⁸²

⁷⁹ TCFD, *Final Report: Recommendations of the Task Force on Climate-Related Financial Disclosures* (2017).

⁸⁰ Organizations like the International Integrated Reporting Council, The Climate Registry, The Sustainable Accounting Standards Board (SASB), CDP (formerly the Carbon Disclosure Project), Climate Disclosure Standards Board, the Global Reporting Initiative, and the World Business Council for Sustainable Development developed guidance and standards for companies to measure, evaluate, and disclose on climate change. Industry organizations, auditing firms, and accounting standards organizations have also developed climate-related reporting guidance. For example, API/IPIECA has sustainability standards that include a module on climate for the oil and gas industry and EEI and AGA have created a reporting template for electric and gas utilities and EEI has a carbon emissions/electricity mix reporting database. The International Auditing and Assurance Standards Board (IAASB) issued a practice alert on climate disclosure in Oct. 2020. IAASB, Staff Audit Practice Alert: The Consideration of Climate-Related Financial Risks in an Audit of Financial Statement (Oct. 1, 2020). The Partnership for Carbon Accounting Financials (PCAF) developed a Global GHG Accounting and Reporting Standard for the financial industry, available at <https://carbonaccountingfinancials.com/standard> (last visited Jan. 21, 2022). *See also*, Press release, FSB, *FSB encourages the IFRS Foundation and authorities to use TCFD’s recommendations as the basis for climate-related financial risk disclosures* (Dec. 21, 2020); Avery Ellfeldt, *Major accounting firms urge companies to disclose risks*, E&E NEWS (Sept. 23, 2020); Gillian Tett, *Big Four accounting firms unveil ESG reporting standards*, FINANCIAL TIMES (Sept. 22, 2020).

⁸¹ *See, e.g.*, Statement of Intent to Work Together Towards Comprehensive Corporate Reporting: Summary of alignment discussions among leading sustainability and integrated reporting organisations CDP, CDSB, GRI, IIRC and SASB (Sept. 2020); Press Release, GRI and SASB, Promoting Clarity and Compatibility in the Sustainability Landscape, (July 13, 2020) (announcing a collaborative workplan). In June 2021, SASB and the IIRC merged to become The Value Reporting Foundation (VRF). Michael Cohn, *SASB and IIRC complete merger to form Value Reporting Foundation*, ACCOUNTING TODAY (June 9, 2021). In November 2021, VRF, CDSB, and the IFRS Foundation announced that VRF and CDSB would consolidate under IFRS to create a new International Sustainability Standards Board (ISSB) by June 2022, with the goal of global sustainability disclosure standards. Press Release, Value Reporting Foundation, IFRS Foundation announces International Sustainability Standards Board (Nov. 3, 2021). The TCFD’s 2021 Status Report includes details of regulators aligning reporting requirements with the TCFD as well as other international standard setters. Task Force on Climate-related Financial Disclosures 2021 Status Report at 5-6 (Oct. 14, 2021), <https://www.fsb.org/2021/10/2021-status-report-task-force-on-climate-related-financial-disclosures/>.

⁸² Proposed Rule at 21335.

TCFD's framework has been a unifying guide representing industry standard approaches,⁸³ but its intentional generality was designed for use across jurisdictions and does not displace the need for regulatory action. It serves as a baseline to build upon. The SEC appropriately does so, providing specifics about how it expects companies to disclose in the context of their required annual and periodic filings that build from the work that companies and investors have done through voluntary efforts like the TCFD.

The SEC's 2010 guidance on climate-related disclosures has not resulted in the type of disclosure needed to properly incorporate climate change risk into investor and market decisions.⁸⁴ It largely restated general disclosure principles, lacking detail on how a company should evaluate and disclose climate-related risks. The failure of the 2010 guidance document to address a recognized information gap was apparent early on. A 2014 review of disclosures noted they were "very brief, provide little discussion of material issues, and do not quantify impacts or risks."⁸⁵ More recent reviews have found disclosure remains vague, inconsistent, unquantified, incomplete, and selective—sometimes to the level that could be considered greenwashing.⁸⁶ Professor Madison Condon detailed the extent to which the market has failed to properly account for climate-related financial risks in her 2022 article *Market Myopia's Climate Bubble*,⁸⁷ arguing SEC-mandated disclosures are part of the solution. A recent review by S&P Global highlights the inadequate disclosure of a key indicator of transition risk, GHG emissions. It found most companies do not currently disclose Scope 1 or 2 GHG emissions though a rising number of companies are identifying climate change as a material issue and setting net zero pledges or establishing plans to reduce emissions.⁸⁸ Also, very few U.S. companies that disclose GHG emissions verify their data with a third party,⁸⁹ undermining the reliability of and investor trust in the information disclosed. TCFD's most recent status report on the alignment of disclosures with its recommendations noted improvements in climate-related reporting globally, but its assessment still found that only 50% of the companies reviewed disclosed in alignment with at least three of its recommended disclosures.⁹⁰ The TCFD noted that companies are not disclosing

⁸³ BlackRock has indicated a preference for companies to disclose climate-related risks in line with the TCFD's recommendations and use industry-specific SASB guidelines (or disclose a similar set of data in a way that is relevant to its particular business). BlackRock, TOWARDS A COMMON LANGUAGE FOR SUSTAINABLE INVESTING (2020), <https://www.blackrock.com/corporate/literature/whitepaper/viewpoint-towards-a-common-language-for-sustainable-investing-january-2020.pdf>.

⁸⁴ Commission Guidance Regarding Disclosure Related to Climate Change, 75 Fed. Reg. 6290 (Feb. 8, 2010).

⁸⁵ Jim Coburn & Jackie Cook, Ceres, COOL RESPONSE: THE SEC & CORPORATE CLIMATE CHANGE REPORTING (2014) (also noting the lack of enforcement that followed issuance of the guidance).

⁸⁶ Barnali Choudhury, Climate Change as Systemic Risk, 18 BERKELEY Bus. L.J. 52, 33-35 (2021) (pre-publication, not yet peer reviewed) (describing various reviews of climate-related disclosures in recent years).

⁸⁷ Madison Condon, *Market Myopia's Climate Bubble*, 2022 Utah Law Review 63 (2021), https://scholarship.law.bu.edu/faculty_scholarship/1087.

⁸⁸ S&P Global, *Climate disclosures are increasing in the US but still far from what the SEC has proposed* (April 5, 2022), <https://www.spglobal.com/esg/insights/climate-disclosures-are-increasing-in-the-us-but-still-far-from-what-the-sec-has-proposed>. The report also notes that most U.S. companies that do disclose Scope 1 and 2 GHG emissions also disclose Scope 3 emissions.

⁸⁹ *Id.*

⁹⁰ Task Force on Climate-related Financial Disclosures 2021 Status Report at 31 (Oct. 14, 2021), <https://www.fsb.org/2021/10/2021-status-report-task-force-on-climate-related-financial-disclosures/>.

how they manage climate-related risks, emphasizing the importance of the SEC’s governance disclosures.

Some of the industries most at risk from climate change continue to omit climate-related information from their disclosures. Carbon Tracker recently reviewed disclosures for 107 oil and gas, transportation, utility, cement, consumer goods and services, and other industrial sector companies and found over 70% did not indicate they considered climate-related risks in preparing their financial reports.⁹¹ Carbon Tracker found they largely failed to disclose quantitative assumptions and estimates, and their financial disclosures were inconsistent with risk disclosures in other reporting. Carbon Tracker noted these disclosure practices were largely out of step with accounting and auditing standard setters’ expectations.⁹²

An example of an emerging, energy-intensive industry whose disclosures do not effectively communicate potential climate-related risks is the crypto-mining industry. A review of disclosures from public crypto-industry players found wide disparities in disclosures and little information on topics critical for analyzing their transition risks, such as energy source and use and GHG emissions. (See separate comments filed by Earthjustice and other partners highlighting the disclosure gaps in the crypto-mining industry for more information.) Similarly, significant gaps in information about GHG emissions in the agricultural industry mask transition risks for companies whose emissions are heavily weighted to Scope 3 emissions, highlighting the importance of Scope 3 disclosures for adequately informing investors. The agricultural industry is also highly susceptible to physical climate risk, which is not well-identified or quantified in current disclosure practices. (See separate comments filed by Earthjustice and other partners on the risks associated with industrial agriculture for more details.)

Dams and reservoirs provide another example of how current climate disclosures are insufficient. A growing body of scientific studies over the past two decades have established that dams and reservoirs produce and emit substantial amounts of carbon dioxide, methane, and nitrous oxide, often from the decomposition of trapped organic material below the reservoir’s water.⁹³ Studies have found that Hoover Dam and Lake Mead emit as much as 12.3 million metric tons of carbon dioxide equivalent (CO₂e) annually, while Kentucky Lake emits over 1.8 million metric tons of CO₂e annually.⁹⁴ A 2020 scientific study co-authored by a U.S. Environmental Protection Agency (EPA) researcher estimated that reservoirs in Ohio are the state’s fourth largest anthropogenic source of methane emissions.⁹⁵ Despite emitting large

⁹¹ Carbon Tracker Initiative, *Flying Blind: The Glaring Absence of Climate Risks in Financial Reporting* (Sept. 2021), <https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>.

⁹² *Id.* at 12-14.

⁹³ See, e.g., Bridget Deemer et al., *Greenhouse Gas Emissions from Reservoir Water Surfaces: A New Global Synthesis*, 66 *BioSci.* 949, 949–50, 954–61 (Nov. 2016), <https://academic.oup.com/bioscience/article/66/11/949/2754271>.

⁹⁴ Laura Scherer & Stephan Pfister, *Hydropower’s Biogenic Carbon Footprint*, *PLoS ONE* (Sept. 14, 2016), <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0161947>.

⁹⁵ Jake Beaulieu et al., *Methane and Carbon Dioxide Emissions from Reservoirs: Controls and Upscaling*, 125 *J. Geophysical Resch. Biogeosciences* 1–2, 19 (2020), <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2019JG005474>.

amounts of GHGs, these facilities do not currently measure or report their GHG emissions, potentially misinforming policymakers and investors about the risks of over-relying on hydropower when working towards a cleaner electricity sector, among other risks.⁹⁶ The SEC’s climate rule would help correct this information asymmetry and better inform investors—whether they are considering investing in a utility or other entity that owns dams and reservoirs or are evaluating corporate transition plans that rely heavily on hydropower.

Many companies are touting new commitments to reduce their climate impacts or to transition to more competitive business models for a lower carbon economy. However, their plans and goals don’t always align with the stated intention.⁹⁷ The SEC’s rule would require more rigorous, reliable, and consistent disclosures, providing a better basis from which investors could evaluate such pronouncements. A particularly illustrative example is that of gas utilities promising a shift to “renewable natural gas” and calling for increased investment and reliance on their infrastructure. These efforts often coincide with utility pushback against building electrification and significantly overstate the potential for GHG emissions reductions, understate the costs, and do not address the related air and water pollution impacts for communities.⁹⁸ Trust is a significant concern with voluntary disclosure. A March 2022 survey of retail investors found only 36% voluntary disclosures of climate change risks, compared to 71% said they would trust them if they were integrated into the SEC’s disclosure requirements and validated by a third-party auditor.⁹⁹

Inconsistencies in disclosures and resulting information asymmetry have also caused some investors to *underestimate* the risks that climate change poses to companies. A 2019 report from Columbia’s Center on Global Energy Policy evaluated the market impact of PG&E’s

⁹⁶ For example, regulators and policymakers often incorrectly assume that hydropower is a clean energy resource that emits zero carbon, when in fact some hydropower facilities emit substantial amounts of GHGs. *See, e.g.*, Bureau of Reclamation, Hydropower Program, <https://www.usbr.gov/power/> (last visited June 6, 2022) (“Hydropower is a renewable and reliable resource providing clean energy to the western United States.”); Tenn. Valley Auth., Hydroelectric, <https://www.tva.com/energy/our-power-system/hydroelectric> (last visited June 6, 2022) (“Hydroelectric power is the most clean, reliable, efficient and economical of all renewable energy sources.”). As an initial step toward obtaining more accurate information on these emissions, Earthjustice recently submitted a rulemaking petition to the EPA requesting that the agency add dams and reservoirs to its Greenhouse Gas Reporting Program. Petition from Michael Hiatt, Earthjustice, to Michael Regan, Adm’r, EPA (Mar. 21, 2022), <https://tellthedamtruth.com/wp-content/uploads/2022/03/Petition-for-rulemaking-to-add-dams-and-reservoirs-as-a-source-category-under-the-Greenhouse-Gas-Reporting-Program.pdf>.

⁹⁷ A March 2021 report finds net-zero pledges by governments and companies “vary hugely in their quality.” Black, R., Cullen, K., Fay, B., Hale, T., Lang, J., Mahmood, S., Smith, S.M., *Taking Stock: A global assessment of net zero targets*, Energy & Climate Intelligence Unit and Oxford Net Zero, at 5 (2021), <https://eciu.net/analysis/reports/2021/taking-stock-assessment-net-zero-targets>.

⁹⁸ Sasan Saadat, Matt Vespa, and Mark Kresowik, *Rhetoric v. Reality: The Myth of “Renewable Natural Gas” for Building Decarbonization*, Earthjustice and Sierra Club (July 2020), <https://earthjustice.org/features/report-building-decarbonization#:~:text=Rhetoric%20vs.,Natural%20Gas%E2%80%9D%20for%20Building%20Decarbonization&text=A%20new%20report%20by%20Earthjustice.buildings%20tethered%20to%20gas%20combustion>.

⁹⁹ Americans for Financial Reform Education Fund (AFR EF) and Public Citizen. 2022. “Results of a Nationwide Survey: Retail Investors’ Support for the SEC Mandating Climate-Related Financial Disclosures from Public Companies.” AFR EF and Public Citizen, April 28, 2022. https://ourfinancialsecurity.org/wp-content/uploads/2022/04/FINAL-Report_Climat-Disclosure-Survey-Results_AFR-PC-2.pdf.

bankruptcy and found it mostly limited to California, in part due to investors lacking information about the national and imminent risks of climate change.¹⁰⁰ Despite “the dire tone of articles touting PG&E as a harbinger of future climate change bankruptcies”¹⁰¹ and scientific consensus that climate change threatens the utilities industry, utility investors outside of California did not appear to price in material financial climate risk.¹⁰² The report attributes the lack of national market response in part to investors underestimating the impacts of climate change. The lack of transparent, consistent, and comparable information about climate risk in this instance may have held off a more significant market impact but also illustrates the potential damage that the current lack of reliable information can cause. These investors may not be properly integrating climate into their risk calculations, but that does not mean they are invulnerable to similar climate-related events that could impact other utilities in other areas.

These are just a few examples of many that illustrate how current disclosure practices fail to inform investors of relevant physical and transition risks from climate change. What is abundantly clear twelve years after the light-touch approach the SEC took in its 2010 climate guidance and the well-meaning efforts to voluntarily improve corporate climate-related disclosure and risk management since then is that we cannot achieve the level of consistency, reliability, and comprehensiveness needed to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation rather than destruction without the SEC requiring and enforcing a disclosure regime.

The SEC has worked to improve its understanding of companies’ consideration of climate-related risks in their disclosures, enhancing its ability to assess corporate compliance with existing requirements,¹⁰³ including climate change in its list of examination priorities,¹⁰⁴ and creating an enforcement task force covering climate concerns.¹⁰⁵ While important, these examination and enforcement efforts do not displace the need for disclosure requirements that establish a baseline level of information for investors to assess companies’ relative climate-related risks. After-the-fact enforcement actions remain important. Sending the message that the SEC is looking behind corporate disclosure decisions to determine whether they were misleading can have a significant deterrence effect. However, without the complementary regulatory effort to establish clear expectations for how companies should assess and disclose climate-related risks, it will inevitably be inadequate. A well-designed, disclosure program could avoid a heavy reliance on more costly enforcement efforts by encouraging upfront compliance.

¹⁰⁰ Market and Policy Perspectives on the First Climate Bankruptcy at 12.

¹⁰¹ *Id.* at 18.

¹⁰² *Id.* at 22.

¹⁰³ Acting Chair Lee, Statement on the Review of Climate-Related Disclosure (Feb. 24, 2021); SEC, Sample Letter to Companies Regarding Climate Change Disclosures (Sept. 22, 2021), <https://www.sec.gov/corpfin/sample-letter-climate-change-disclosures>.

¹⁰⁴ Press Release, SEC, SEC Division of Examinations Announces 2021 Examination Priorities (March 3, 2021).

¹⁰⁵ Press Release, SEC, SEC Announces Enforcement Task Force Focused on Climate and ESG Issues (March 4, 2021).

III. Investors have attempted to fill the gap, seeking climate-related information through other means.

Many investors and asset managers have made clear their expectations that companies disclose more on climate-related risks, including emissions data and details on achieving any targets they set. BlackRock’s 2022 stewardship principles encourage companies to disclose based on the TCFD framework and industry-specific metrics developed by the Sustainability Accounting Standards Board (SASB).¹⁰⁶ It describes climate change as “a defining factor in companies’ long-term prospects” and asks “every company to help its investors understand how it may be impacted” and asks them “to set short-, medium- and long-term science-based targets, where available for their sector, for greenhouse gas reductions and to demonstrate how their targets are consistent with the long-term economic interests of their shareholders.”¹⁰⁷ A recent survey of retail investors found sixty three percent would factor climate-related risks into their investment decisions if it were audited and disclosed to the SEC. Seventy-eight percent said that if a company has committed to net-zero emissions targets, its plan’s metrics and progress should be freely available to the public and investors.¹⁰⁸

Investors have attempted to fill the gap in disclosures by seeking out climate-related information from other sources. Some have partnered with science organizations or climate data groups, sometimes even purchasing them, to develop the data needed for the risk assessments their investment clients expect. Wellington Asset Management has partnered with Woodwell Climate Research Center and the MIT Joint Program to help integrate physical and transition risks into their investment practices.¹⁰⁹ The California Public Employees’ Retirement System committed to applying the results of Wellington’s work with Woodwell in its portfolio.¹¹⁰ BlackRock partnered with Rhodium Group to identify how physical climate risks impact financial performance.¹¹¹ As a result of that work, the Rhodium Group is developing asset-level data for companies and investors to purchase, noting that “companies have made very little progress on physical climate risk disclosure to date. The few companies that report risks do so in a qualitative manner—giving investors little information about the financial implications of physical climate risk and likely underestimating their magnitude.”¹¹²

¹⁰⁶ Blackrock Investment Stewardship Global Principles (Jan. 2022) at 11, <https://www.blackrock.com/corporate/literature/fact-sheet/blk-responsible-investment-engprinciples-global.pdf>.

¹⁰⁷ *Id.* at 13.

¹⁰⁸ Americans for Financial Reform Education Fund (AFR EF) and Public Citizen. 2022. “Results of a Nationwide Survey: Retail Investors’ Support for the SEC Mandating Climate-Related Financial Disclosures from Public Companies.” AFR EF and Public Citizen, April 28, 2022. https://ourfinancialsecurity.org/wp-content/uploads/2022/04/FINAL-Report_Climate-Disclosure-Survey-Results_AFR-PC-2.pdf.

¹⁰⁹ Press Release, Wellington, Wellington Management and the MIT Joint Program announce climate change research collaboration (Jan. 27, 2022), <https://www.wellington.com/en/wellington-news/wellington-news/wellington-mit-climate-change-collaboration>.

¹¹⁰ Press Release, Woods Hole Research Center, Wellington Management and Woods Hole Research Center Announce Strategic Climate Science Initiative (Sept. 16, 2018).

¹¹¹ Rhodium Group. 2019. “Clear, Present and Underpriced: The Physical Risks of Climate Change.” Rhodium Group, April 3, 2019. <https://rhg.com/research/physical-risks-climate-blackrock/>.

¹¹² *Id.*

Numerous organizations are working to develop better tools for the public, companies, and investors to address climate-related risks. The First Street Foundation has made some property-level flood and fire risk data available publicly while providing additional data access to paying customers.¹¹³ Rating agencies and shareholder advisory groups, responding to the investor interest in this information, have likewise developed new data streams to address the need. S&P Global Ratings' ESG Evaluation program and Risk Atlas includes climate change risks, Moody's acquired climate data and risk analysis company Four Twenty Seven, Inc., MSCI acquired Carbon Delta, a data analytics company that conducts climate change scenario analysis for investors.¹¹⁴ S&P has also released new physical risk data tools for investors to better assess risks from the physical impacts of climate change.¹¹⁵

Shareholder votes and voting policies are also demonstrating investor interest in more reliable climate-related disclosures. ISS's proxy voting policies for 2022 include a climate accountability policy that indicates it will recommend voting against management if it believes the company is "not taking the minimum steps needed to understand, assess and mitigate risks related to climate change," including "robust disclosure and adoption of GHG emissions targets."¹¹⁶ Large asset managers like State Street Global Advisors and BlackRock have told companies they would vote against directors if the companies do not improve and disclose their oversight of climate-related risks and emissions reduction targets.¹¹⁷ An analysis by Ceres of shareholder climate proposals in the 2021 proxy season found "historic success," noting the proposals that received majority votes called for climate-related disclosures "on deforestation, plastic pollution, climate lobbying, and energy transition plans and three winning votes called for reductions in greenhouse gas emissions. Two proposals requesting climate-risk disclosure in oil

¹¹³ First Street Foundation, <https://firststreet.org/>.

¹¹⁴ Hana V. Vizcarra, *The Reasonable Investor and Climate-Related Information: Changing Expectations for Financial Disclosures*, 50 *Env'tl. L. Rep. (ELI)* 10106 (2020) (listing examples in footnotes 38-41 and associated text); Billy Nauman and Anna Gross, Credit rating agencies focus on rising green risks, *FINANCIAL TIMES* (Nov. 26, 2019) (noting S&P bought the ESG ratings arm of RobecoSAM and Fitch introduced ESG "relevance scores" in 2019); S&P Global Ratings, *General Criteria: Environmental, Social, and Governance Principles in Credit Ratings* (Oct. 10, 2021), https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/12085396?utm_medium=cpc&utm_source=google&utm_campaign=ESG_Phase_2&utm_term=esg&utm_content=600364980216&gclid=Cj0KCQjwhqaVBhCxAARIsAHK1tiPr-SXmPejTbUmuRt4keR2-CEm3OOZBENe0skwvmZ7vbNDBSjc_lzoaAtntEALw_wcB.

¹¹⁵ S&P Global, "Let's Get Physical" with S&P Trucost's Physical Climate Risk Data (July 19, 2021).

https://www.spglobal.com/esg/insights/let-s-get-physical-with-sp-trucost-s-physical-climate-risk-data?gclid=CjwKCAjwjtOTBhAvEiwASG4bCN41K3TputlNZ-Rxl4qQaZuvLG8h3AZiuTYjczU5-SA-zl86M_jMeRoCJHgQAvD_BwE.

¹¹⁶ Press Alert, ISS Publishes Proxy Voting Policies for 2022 Relating to Climate Matters and Racial Equity Audits (Dec. 21, 2021), <https://www.ropesgray.com/en/newsroom/alerts/2021/December/ISS-Publishes-Proxy-Voting-Policies-for-2022-Relating-to-Climate-Matters-and-Racial-Equity-Audits#:~:text=For%20companies%20that%20are%20deemed,understand%2C%20assess%20and%20mitigate%20risks>.

¹¹⁷ State Street Global Advisors, "CEO's Letter on Our 2022 Proxy Voting Agenda," January 12, 2022; BlackRock, *Our 2021 Stewardship Expectations: Global Principles and Market-level Voting Guidelines* (2020), (specifically noting it would vote against boards who do not adequately disclose or plan for climate change) <https://www.blackrock.com/corporate/literature/publication/our-2021-stewardship-expectations.pdf>.

and gas companies' financial statements were both on the cusp of earning majorities."¹¹⁸ In the 2021 proxy season, "the largest institutional investors opposed more directors because of inadequate climate risk oversight and they supported more shareholder proposals seeking to strengthen climate disclosures and policies."¹¹⁹ Thirty-nine percent more proposals on environmental topics were submitted in 2022 than the 2021 season.¹²⁰ Seventy-one call for adopting or enhancing emissions reductions targets, and fifty-six of those included Scope 3 targets.¹²¹ A recent survey by ERM found that institutional investors are spending significant amounts of money to collect and assess climate information, spending that could be reduced by this rule and helps explain the shift in votes on shareholder proposals.¹²²

IV. The proposed rule supports SEC's mission of protecting investors, ensuring fair, orderly, and efficient markets, and facilitating capital formation.

While the climate effects on our communities and economy are unprecedented, the SEC's response to a clearly identified gap in the information reaching investors is not. In this proposal, the SEC utilizes the tools Congress provided it to fulfill the mission Congress assigned it. The SEC has grounded its disclosure requirements in the clear authorities Congress granted it in 1933 and 1934 to require disclosures that are necessary or appropriate to protect investors. Professor John C. Coates explains the extent of this delegation in his comments already submitted to the Commission.¹²³ Thirty securities law professors have also written that the proposed disclosure requirements fit squarely within the SEC's authority.¹²⁴ The disclosure requirements stay true to the Congressional directive to protect investors, requiring information necessary to address a substantial lapse in current disclosure practices and appropriate to properly inform investors of evolving climate-related risks.

As we have already outlined, climate change poses significant financial risks to companies, investors, and our economy, but existing disclosure requirements are failing to elicit reliable, substantive disclosures on these risks. This failure prevents investors from effectively

¹¹⁸ Rob Berridge and Ryan Taylor, "As climate risks skyrocket, largest asset managers vote for more climate-related shareholder proposals, tipping support to record levels in 2021," Ceres (Dec. 6, 2021), <https://www.ceres.org/news-center/blog/climate-risks-skyrocket-largest-asset-managers-vote-more-climate-related>.

¹¹⁹ <https://corpgov.law.harvard.edu/2022/03/14/2022-proxy-season-preview/#1b>

¹²⁰ Hannah Orowitz, Rajeev Kumar, and Lee Anne Hagel, *An Early Look at the 2022 Proxy Season*, HARV. LAW CORP. GOV. FORUM (June 7, 2022), <https://corpgov.law.harvard.edu/2022/06/07/an-early-look-at-the-2022-proxy-season/#:~:text=Climate%20remains%20a%20key%20focus,124%20during%20the%202021%20season>.

¹²¹ *Id.*

¹²² ERM, *Costs and Benefits of Climate-Related Disclosure Activities by Corporate Issuers and Institutional Investors* (May 2022), <https://www.sustainability.com/thinking/costs-and-benefits-of-climate-related-disclosure-activities-by-corporate-issuers-and-institutional-investors/>

¹²³ John C. Coates, Comment on The Enhancement and Standardization of Climate-Related Disclosures for Investors (June 2, 2020), <https://www.sec.gov/comments/s7-10-22/s71022-20130026-296547.pdf>.

¹²⁴ Fisch, Jill E. and Georgiev, George S. and Nagy, Donna M. and Williams, Cynthia A., Comment Letter of Securities Law Scholars on the SEC's Authority to Pursue Climate-Related Disclosure (June 6, 2022). Available at SSRN: <https://ssrn.com/abstract=4129614> or <http://dx.doi.org/10.2139/ssrn.4129614>.

accounting for them in their investment decisions. Continued failure to adequately inform investors could lead to more volatile markets, inadequate capital formation, and substantial risk for individual investors (whether due to their being unaware of potential risks or misled about specific risks). Under existing disclosure requirements, companies should already disclose much more than they do, as some of this information is responsive to existing requirements and financially material to many companies.¹²⁵ However, the SEC’s guidance and limited enforcement efforts to date have not succeeded in closing this gap. Thus, there is a need for more extensive disclosure requirements specific to climate-related risks that will assess these evolving risks over time.

The SEC rule astutely balances the need for more information with the need for workable and accessible disclosures. By requiring prescriptive disclosures of certain information that can be critical indicators of risk, the SEC avoids asking companies to conduct labor-intensive materiality determinations for every disclosure and allows investors and regulators to assess how companies are responding to changing risk environments. Climate risks look different over different timeframes, and the SEC’s request that companies assess and disclose risks that are material or could become so over the short, medium, and long term is essential to avoiding losses from foreseeable but often ignored climate-related impacts. These disclosures would also reduce the “estimation risk an investor faces in understanding the exposure of a firm to physical and transition risks associated with climate change” and decrease the cost of capital beyond the potential compliance costs.¹²⁶

Each item proposed includes valuable disclosures that address investors’ specific informational needs. The **Regulation S-K amendments** provide a crucial window into how corporate managers and the board identify, assess, and manage climate-related risks that will increase trust in current disclosures and allow investors to better see over the horizon to risks reasonably likely to develop. Requiring companies to describe their processes and the parameters for assessing, managing, and disclosing climate-related risks in a similar manner (such as: describing how they define their time horizons (Item 1502(a)(2)), determine materiality (Item 1503(a)(1)(iv)), and integrate climate-related risks into their overall risk management system (Item 1503(b)), etc.) will allow investors to better compare across companies and industries. Below we describe some of the specific benefits of the Regulation S-K amendments.

Item 1501’s governance disclosures provide investors reassurance that the most important risks are receiving the appropriate oversight at the board level.

Item 1502’s strategy, business model, and outlook disclosures ensure companies go through the process of identifying and assessing climate risks, an exercise that not only informs

¹²⁵ Hana V. Vizcarra, *The Reasonable Investor and Climate-Related Information: Changing Expectations for Financial Disclosures*, 50 *Env’tl. L. Rep. (ELI)* 10106 (2020).

¹²⁶ Shivaram Rajgopal, *Why I support the SEC’s Climate Risk Disclosure Rules*, *Forbes* (June 12, 2022), <https://www.forbes.com/sites/shivaramrajgopal/2022/06/12/why-i-support-the-secs-proposed-climate-risk-disclosure-rules/?sh=282032393021>.

investors but also improves the reliability of disclosures. By requiring independent consideration and identification of both physical (acute and chronic) and transition risks, the rule safeguards against companies' tendency to address only the risks for which they are best prepared. Physical and transition risks can often look quite different from one individual company or industry to another and can evolve over distinct timeframes (and, as was previously discussed, they can feed into each other to increase overall risks). Requiring evaluation of each is key to understanding the full scope of risks. The physical risk disclosures also rightly recognize that such risks are tied to place. Location information allows investors to assess the extent of the risk for a particular company and understand the company's ability to manage it, improving comparability. The specifics of how to define flood hazard areas or the appropriate level of water stress requiring disclosure could be debated, but the usefulness of such disclosures should not be in light of the repetitive and increasingly extreme droughts and floods occurring across the country.

However, identifying reasonably likely risks does not finish the job. Some companies already do name some risks in their risk factor disclosures. Requiring companies to describe "the actual and potential impacts" of these risks on "strategy, business model, and outlook" (Item 1502(b)) and discuss how the company considers those impacts in its business strategy, financial planning, and capital allocation (Item 1502(c)) allows investors to connect those risks to the company's prospects of weathering them. Likewise, providing a narrative discussion of how these risks have or could affect financial statements prevents such affects from being buried in the financial statement, ensuring an investor has a full sense of the nature of these risks from reading the climate disclosure section of a company's reports.

Item 1503's risk management disclosures provide investors with critical information about how the company evaluates and identifies its risks and integrates it into existing risk management processes. These disclosures are crucial for understanding and trusting the risks identified in Item 1502. They also increase the reliability of materiality determinations for climate-related information. The SEC outlines specific considerations that ensure companies evaluate significant transition risks, including the regulatory and policy environments in which they work and shifts in preferences and technologies.

Item 1503(c)'s transition plan disclosures help combat greenwashing and potentially misleading communications with investors. They will allow investors to see whether a company responds to climate-related risks with reactionary risk management or a proactive plan to withstand increasing future risk. But all transition plans are not created equal. The devil is in the details with "net-zero" and other transition plans, and many announced targets have not been backed up with science-based interim goals or specific information about how a company plans to achieve them. "Roughly half of the Forbes 2000 largest companies have yet to announce plans to reach net-zero Of the 702 companies with a net-zero target, two-thirds haven't made it clear how they plan to achieve that goal, Net Zero Tracker found in their annual report."¹²⁷ Some

¹²⁷ Gloria Dickie and Simon Jessop, *Report casts doubt on net-zero emissions pledges by big global companies*, REUTERS (June 13, 2022), <https://www.reuters.com/business/sustainable-business/report-casts-doubt-net-zero-emissions-pledges-by-big-global-companies-2022-06-12/>.

also address transition risk with no discussion of physical risks. Item 1503(c)'s disclosures critically require companies to discuss how its plan addresses the physical and transition risks disclosed in previous sections, exposing potentially significant gaps in planning. They also alert investors to empty promises by requiring companies to describe actions taken each year to achieve the goals set in the plan. (Item 1503(c)(1)), a sound check against potentially misleading pronouncements not backed up by action.

Item 1504's GHG emissions metrics disclosures are key indicators of transition risks. Company level disclosures covering the scope of emissions needed to help investors understand such risks are not available elsewhere. Existing disclosure regimes under other agencies with distinct statutory authorities serve different purposes and are limited in ways that cannot inform investors in the manner needed to evaluate these risks. Voluntary disclosures have thus far proven unreliable and incomplete. This proposal provides the ground rules needed to have comparable data and the third-party verification required to trust it. The proposal requires the following important disclosures: disaggregated emissions information and aggregate CO₂e numbers, exclusion of offsets in these numbers so as not to obscure emissions levels, and Scope 3 emissions for certain companies. We strongly support disclosure of all Scope 1 and 2 emissions and, at a minimum, Scope 3 emissions if material or included in a GHG emissions reduction target, as proposed. As we discussed in Section II of these comments, there are many industries for which Scope 3 GHG emissions disclosures are essential to evaluating climate-related risks. As in other parts of these disclosure requirements, the explanations about the categories of emissions considered and what data and methodologies are utilized is important to assessing the validity and trustworthiness of the disclosures.

Item 1505's attestation of Scope 1 and 2 disclosures at a reasonable assurance level addresses a key failure in voluntary disclosures to date. Most current voluntary climate-related disclosures are not reviewed in a similar manner to financial disclosures or are only reviewed to a limited assurance level. [cite to Samantha Ross's auditing piece for CAP?] This has prevented investors from having confidence in the numbers provided and process that went into developing them. Together with the other disclosure requirements in the proposal, the attestation requirement corrects a significant deficiency.

Item 1506's targets and goals disclosures will provide additional protection for investors against misleading statements by requiring explicit descriptions of the scope of climate-related goals, how the company intends to meet them, in relation to what baseline, and over what time frame. Again, the devil is in the details with many such goals, and seemingly similar pronouncements can have very different risk profiles depending on the plans made (or not) to achieve them. **Item 1507's interactive data requirement** also ensures the information provided will be useable by investors.

The proposal also addresses one of the most significant failures of the current disclosure regime—that companies largely do not disclose quantitative financial impacts from identified climate-related risks. Climate risks are financial risks and should be included in a company's

financial statements. To properly understand the scope of the risks identified in S-K, investors need to see the financial impacts of climate-related risks and opportunities broken out from the overall financials. By requiring a separate note in the financial statements, **the Regulation S-X amendments** allow investors to evaluate recent financial impacts of the identified risks and evaluate their trajectory over time. The contextual information required will help investors understand how companies arrive at those numbers, an important factor in assessing their validity and comparability. And including a uniform threshold for these financial disclosures improves comparability and helps investors evaluate trends in financial impacts over time. With individual disclosures for physical impacts of climate change and transition activities, including the measures taken by companies to mitigate risk and impacts, the disclosure provide an important avenue through which investors can assess the corporate preparedness and any plans articulated in the S-K disclosures.

Disclosures are meant to evolve as risks change and investors' needs shift. That is why Congress left the job of continually evaluating the need for such disclosures to the SEC, the entity best equipped to evaluate changing risk exposure and disclosure gaps to protect investors and the markets. Much has changed since 2010 in our understanding of climate change and the physical and transition risks it imposes on individuals, communities, companies, and our economy. The significant work over the last twelve years by scientists, economists, investors, and companies, to understand the scope of risks and devise better processes for evaluating them provides a good basis of information to build upon in developing a climate-related disclosure regime that will be effective, efficient, and immensely useful to the market.

* * *

We urge the SEC to resist requests to weaken the proposed disclosure requirements. Each piece of the SEC's proposal independently aids in protecting investors and ensuring the efficiency of the market. However, together, the whole is much stronger than the sum of its parts. Governance disclosures without key metrics to evaluate transition risks, such as the GHG emissions data, would only tell part of the story and hinder investors' ability to evaluate the effectiveness of that governance. Emissions data that omits Scope 3 would do little for investors concerned about industries like large industrial agricultural or many parts of the energy sector, whose emissions fall heavily into that category.

As an organization dedicated to using the law to protect people's health, preserve magnificent places and wildlife, advance clean energy, and combat climate change, we recognize that the SEC is not charged with setting or enforcing policies that will achieve these goals. However, our experience provides us with a useful view into the realities of how climate change is impacting companies and our economy in ways not yet adequately reflected in the markets the Commission oversees. Ineffective risk management and disclosure harm investors and markets which, in turn, harm the people and places we work to protect. For these reasons, we urge the SEC to finalize strong disclosure requirements that will protect investors from the physical and transition risks of climate change and ensure our markets accurately consider such risks.

Respectfully Submitted,

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