December 31st fiscal year-end, the compliance date for the proposed disclosures in annual reports, other than the Scope 3 disclosure, would be:

- For large accelerated filers, fiscal year 2023 (filed in 2024);
- For accelerated and non-accelerated filers, fiscal year 2024 (filed in 2025); and
- For SRCs, fiscal year 2025 (filed in 2026).[144]

Registrants subject to the proposed Scope 3 disclosure requirements would have one additional year to comply with those disclosure requirements.

We welcome feedback and encourage interested parties to submit comments on any or all aspects of the proposed rules. When commenting, it would be most helpful if you include the reasoning behind your position or recommendation.

II. DISCUSSION

A. Overview of the Climate-Related Disclosure Framework

1. Proposed TCFD-Based Disclosure Framework

We have modeled the proposed disclosure rules in part on the TCFD disclosure framework. Building on the TCFD framework should enable companies to leverage the framework with which many investors and issuers are already familiar, which should help to mitigate both the compliance burden for issuers and any burdens faced by investors in analyzing and comparing the new proposed disclosures.

Many commenters that supported climate disclosure rules recommended that we consider the TCFD framework in developing those rules. Numerous commenters stated that the Commission should base its climate-related disclosure rules on the TCFD framework either as a

---

[144] *See infra* Section II.M.

standalone framework,[145] or in conjunction with industry-specific metrics drawn from the SASB[146] or other third-party frameworks.[147] A broad range of commenters, including both

---

[145] *See, e.g.*, letters from Alphabet Inc., Amazon.com Inc., Autodesk, Inc., eBay Inc., Facebook, Inc., Intel Corporation, and Salesforce.com, Inc. (June 11, 2021) ("Alphabet Inc. *et al.*); the Aluminum Association (June 11, 2021); Amalgamated Bank; Apple, Inc.; Bank of Finland; BNP Paribas; Boston Common Asset Management; Ceres and other signatories representing NGOs, academics, and investors (Ceres *et al.*) (June 11, 2021); Certified B Corporations (June 11, 2021); Chevron; Clean Yield Asset Management; Climate Advisers (June 13, 2021); Climate Governance Initiative (June 12, 2021); Committee on Financial and Capital Markets (Keidenren) (June 13, 2021); Commonwealth Climate and Law Initiative; Crowe LLP (June 11, 2021); E2 (June 14, 2021); ERM CVS; Eumedion (June 11, 2021); Fossil Fuel Divest Harvard (June 14, 2021); Impact Investors, Inc.; Impax Asset Management; Information Technology Industry Council (June 11, 2021); Institutional Limited Partners Association (June 11, 2021); Japanese Bankers Association (June 11, 2021); Keramida (June 11, 2021); Carolyn Kohoot (June 11, 2021); Legal and General Investment Management America (June 11, 2021); Christopher Lish (June 12, 2021); Manifest Climate (June 13, 2021); Mercy Investment Services, Inc.; Miller/Howard Investments; Mirova US LLC (June 14, 2021); M.J. Bradley & Associates, on behalf of Energy Strategy Coalition (June 13, 2021); Morningstar, Inc. (June 9, 2021); MSCI, Inc.; Natural Resources Defense Council (June 11, 2021); Persefoni (June 14, 2021); PRI; S&P Global; Maria Stoica (June 11, 2021); Trillium Asset Management; United Nations Environment Programme (UNEP) (June 9, 2021); Walmart, Inc. (June 11, 2021); and World Business Council for Development (June 11, 2021) (WBCSD).

[146] *See, e.g.*, letters from Adobe Inc. (June 11, 2021); Alberta Investment Management Corporation (June 11, 2021); AllianceBernstein; American Chemistry Council (June 11, 2021); American Society of Adaptation Professionals (June 11, 2021); Baillie Gifford (June 11, 2021); Bank Policy Institute (June 9, 2021); BlackRock; Bloomberg, LP (June 3, 2021); bp; BSR (June 11, 2021); Canadian Bankers Association (June 11, 2021); Canadian Coalition of Good Governance; Capital Group (June 11, 2021); Catavento Consultancy (Apr. 30, 2021); Center for Climate and Energy Solutions; Confluence Philanthropy (June 14, 2021); ConocoPhilips, Inc. (June 11, 2021); CPP Investments (June 11, 2021); Enbridge, Inc. (June 11, 2021); Energy Workforce and Technology Council (June 11, 2021); Entelligent, Inc. (June 14, 2021); Ethic Inc.; Emmanuelle Haack (Apr. 27, 2021); Harvard Management Company (June 11, 2021); Hermes Equity Ownership Services Limited (June 14, 2021); Douglas Hileman Consulting (June 7, 2021); HP, Inc. (June 14, 2021); Virginia Harper Ho (June 12, 2021); IHS Markit (June 13, 2021); Institute of International Bankers; Institute of International Finance (June 13, 2021); Institute of Management Accountants (June 12, 2021); Invesco (June 10, 2021); Investment Company Institute; Investment Consultants Sustainability Working Group (June 11, 2021); Richard Love (May 20, 2021); Manulife Investment Management (June 11, 2021); NEI Investments (June 11, 2021); Neuberger Berman (June 11, 2021); New York State Society of Certified Public Accountants; Nordea Asset Management (June 11, 2021); Norges Bank Investment Management (June 13, 2021); NY State Comptroller; Paradice Investment Management (June 11, 2021); Parametric Portfolio Associates; PayPal Holdings, Inc. (June 12, 2021); PGIM (June 13, 2021); Reinsurance Association of America (June 9, 2021); Salesforce.com (June 11, 2021); San Francisco Employees Retirement System (June 12, 2021); State Street Global Advisors; Summit Strategy Group (June 11, 2021); Teachers Insurance and Annuity Association of America (June 11, 2021); T Rowe Price (June 11, 2021); Value Reporting Foundation (June 11, 2021); Wellington Management Co. (June 11, 2021); and Westpath Benefits and Assessments (June 11, 2021).

[147] *See, e.g.*, letters from Gabrielle F. Preiser (Mar. 31, 2021) and Worldbenchmarking Alliance (June 11, 2021) (recommending the Global Reporting Initiative (GRI) standards); letter from Mathew Roling and Samantha Tirakian (June 11, 2021) (recommending the CDSB standards); and Pricewaterhouse Coopers and Grant Thornton (June 11, 2021) (recommending the Sustainability Standards Board (SSB) standards once the SSB is established by the IFRS Foundation and others as a global standard-setter and once it promulgates standards).

issuers[148] and investors,[149] supported basing new climate-related disclosure rules on the TCFD framework.

Commenters provided several reasons for their support of the TCFD framework. First, commenters indicated that, because of the widespread adoption of the framework, issuers and investors have experience making and using TCFD disclosures. As a result, according to commenters, aligning SEC rules with the TCFD could reduce the burden on issuers and increase the consistency and comparability of climate disclosures.[150] Second, commenters stated that the information that the TCFD disclosures elicit is useful for investors to understand companies' exposure to and management of climate-related risks.[151] Third, various jurisdictions around the world have announced their intention to align their domestic disclosure rules with the TCFD.[152] Commenters stated that by aligning with the TCFD framework, the Commission could potentially facilitate higher levels of consistency and comparability of disclosures globally.[153]

The consistency and breadth of these comments comport with our understanding that the TCFD framework has been widely accepted by issuers, investors, and other market participants and reinforce our view that the framework would provide an appropriate foundation for the

---

[148] *See, e.g.*, letters from Adobe; Alphabet Inc. *et al*.; BNP Paribas; bp; Chevron; ConocoPhilips; and Walmart.

[149] *See, e.g.*, letters from Alberta Investment Management Corporation; BlackRock; CalPERS; CALSTRS; Impact Investors, Inc.; and San Francisco Employees Retirement System.

[150] *See, e.g.*, letters from BNP Paribas; Deutsche Bank (June 11, 2021); and Institute of International Bankers.

[151] *See, e.g.*, letters from AllianceBernstein; CALSTRS; Investment Company Institute; and NY State Comptroller.

[152] *See supra* note 95 and accompanying text.

[153] *See, e.g.*, letters from BNP Paribas; bp; and Chevron.

proposed amendments.[154] Basing the Commission's climate-related disclosure rules on a globally recognized framework should help elicit climate-related disclosures that are consistent, comparable, and reliable while also limiting the compliance burden for registrants that are already providing climate-related disclosures based on this framework.

Similar to the TCFD framework, the proposed climate-related provisions under Regulation S-K would require disclosure of a registrant's: governance of climate-related risks;[155] any material climate-related impacts on its strategy, business model, and outlook;[156] climate-related risk management;[157] GHG emissions metrics;[158] and climate-related targets and goals, if any.[159]

The proposed climate-related provisions under Regulation S-X would require a registrant to disclose in a note to its financial statements certain disaggregated climate-related financial statement metrics that are mainly derived from existing financial statement line items.[160] The proposed rules would require disclosure falling under the following three categories of

---

154 Proponents of the TCFD framework include academics (*see, e.g.*, letters from Jill Fisch *et al*., J. Robert Gibson (May 26, 2021), and Gina-Gail S Fletcher (June 14, 2021)); accounting and audit firms (*see, e.g.*, letters from AICPA (June 11, 2021), Center for Audit Quality ("CAQ") (June 11, 2021), and KPMG LLP (June 12, 2021)); foreign firms (*see, e.g.*, letters from Bank of Finland, BNP Paribas, bp, and Deutsche Bank); industry groups (*see, e.g.*, letters from American Chemistry Council, Association of American Railroads (June 11, 2021), and Information Technology Industry Council (June 11, 2021)); investor groups (*see, e.g.*, letters from CalPERS; CALSTRS; and San Francisco Employees Retirement System); individuals (*see, e.g.*, letters from Emmanuelle Haack, Christopher Lish, and Maria Stoica); issuers (*see, e.g.*, letters from Adobe, Alphabet Inc. *et al*., Apple, and Chevron); NGOs (*see, e.g.*, letters from Ceres *et al*., Climate Governance Initiative, Natural Resources Defense Council, and UNEP); professional climate advisors (*see, e.g.*, letters from Catavento Consultancy, Douglas Hileman Consulting, ERM CVS, and Ethic Inc.); and professional investment advisors/investment management companies (*see, e.g.*, letters from AllianceBernstein, Impact Investors, Miller/Howard Investments, and Neuberger Berman).

155 *See* proposed 17 CFR 229.1501.

156 *See* proposed 17 CFR 229.1502.

157 *See* proposed 17 CFR 229.1503.

158 *See* proposed 17 CFR 229.1504.

159 *See* proposed 17 CFR 229.1506.

160 *See* proposed 17 CFR 210.14-01 and 14-02.

information: financial impact metrics;[161] expenditure metrics;[162] and financial estimates and assumptions.[163] Similar to the TCFD's recommendation regarding financial impacts, the proposed financial statement metrics have the objective of increasing transparency about how climate-related risks impact a registrant's financial statements.[164] The TCFD framework identifies two broad categories of actual and potential financial impacts driven by climate-related risks and opportunities: financial performance (income statement focused) and financial position (balance sheet focused), and includes suggested metrics such as the amount of capital expenditure deployed toward climate-related risks and opportunities, which is similar to our proposed financial statement metrics.[165]

2. Location of the Climate-Related Disclosure

Many commenters stated that the Commission should amend Regulation S-K or Regulation S-X to include climate-related disclosure requirements.[166] Other commenters

---

161 *See* proposed 17 CFR 210.14-02(c) and (d).

162 *See* proposed 17 CFR 210.14-02(e) and (f).

163 *See* proposed 17 CFR 210.14-02(g) and (h).

164 *See* TCFD, *Recommendations of the Task Force on Climate-related Financial Disclosures* (June 2017), Section B.3 (Financial Impacts).

165 *See* TCFD, Guidance on Metrics, Targets, and Transition Plans (Oct. 2021), Section F (Financial Impacts), *available at* https://assets.bbhub.io/company/sites/60/2021/07/2021-Metrics_Targets_Guidance-1.pdf. For avoidance of doubt, disclosure of climate-related opportunities is optional, not required, under our proposal.

166 *See, e.g.*, letters from AllianceBernstein; American Society of Adaptation Professionals; Seema Arora (June 22, 2021); Associated General Contractors of America (June 11, 2021); Baillie Gifford; CalPERS; Cardano Risk Management Ltd. (Apr. 19, 2021); Center for American Progress; Ceres *et al*.; Eni SpA; Jill Fisch (June 3, 2021); George S. Georgiev (June 22, 2021); Hannon Armstrong (June 15, 2021); Henry Schein, Inc.; Hermes Equity Ownership Services Limited; Virginia Harper Ho; Institute for Governance and Sustainable Development (June 9, 2021); Institute for Market Transformation (June 12, 2021); Interfaith Center on Corporate Responsibility; International Corporate Governance Network (June 11, 2021); Japanese Bankers Association; Morrison & Foerster LLP; National Investor Relations Institute (June 11, 2021); Natural Resources Defense Council; Newmont Corporation (June 13, 2021); New York State Society of Certified Public Accountants; NY State Comptroller; PayPal Holdings, Inc.; PRI (Consultation Response); PricewaterhouseCoopers LLP; Maria Stoica; Sunrise Bay Area (June 14, 2021); Teachers Insurance and Annuity Association of America; Vert Asset Management LLC (June 14, 2021); WBCSD; and Wespath Benefits and Investments (June 11, 2021).

recommended that the Commission adopt a new stand-alone regulation for climate-related disclosure.[167] We are proposing to include the climate-related disclosure rules in Regulation S-K and Regulation S-X because the required disclosure is fundamental to investors' understanding the nature of a registrant's business and its operating prospects and financial performance, and therefore, should be presented together with other disclosure about the registrant's business and its financial condition.

Specifically, we are proposing to require a registrant to include climate-related disclosure in Securities Act or Exchange Act registration statements and Exchange Act annual reports in a separately captioned "Climate-Related Disclosure" section and in the financial statements.[168] Requiring climate-related disclosure to be presented in this manner would facilitate review of the climate-related disclosure by investors alongside other relevant company financial and non-financial information.

A registrant would be able to incorporate by reference disclosure from other parts of the registration statement or annual report (*e.g.*, Risk Factors, MD&A, or the financial statements) or, in most cases, from other filed or submitted reports into the Climate-Related Disclosure item if it is responsive to the topics specified in Items 1500-1506 of Regulation S-K and if the registrant satisfies the incorporation by reference requirements under the Commission's rules and forms.[169] Allowing incorporation by reference for the Regulation S-K climate-related disclosure

---

[167] *See* letters from Bank Policy Institute; Andrew Behar (As You Sow) (June 14, 2021); Entelligent Inc. (June 14, 2021); Impax Asset Management; Information Technology Industry Council; Majedie Asset Management (May 25, 2021); David Marriage (June 15, 2021); and XBRL US (June 15, 2021).

[168] *See infra* Section II.J for a discussion of the registrants and forms to which the proposed rules would apply.

[169] *See* 17 CFR 230.411; 17 CFR 240.12b-23; and the applicable forms.

would be consistent with the treatment of other types of business disclosure under our rules and would provide some flexibility for registrants while reducing redundancy in disclosure.[170]

Many commenters stated that the Commission should require registrants to discuss and analyze their quantitative climate data in a manner similar to that required for MD&A.[171] These commenters stressed the importance of placing climate-related metrics in the context of other company financial and non-financial information to enable investors to see how those metrics intersect with business operations and industrial processes.[172] Other commenters supported a requirement to discuss and analyze the climate-related metrics, but stated that such discussion should be part of the existing MD&A disclosures.[173] We agree with the commenters supporting a narrative discussion and analysis of the climate-related metrics as means to present these disclosures in context and explain how they relate to the registrant's strategy and management of its climate-related risks. In this way, such a discussion will serve a similar function to the MD&A but will focus on climate-related risk specifically. Our proposed approach, which

---

170 A registrant that elects to incorporate by reference any of the metrics or narrative disclosure that is subject to XBRL tagging must comply with the electronic tagging requirement in the section of the registration statement or report where the metrics or narrative disclosure appears in full. We discuss the XBRL tagging requirement in Section II.K.

171 *See, e.g.*, letters from Acadian Asset Management LLC (June 14, 2021); Actual Systems, Inc. (June 11, 2021); Baillie Gifford; Biotechnology Innovation Organization; CDP; ClientEarth US (June 14, 2021); FAIRR Initiative (June 15, 2021); Jill Fisch (June 3, 2021); Hermes Equity Ownership Services Limited; International Corporate Governance Network; Japanese Bankers Association; Majedie Asset Management; Morningstar, Inc.; NEI Investments; NY State Comptroller; Paradice Investment Management; Pre-Distribution Initiative (June 14, 2021); PricewaterhouseCoopers LLP; Matthew Roling and Samantha Tirakian (June 11, 2021); Terra Alpha Investments; Vert Asset Management; and WBCSD.

172 *See, e.g.*, letters from Pricewaterhouse Coopers Ltd.; Vert Asset Management; and WBCSD.

173 *See, e.g.*, letters from Canadian Coalition for Good Governance; Clean Production Action and Environmental Health Network (June 11, 2021); Decatur Capital Management; Dimensional Fund Advisors (June 11, 2021); Environmental Industry Group (June 9, 2021); Institute for Governance and Sustainable Development; PRI (Consultation Response); Kenya Rothstein (May 3, 2021); and Maria Stoica. *But see* letter from Sarah Ladin (June 14, 2021) (doubting that a "sustainability discussion and analysis" requirement would achieve the desired results and stating that it would be difficult to enforce); and David Marriage (indicating that a discussion and analysis requirement for climate-related data would make the data difficult for the market to absorb).

requires the climate-related disclosure to be included in a specific section but allows registrants to incorporate from disclosure elsewhere (consistent with applicable incorporation by reference requirements), provides some flexibility to the proposed climate-related disclosure scheme while ensuring the disclosure is consistent and comparable across registrants.

Request for Comment

1. Should we add a new subpart to Regulation S-K and a new article to Regulation S-X that would require a registrant to disclose certain climate-related information, as proposed? Would including the climate-related disclosure in Regulation S-K and Regulation S-X facilitate the presentation of climate information as part of a registrant's regular business reporting? Should we instead place the climate-related disclosure requirements in a new regulation or report? Are there certain proposed provisions, such as GHG emissions disclosure requirements, that would be more appropriate under Regulation S-X than Regulation S-K?

2. If adopted, how will investors utilize the disclosures contemplated in this release to assess climate-related risks? How will investors use the information to assess the physical effects and related financial impacts from climate-related events? How will investors use the information to assess risks associated with a transition to a lower carbon economy?

3. Should we model the Commission's climate-related disclosure framework in part on the framework recommended by the TCFD, as proposed? Would alignment with the TCFD help elicit climate-related disclosures that are consistent, comparable, and reliable for investors? Would alignment with the TCFD framework help mitigate the reporting burden for issuers and facilitate understanding of climate-related information by investors because the framework is widely used by companies in the United States and around the world? Are there aspects of the TCFD framework that we should not adopt? Should we instead adopt rules that are based on a

different third-party framework? If so, which framework? Should we base the rules on something other than an existing third-party framework?

4. Do our current reporting requirements yield adequate and sufficient information regarding climate-related risks to allow investors to make informed decisions? In lieu of, or in addition to the proposed amendments, should we provide updated guidance on how our existing rules may elicit better disclosure about climate-related risks?

5. Should we require a registrant to present the climate-related disclosure in an appropriately captioned, separate part of the registration statement or annual report, as proposed? Should this disclosure instead be presented as part of the registrant's MD&A?

6. Should we permit a registrant to incorporate by reference some of the climate-related disclosure from other parts of the registration statement or annual report, as proposed? Should we permit a registrant to incorporate by reference climate-related disclosure that appears in a sustainability report if the registrant includes the incorporated by referenced disclosure as an exhibit to the registration statement or annual report? Are there some climate-related disclosure items, such as GHG emissions data, that we should not permit a registrant to incorporate by reference? Would requiring a registrant to include all of the proposed climate-related disclosures in a separate, appropriately captioned section, while precluding a registrant from incorporating by reference some or all of the climate-related disclosures, promote comparability and ease of use of the climate-related information for investors?

7. Should we permit a registrant to provide certain of the proposed climate-related disclosures in Commission filings other than the annual report or registration statement? For example, should we permit a registrant to provide information about board and management oversight of climate-related risks in its proxy statement?

B. Disclosure of Climate-Related Risks

As many commenters have noted when seeking more detailed climate-related disclosures,[174] climate events and contingencies can pose financial risks to issuers across industrial sectors.[175] Physical risks may include harm to businesses and their assets arising from acute climate-related disasters such as wildfires, hurricanes, tornadoes, floods, and heatwaves. Companies and their investors may also face chronic risks and more gradual impacts from long-term temperature increases, drought, and sea level rise.

In addition to the physical risks associated with the climate, issuers and investors may also face risks associated with a potential transition to a less carbon intensive economy. These risks may arise from potential adoption of climate-related regulatory policies including those that may be necessary to achieve the national climate goals that may be or have been adopted in the United States and other countries;[176] climate-related litigation; changing consumer, investor, and employee behavior and choices; changing demands of business partners; long-term shifts in market prices; technological challenges and opportunities, and other transitional impacts.

---

174 *See supra* note 40.

175 The 2020 CFTC Advisory Subcommittee Report found that climate change currently impacts or is expected to affect every part of the U.S. economy, including agriculture, real estate, infrastructure, and the financial sectors. *See infra* note 361.

176 A National Climate Taskforce created by the president established commitments to reduce economy-wide net greenhouse gas emissions by 50-52% by 2030 as compared to 2005 levels, and to reach net zero emissions by 2050. *See* The White House, FACT SHEET: *President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies* (Apr. 22, 2021). An Executive Order also directs the Federal government to achieve net-zero emissions from overall Federal operations by 2050, and a 65% emissions reduction by 2030. *See* The White House, FACT SHEET: *President Biden Signs Executive Order Catalyzing America's Clean Energy Economy Through Federal Sustainability* (Dec. 8, 2021), at https://www.whitehouse.gov/briefing-room/statements-releases/2021/12/08/fact-sheet-president-biden-signs-executive-order-catalyzing-americas-clean-energy-economy-through-federal-sustainability/. A growing number of governments and companies have made net zero commitments or announced similar carbon-reduction goals or targets. *See* United Nations Climate Change, *Commitments to Net Zero Double in Less Than a Year* (Sept. 21, 2020), available at https://unfccc.int/news/commitments-to-net-zero-double-in-less-than-a-year.

Disclosure about a registrant's exposure to transition risks, as well as how the registrant is assessing and managing those risks, would help investors assess and plan for how the registrant would be financially impacted by a transition to a lower-carbon economy.

1. Definitions of Climate-Related Risks and Climate-Related Opportunities

A central focus of the Commission's proposed rules is the identification and disclosure of a registrant's material climate-related risks. The proposed rules would require a registrant to disclose any climate-related risks reasonably likely to have a material impact on the registrant's business or consolidated financial statements.[177] A registrant may also disclose, as applicable, the actual and potential impacts of any climate-related opportunities it is pursuing.[178] The proposed definitions are substantially similar to the TCFD's definitions of climate-related risks and climate-related opportunities.[179] We have based our definitions on the TCFD's definitions because they provide a common terminology that allows registrants to disclose climate-related risks and opportunities in a consistent and comparable way. Grounding our definitions in a framework that is already widely accepted also could help limit the burden on issuers to identify and describe climate-related risks and improve the comparability and usefulness of the disclosures for investors.

As proposed, "climate-related risks" means the actual or potential negative impacts of climate-related conditions and events on a registrant's consolidated financial statements,

---

177 *See* proposed 17 CFR 229.1502(a).

178 *See id*.

179 *See* TCFD, *Recommendations of the Task Force on Climate-related Financial Disclosures*, Appendix 5.

business operations, or value chains, as a whole.[180] "Value chain" would mean the upstream and downstream activities related to a registrant's operations.[181] Under the proposed definition, upstream activities include activities by a party other than the registrant that relate to the initial stages of a registrant's production of a good or service (*e.g.*, materials sourcing, materials processing, and supplier activities). Downstream activities would be defined to include activities by a party other than the registrant that relate to processing materials into a finished product and delivering it or providing a service to the end user (*e.g.*, transportation and distribution, processing of sold products, use of sold products, end of life treatment of sold products, and investments).[182] We have proposed including a registrant's value chain within the definition of climate-related risks to capture the full extent of a registrant's potential exposure to climate-related risks, which can extend beyond its own operations to those of its suppliers, distributors, and others engaged in upstream or downstream activities.[183]

Climate-related conditions and events can present risks related to the physical impacts of the climate ("physical risks") and risks related to a potential transition to a lower carbon economy ("transition risks"). As proposed, "physical risks" is defined to include both acute and chronic risks to a registrant's business operations or the operations of those with whom it does business.[184] "Acute risks" is defined as event-driven risks related to shorter-term extreme

---

[180] *See* proposed 17 CFR 229.1500(c). The reference to 'negative' impact is intended to refer to the actual or potential impact on the registrant's consolidated financial statements, business operations, or value chains as a whole, rather than the mathematical impacts on a specific financial statement line item. *See infra* Section II.F.2 (discussing the proposed financial impact metrics, which focus on the line items in a registrant's consolidated financial statements).

[181] *See* proposed 17 CFR 229.1500(t).

[182] *See id*.

[183] *See, e.g.*, *infra* Section II.G.1.

[184] *See* proposed 17 CFR 229.1500(c)(1).

weather events, such as hurricanes, floods, and tornadoes.[185] "Chronic risks" is defined as those 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.[186] Many of these physical risks have already impacted and may continue to impact registrants across a wide range of economic sectors.[187]

The proposed rules would define transition risks to mean the actual or potential negative impacts on a registrant's consolidated financial statements, business operations, or value chains attributable to regulatory, technological, and market changes to address the mitigation of, or adaptation to, climate-related risks.[188] Transition risks would include, but are not limited to, increased costs attributable to climate-related changes in law or policy, reduced market demand for carbon-intensive products leading to decreased sales, 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, reputational impacts (including those stemming from a registrant's customers or business counterparties) that might trigger changes to market behavior, changes in consumer preferences or behavior, or changes in a registrant's behavior. A registrant that has significant operations in a jurisdiction that has made

---

[185] *See* proposed 17 CFR 229.1500(c)(2).

[186] *See* proposed 17 CFR 229.1500(c)(3). The physical risks described are examples, but registrants may be exposed to many other types of physical risks from climate change depending on their specific facts and circumstances. As such, any reference to certain types of risks should be considered as non-exhaustive examples.

[187] The IPCC's Sixth Assessment Report noted drought, heatwaves, hurricanes, and heavy precipitation. *See* IPCC, *Climate Change 2021, The Physical Science Basis Summary for Policymakers*.

[188] *See* proposed 17 CFR 229.1500(c)(4).

a GHG emissions reduction commitment would likely be exposed to transition risks related to the implementation of the commitment.[189]

The proposed rules would require a registrant to specify whether an identified climate-related risk is a physical or transition risk so that investors can better understand the nature of the risk[190] and the registrant's actions or plan to mitigate or adapt to the risk.[191] If a physical risk, the proposed rules would require a registrant to describe the nature of the risk, including whether it may be categorized as an acute or chronic risk.[192]

The proposed rules would require a registrant to include in its description of an identified physical risk the location of the properties, processes, or operations subject to the physical risk.[193] The proposed location disclosure would only be required for a physical risk that a registrant has determined has had or is likely to have a material impact on its business or consolidated financial statements. In such instances, a registrant would be required to provide the ZIP code for the location or, if the location is in a jurisdiction that does not use ZIP codes, a similar subnational postal zone or geographic location.[194] Because physical risks can be concentrated in particular geographic areas, the proposed disclosure would allow investors to better assess the risk exposure of one or more registrants with properties or operations in a particular area. One commenter cited location information as a key component of how it, as an

---

[189] *See* proposed 17 CFR 229.1502(a)(1)(ii).

[190] *See* proposed 17 CFR 229.1502(a)(1).

[191] *See, e.g.*, proposed 17 CFR 229.1502(b)(1) and 229.1503(c)(1) and (2).

[192] *See* proposed 17 CFR 229.1502(a)(1)(i). In some instances, chronic risks might give rise to acute risks. For example, drought (a chronic risk) that increases acute risks, such as wildfires, or increased temperatures (a chronic risk) that increases acute risks, such as severe storms. In such instances, a registrant should provide a clear and consistent description of the nature of the risk and how it may affect a related risk.

[193] *See id*.

[194] *See* proposed 17 CFR 229.1500(k).

investor, assesses the climate risk facing a company, particularly for companies with fixed assets that may be disproportionately exposed to climate-related physical risks.[195] Several other commenters recommended that we require the disclosure of certain climate data to be disaggregated by location using a point source's zip code for risk assessment.[196] Disclosing the zip codes of its identified material climate-related risks, rather than a broader location designation, could help investors more accurately assess a registrant's specific risk exposure.

Some registrants might be exposed to water-related acute physical risks, such as flooding, which could impair a registrant's operations or devalue its property. If flooding presents a material physical risk, the proposed rules would require a registrant to disclose the percentage of buildings, plants, or properties (square meters or acres) that are located in flood hazard areas in addition to their location.[197] This information could help investors evaluate the magnitude of a registrant's exposure to flooding, which, for example, could cause a registrant in the real estate sector to lose revenues from the rental or sale of coastal property or incur higher costs or a diminished ability to obtain property insurance, or a manufacturing registrant to incur increased expenses due to the need to replace water-damaged equipment or move an entire plant.

Additional disclosure would be required if a material risk concerns the location of assets in regions of high or extremely high water stress.[198] For example, some registrants might be impacted by water-related chronic physical risks, such as increased temperatures and changes in weather patterns that result in water scarcity. Registrants that are heavily reliant on water for

---

195 *See* letter from Wellington Management Co.

196 *See* letters from Action Center on Race and Economy (June 14, 2021); Americans for Financial Reform Education Fund; Confluence Philanthropy; Domini Impact Investments; William and Flora Hewlett Foundation; Public Citizen; and Revolving Door Project.

197 *See* proposed 17 CFR 229.1502(a)(1)(i)(A).

198 *See* proposed 1502(a)(1)(i)(B).

their operations, such as registrants in the energy sector, materials and buildings sector, or agriculture sector,[199] could face regulatory restrictions on water use, increased expenses related to the acquisition and purchase of alternative sources of water, or curtailment of its operations due to a reduced water supply that diminishes its earning capacity. If the location of assets in regions of high or extremely high water stress presents a material risk, the proposed rules would require a registrant to disclose the amount of assets (*e.g.*, book value and as a percentage of total assets) located in such regions in addition to their location. The registrant would also be required to disclose the percentage of its total water usage from water withdrawn in those regions.[200] These disclosures could help investors understand the magnitude of a registrant's material water-stress risks with a degree of specificity that might not be elicited under our current risk factor disclosure standards.

Any increased temperatures could also materially impact a registrant in other ways. For example, a registrant in the construction industry might be required to disclose the physical risk of increased heat waves that affect the ability of its personnel to safely work outdoors, which could result in a cessation or delay of operations, and a reduction in its current or future earnings.[201] A registrant operating in wildfire-prone areas could be exposed to potential disruption of operations, destruction of property, and relocation of personnel in the event of heat-

---

[199] Registrants in these industry sectors could be particularly susceptible to water-stress risks because operations in these sectors require large amounts of water. *See* TCFD, *Implementing the Recommendations of the Task Force on Climate-Related Financial Disclosures*, Section E (Oct. 2021), available at https://assets.bbhub.io/company/sites/60/2021/07/2021-TCFD-Implementing_Guidance.pdf (discussing the listed events and other risks).

[200] *See* proposed 17 CFR 229.1502(a)(1)(i)(B).

[201] *See*, *e.g*. [How Seasonal Temperature Changes Affect the Construction Industry (constructconnect.com)](https://www.constructconnect.com/blog/seasonal-temperature-changes-affect-construction-industry) (Aug. 15, 2018), available at https://www.constructconnect.com/blog/seasonal-temperature-changes-affect-construction-industry.

induced wildfires.[202] A registrant in the real estate sector might similarly be required to disclose the likelihood that sea levels could rise faster than expected and reduce the value of its coastal properties.[203]

The proposed rules would require a registrant to describe the nature of transition risks, including whether they relate to regulatory, technological, market (including changing consumer, business counterparty, and investor preferences), liability, reputational, or other transition-related factors, and how those factors impact the registrant.[204] For example, an automobile manufacturer might describe how market factors, such as changing consumer and investor preferences for low-emission vehicles, have impacted or will likely impact its production choices, operational capabilities, and future expenditures. An energy producer might describe how regulatory and reputational factors have impacted or are likely to impact its operational activities, reserve valuations, and investments in renewable energy. An industrial manufacturer might describe how investments in innovative technologies, such as carbon capture and storage, have impacted or are likely to impact its consolidated financial statements, such as by increasing its capital expenditures.

Climate related conditions and any transition to a lower carbon economy may also present opportunities for companies and investors. The proposed rules would define "climate-related opportunities" to mean the actual or potential positive impacts of climate-related conditions and events on a registrant's consolidated financial statements, business operations, or

---

[202] *See, e.g.*, [The Impact of Wildfires on Business is Enormous | Are You Ready? (alertmedia.com)] (Aug. 27, 2020), available at https://www.alertmedia.com/blog/the-impact-of-wildfires-on-business/.

[203] *See, e.g.*, [Climate change and the coming coastal real estate crash - Curbed] (Oct. 16, 2018), available at https://archive.curbed.com/2018/10/16/17981244/real-estate-climate-change-infrastructure.

[204] *See* proposed 17 CFR 229.1502(a)(1)(ii).