



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

June 14, 2021

Re: Public Statement: Public Input Welcomed on Climate Change Disclosures, Acting Chair Allison Herren Lee, March 15, 2021.

Dear Ms. Countryman,

[Note: This letter is a complement to the 15-page letter signed by Americans for Financial Reform Education Fund (AFREF), Public Citizen, and 57 organizations submitted on June 14, 2021, and the 2-page letter signed by AFREF and four organizations that was also submitted on June 14, 2021. This letter expands upon the views of AFREF and Public Citizen, and should be read as an additional submission to the other letters described in this paragraph.]

Americans for Financial Reform Education Fund and Public Citizen appreciate the opportunity to comment on the above referenced request for Public Input by the Securities and Exchange Commission (the “SEC” or the “Commission”)¹ which rightly identified the urgent need for mandatory climate and environmental, social, and governance (“ESG”) disclosures. We believe that the Commission should move quickly to propose, adopt, implement, and enforce detailed disclosure requirements for all issuers.

A growing chorus of bipartisan U.S. financial regulators² and their international peers³ agree: mitigating climate financial risk is clearly within the purview of financial regulation because climate change and the

¹ *Public Input Welcomed on Climate Change Disclosures*, Hon. Allison Herren Lee, Sec. and Exch. Comm’n, Mar. 15, 2021, available at <https://www.sec.gov/news/public-statement/lee-climate-change-disclosures> (“RFI”).

² See e.g., <https://www.federalreserve.gov/newsevents/speech/brainard20210323a.htm>; <https://www.politico.com/news/2021/03/31/yellen-climate-change-fsoc-478769>; <https://www.americanbanker.com/news/new-occ-head-signals-focus-on-climate-risks-technological-change>; <https://www.bloomberg.com/news/articles/2021-03-24/yellen-holds-first-financial-stability-council-meeting-next-week> and <https://apnews.com/article/climate-climate-change-jerome-powell-63b95c7276e2db7346f52eb90bca94b6>

³ See e.g., <https://www.ngfs.net/en>; <https://www.greenbiz.com/article/what-you-should-know-about-eu-taxonomy>; and <https://www.reuters.com/world/uk/uk-proposes-requiring-businesses-disclose-climate-risks-by-2022-2021-03-24/>

urgent human response create substantial financial risk to businesses, investors, financial institutions, the global financial system, other market participants like suppliers, employees, and customers, and the public at large. Over the coming decades, climate financial risk will increasingly affect the profitability of businesses, the pricing of assets, and the safety and soundness of the financial system. The SEC can protect investors, promote fair and efficient capital markets, and facilitate capital formation in line with a range of investment horizons and goals by implementing a robust, mandatory disclosure regime for climate and ESG risks.

On climate-related financial risk, the Commodity Futures Trading Commission (CFTC) Market Risk Advisory Committee (MRAC) recently found⁴ that:

“Climate change is expected to affect multiple sectors, geographics, and assets in the United States, sometimes simultaneously and within a relatively short time frame....The disclosure by corporations of information on material, climate-related financial risks is an essential building block to ensure that climate risks are measured and managed effectively...[and to] facilitate the risk-informed allocation of capital.”

Given the physical and transition risks inherent to the ongoing climate crisis and the shift away from fossil fuels and carbon-intensive industry, investors, credit rating agencies, index providers and other market participants that rely on securities disclosures need more information about companies’ growing climate financial risk, their contribution to climate change, and their plans for remaining viable in a low-carbon future economy. Investors and others are thus reasonably seeking information that allows them to better assess the climate risks and opportunities of individual issuers. At the same time, it is important that the Commission recognizes that climate change is not just an *environmental* crisis, but one of social justice, wealth distribution, equity and human rights. It is vitally important that disclosures from issuers include elements of environmental and climate justice, as well as other ESG issues like diversity, equity, and inclusion; political spending; tax; lobbying; and human capital management practices to allow investors to develop a holistic assessment of an issuer’s overall sustainability and make more informed investment decisions.

Mandating such climate and ESG disclosures falls squarely within the SEC’s mission to protect investors; ensure fair, orderly, and efficient markets; and facilitate capital formation.⁵ ESG considerations are already an important part of global capital allocation decisions: About 75 percent of professional investors say they incorporate ESG factors into their investment practices.⁶ Further, 90 percent of issuers on the S&P 500 already make some form of ESG disclosures.⁷ Mandating climate and ESG disclosures in a standard format within SEC filings will improve the reliability and comparability of these data and ratings, allow ordinary investors to access high-quality sustainability data without hefty consulting fees, protect investors from hidden ESG risks within their portfolios, permit index providers, credit rating

⁴<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>

⁵ <https://www.sec.gov/about/reports/sec-fy2014-agency-mission-information.pdf>

⁶<https://www.businesswire.com/news/home/20210422005347/en/ESG-Investing-Reaches-Critical-Mass-Ongoing-Momentum-Depends-on-What's-Driving-the-Demand-Finds-Natixis-Investment-Managers-Survey>

⁷<https://www.globenewswire.com/news-release/2020/07/16/2063434/0/en/90-of-S-P-500-Index-Companies-Publish-Sustainability-Reports-in-2019-G-A-Announces-in-its-Latest-Annual-2020-Flash-Report.html>

agencies and market analysis firms to draw more accurate conclusions, and spur the fair and efficient allocation of capital towards activities that promote long-term, sustainable economic growth.

ESG factors are positively correlated with firms' financial performance and investment portfolio performance. A recent review of 1000 studies published in the last five years found that a higher ESG rating for an individual company was associated with higher corporate financial performance (e.g., return on equity or assets, or stock performance) in 58 percent of the studies, and a higher ESG rating for a portfolio of stocks was associated with better investment returns in 59 percent of the studies.⁸ For low carbon ratings in particular, the climate-friendly companies and portfolios performed better 57 percent and 65 percent of the time, respectively.

Climate and ESG-related disclosures are also critical for continued robust and competitive functioning of the U.S. capital markets. If the U.S. disclosure requirements fall behind the rest of the world, U.S. companies and funds will be at a competitive disadvantage. In contrast, if the U.S. takes the lead in this space, it will attract global capital from investors who increasingly rely on access to robust ESG information to make investment decisions. Securities regulators in the EU, UK, and New Zealand are all currently in the process of implementing or enhancing their mandatory corporate sustainability reporting regimes. This means that U.S. issuers that raise money in foreign markets will already be required to start developing their capabilities to measure and disclose ESG data (like Scopes 1, 2, and 3 greenhouse gas emissions) and the marginal cost of compliance for each regulatory regime may thus be less significant.

Despite many firms reporting some ESG data, the 2010 SEC climate disclosure guidance⁹ has not been complied with or enforced sufficiently to satisfy the needs of investors; it essentially allows firms to self-determine and report which climate risks are material. Many firms provide only vague, boilerplate disclosures, publicly commit to using voluntary disclosure frameworks but skip entire sections, or do not address climate risk at all.¹⁰ Initial determination of materiality usually begins at the executive level, and management is often overly optimistic about a firm's climate resilience,¹¹ may not fully understand what investors actually believe is material or want to know, and may have an interest in obscuring parts of the picture, leading to drastic under-reporting of risks. The International Organization of Securities Commissions (IOSCO) recently found that investor demand for sustainability-related information is currently not being properly met.¹²

A range of voluntary standards have been developed, the biggest of which include the Task Force on Climate-Related Financial Disclosures (TCFD), the Sustainability Accounting Standards Board (SASB), the Carbon Disclosure Standards Board (CDSB), and the Global Reporting Initiative (GRI). But the proliferation of differing frameworks has increased compliance complexities and costs for companies. While these standards are now incorporating more forward-looking risk management and governance

⁸ https://www.stern.nyu.edu/sites/default/files/assets/documents/NYU-RAM_ESG-Paper_2021%20Rev_0.pdf

⁹ <https://www.sec.gov/rules/interp/2010/33-9106.pdf>

¹⁰ <https://climatedisclosurelab.duke.edu/wp-content/uploads/2020/10/Climate-Risk-Disclosures-and-Practices.pdf>

¹¹ See Donald C. Langevoort, *The Epistemology of Corporate-Securities Lawyering: Beliefs, Biases and Organizational Behavior*, 63 Brooklyn L. Rev. 629, 642 (1997) ("Once people have made some voluntary commitment to a person or course of behavior, there is a strong subconscious need to maintain consistency in the face of subsequent events, to justify the commitment to themselves and others. This underlies the well-known concept of cognitive dissonance. Thus, managers who make an investment are motivated to focus on the project's upside potential more than its downside risks, to bolster the wisdom of the choice.").

¹² <https://www.iosco.org/news/pdf/IOSCONEWS594.pdf>

disclosures that many stakeholders are seeking, investors and issuers both complain that the information provided under voluntary frameworks is seriously inadequate for a variety of reasons,¹³ including:

- The lack of comparability among issuers using the same framework,
- The omission of material disclosure items—or even whole areas of material disclosures—from a framework’s requirements,
- The ability for firms to ‘shop’ around for the framework and disclosures which cast them in a favorable light, and
- The massive amount of incongruent sustainability data that makes it hard to form an accurate picture of a firm’s performance and risk management.

Some commentators have suggested that the SEC should wait until private ordering and global harmonization of a single standard play out before deciding to act, but 20 years since the first voluntary disclosure frameworks were developed, the list of competing frameworks continues to grow rather than consolidate. Private ordering has clearly failed investors, issuers, the markets, and the public. The SEC has an opportunity here to put an end to the lack of transparency and greenwashing that private ordering has allowed to flourish.

To meet investor and issuer needs, the SEC must move swiftly to finalize mandatory disclosure rules for climate risk; stewardship of a just and equitable transition to a low carbon economy; human capital management; racial, economic, environmental, and climate justice; taxes; and political spending to avoid untenable growth of climate and ESG risk within our markets that harms investors, spurs the improper allocation of capital, and may increase the cost and availability of capital for U.S. companies.

What firms and funds (public and private) should be required to make climate-related disclosures?¹⁴

As soon as possible, the SEC should require all public companies to disclose a standardized set of climate and ESG related metrics and the relevant context for those metrics. The SEC must also work both to reverse the movement of capital out of public markets through regulatory exemptions, and to extend necessary reporting requirements to private markets, where climate financial risk is increasing with little scrutiny. Already the migration of activity into private markets is picking up, for example, with private equity firms such as KKR raising funds to specifically target investments in shale oil companies, recently merging two independent producers for \$5.7 billion, and indicating more is still to come.¹⁵

Climate and ESG disclosures for private debt offerings in particular are important for assessing risks to the banking and financial system, as without information from issuers, banks, funds, and regulators may be unable to fully and accurately assess their portfolio risks. The SEC should revise its rules to push all large companies (including the many large private companies owned by private equity firms and hedge funds) and large offerings of securities into the public market reporting regime¹⁶ and consider conditioning any remaining registration exemptions upon the disclosure of ESG details of the securities.

¹³ See, e.g., https://assets.bbhub.io/company/sites/60/2020/09/2020-TCFD_Status-Report.pdf

¹⁴ RFI Questions 14.

¹⁵ <https://www.bloomberg.com/news/articles/2021-06-08/kkr-s-independence-contango-agree-on-4-8-billion-shale-merger>

¹⁶ Tyler Gellasch and Lee Reiners, *From Laggard to Leader: Updating the Securities Regulatory Framework to Better Meet the Needs of Investors and Society*, Global Financial Markets Center at Duke University School of Law, Feb. 2021, available at <https://web.law.duke.edu/sites/default/files/centers/gfmc/From-Laggard-to-Leader.pdf>.

The SEC could first provide investors and the broader public insight into private companies' ESG performance by limiting the number of exemptions an issuer can rely on under Rule 144A to avoid registering a debt offering with the SEC. Nearly 60% of corporate debt issuance currently relies on Rule 144A¹⁷ exemptions which significantly limits the amount of information provided to investors and the public. The Commission should also condition the use of Rule 506, particularly for large issuers or large issuances, on making disclosure to investors similar to what is required under Regulation S-K and S-X. Without this condition, large issuers and large issuances can avoid making important disclosures on climate risk and other matters important to investors. In addition, the Commission should tighten its rules for counting beneficial owners for purposes of the thresholds for when companies become Exchange Act reporting companies. Without this change, issuers who are owned by a large number of diffuse investors can continue to avoid making important disclosures.

Hundreds of billions of dollars in corporate lending is now done by non-banks, whose activity is sometimes not under the purview of any regulatory agency. The SEC therefore needs to gain greater visibility into this major area of financial activity by expanding its reporting requirements for private funds. The Commission should consider requiring underwriters on exempt offerings over a certain threshold to collect the data from the issuers themselves before they are allowed to transact. Such a model would mirror the municipal bond market where broker-dealers are currently required to collect and distribute data to investors before they are able to offer and trade those securities.

Such reforms are necessary given the magnitude of “greenwashing” already occurring. The same Rule 144A exemptions that allow issuers to disclose a limited set of information to investors are allowing tens of billions of dollars in supposed “green bonds” to misleadingly be used to repay other existing debt or cover other corporate expenses rather than fulfilling their environmental pledges.¹⁸ Investors, frustrated with such behavior, are also investing in sustainability-linked bonds that penalize issuers with higher interest rates if they fail to meet their specified targets, such as reducing a certain level of carbon emissions or using more recycled materials. Yet, the penalties are often still too small to be punitive and are still offset by the lower financing costs investors often award to sustainability-linked bonds.

Where and how should disclosures be made?¹⁹

Disclosures are most useful to investors and registrants if they are mandatory and standardized in a way that makes them comparable across firms within an industry and across sectors. They should be easily accessible, machine-readable, transparent, clear, and decision-useful to investors across different levels of sophistication. Such requirements will also eliminate confusion among registrants regarding what to disclose. In contrast, industry-led voluntary standards development would be subject to the challenges that existing standards-setting bodies face, and it would not generate the information that investors need on the timelines that they need it. Similarly, current trends show that a “comply or explain” framework would perpetuate the status quo of uneven disclosures. Some firms would ignore the voluntary standards; others would comply; and variation among complying firms would frustrate investors' ability to compare among

¹⁷ <https://insights.ddjcap.com/blog/144a-bonds-and-why-we-buy-them>

¹⁸ https://www.wsj.com/articles/green-junk-bonds-may-not-deliver-green-results-11623236581?mod=hp_lead_pos4

¹⁹ RFI Question 1, 3, 7, 11, 12

them. For example, TCFD recently found that the average issuer only includes between 13 to 40 percent of TCFD's recommended disclosures, varying by industry.²⁰

Disclosures should include both qualitative disclosures, such as the requirements in TCFD and specific, line-item, quantitative disclosures. To make this information easily accessible to investors, disclosures should be made in specified sections of annual and quarterly SEC filings, and to the extent possible, should be included in the audited financial statements. To encourage honest assessment of risks, all disclosures should be subject to review by the Chief Executive Officer (CEO), Chief Financial Officer (CFO), and the audit committee, and subject to attestation by the CEO and CFO.

Some issuers have expressed concern about legal liability associated with 10-K disclosure and thus suggested other alternatives such as requiring furnishing on a Form 8-K, reporting in a separate public report, or on a company website. But issuers disclosing in good faith, and with adequate corporate governance and risk management processes in place, should not be worried about legal liability arising from disclosure in SEC filings. If the SEC does not require independent third party audits and attestation from executive officers, it's likely that certain issuers will continue to hide or downplay their climate and ESG-related risks just as they do currently. An SEC requirement to publicly disclose without any substantial enforcement mechanism would be rubber stamping the kind of greenwashing already rampant in the voluntary reporting ecosystem, potentially a worse outcome than not engaging at all.

How does 'materiality' relate to SEC authority to require disclosures, and what's measurable and reportable for all firms?²¹

Climate and ESG information is clearly important and material to the reasonable investor and the public. The breadth of topics and disclosure requirements developed by voluntary and external standard-setters, as well as those under development by governments in other jurisdictions, is one indication of the range of items that matter to investors, and that affect their decisions to invest, divest, vote proxies, and file shareholder proposals. Since 2019, climate related disclosure has been the subject of successful shareholder proposals at BP, ExxonMobil, Occidental Petroleum, and PPL Corporation.²² Beyond disclosure, 2021 also saw Chevron's shareholders vote affirmatively to decrease the firm's Scope 3 emissions.²³ Clearly, emissions data has the power to affect investors' decisions, and investors increasingly seek information that includes both quantitative metrics *and* qualitative information about governance, strategy, and risk management as they pertain to sustainability. In particular, investors want climate-related and ESG disclosures that cover both physical risks and transition risks that affect enterprise value, and also that indicate the impacts that issuers have on society, the global financial system, and investors as a whole.

Unfortunately, recent discussions have led to significant confusion about the concept of 'materiality' in the SEC context. To be clear, the SEC has broad authority to require disclosures of issues that are material to investors, but it does not already require, in some self-executing fashion, *every* disclosure that is material. SEC Commissioner Lee spoke recently about this misperception:

²⁰ <https://www.fsb.org/wp-content/uploads/P291020-1.pdf>

²¹ RFI Questions 2, 4, 8

²² <https://hbr.org/2021/04/shareholders-are-pressing-for-climate-risk-disclosures-thats-good-for-everyone>

²³ <https://www.reuters.com/business/energy/chevron-shareholders-approve-proposal-cut-customer-emissions-2021-05-26/>

“Many appear to believe that materiality currently works almost preternaturally, on its own with no need for regulatory involvement, to produce all important information from all public companies at all times.”²⁴

Commissioner Lee makes clear that many ESG matters that are material to investors are not already required to be disclosed under the securities laws, pointing out that “public company disclosure is not automatically triggered by the occurrence or existence of a material fact. There is not a general requirement under the securities laws to reveal all material information. Rather, disclosure is only required when a specific duty to disclose exists” which can arise either from an explicit SEC disclosure requirement or in order to make *other* disclosure statements materially accurate and not misleading.²⁵ This means there are a number of disclosures that are material to investors, but which are not required explicitly today.

Commissioner Lee also addressed the improper invocation of financial ‘materiality’— especially when guided by arbitrary quantitative thresholds or benchmarked by universal applicability—in relation to SEC mandatory disclosure authority:

“Many have also come to believe (incorrectly) that the SEC is legally prohibited from requiring specific disclosures unless it can demonstrate that each disclosure is individually material to the bottom line of every public company.”²⁶

In reality, the SEC has broad authority to require disclosures that promote fair and efficient markets, protect investors, or serve the public interest, and it should not limit disclosure requirements based on quantitative definitions of financial materiality that have no basis in law or Commission practice.²⁷ There is no statutory requirement that any disclosure, by itself, be quantitatively “material” to the issuer; and the SEC currently requires disclosures of many items that are not financially “material” to issuers, such as single share stock buybacks.²⁸ Regulation S-K, for example, already requires filings to include information that is important to investors but may or may not be material in every respect to every company making the disclosure.²⁹

Finally, disclosures are not just used by purchasers of securities, but also creditors, suppliers, customers, and other parties that must be informed to ensure smooth functioning of the capital markets. For example,

²⁴ <https://www.sec.gov/news/speech/lee-living-material-world-052421>

²⁵ *Ibid.*

²⁶ *Ibid.*

²⁷ See <https://web.law.duke.edu/sites/default/files/centers/gfmc/From-Laggard-to-Leader.pdf>

²⁸ See 15 U.S.C. § 77g(a)(1) (“Any such registration statement shall contain such other information, and be accompanied by such other documents, as the Commission may by rules or regulations require as being necessary or appropriate in the public interest or for the protection of investors.”); and 15 U.S.C. § 78m(a) (“Every issuer of a security registered pursuant to section 12 of this title shall file with the Commission, in accordance with such rules and regulations as the Commission may prescribe as necessary or appropriate for the proper protection of investors and to insure fair dealing in the security” annual reports.); see also 15 U.S.C. § 78l(b); 15 U.S.C. § 78o(d).

²⁹ Indeed, “immaterial information is often required to be disclosed (although not under Rule 10b-5).” See Langevoort, *supra* note 5, at 1645 n. 18 (2004) (“Although the rationale for the construction of the various disclosure obligations of companies - such as their periodic filing obligations in Forms 10-Q and 10-K - is that the information is likely to be important to investors, not every piece of information required is going to be important in every instance.”).

creditors review companies' public disclosures when making decisions about the extension of credit. Customers may use disclosures to help decide whether to engage in business with companies. And firms like credit rating agencies, which provide information that markets rely on, often read disclosures when making determinations of risk. Each of these groups and others would benefit from a mandatory ESG disclosure regime that helps create fair, orderly, and efficient markets.

With respect to climate risk, we believe the SEC must require reporting on total greenhouse gas emissions (Scopes 1, 2, and 3 as defined by the Greenhouse Gas Protocol³⁰). The agency should also require issuers to provide a qualitative discussion of risk management and their business model and strategy under various climate-related scenarios, including a 1.5 degree warming scenario consistent with science-based emissions targets and a 2 degree scenario, a 3 degree scenario, and a catastrophic 4 degree warming scenario, and the extent to which the firm's decarbonization goals and climate strategy depend on the availability of carbon offsets. Importantly, Scope 3 emissions must also include greenhouse gas emissions resulting from real economy activities that issuers finance or underwrite, using an established carbon accounting method such as that developed by the Partnership for Carbon Accounting Financials (PCAF). Climate and ESG disclosure rules should also cover at least the essential items outlined in Appendix A.

The disclosure regime must incorporate and center intersectional issues of racial, economic, environmental, and climate justice.³¹

The climate crisis is not just a problem of parts per million carbon dioxide, but one of racial and social justice, wealth distribution, equity, and human rights. It is vitally important that disclosures from public companies include elements of environmental and climate justice, because investors care about whether vulnerability to climate impacts, climate mitigation collateral harms, and lack of adaptation and resilience resources and capabilities fall unevenly on low income communities, communities of color or the global south. Investors are demanding more information related to racial, economic, environmental, and climate justice and using this information to make investment decisions, to vote proxies, to file shareholder proposals, and to engage with issuers in other ways.

Because climate change, social justice, and inequality are inextricably linked, reporting on only one dimension will not satisfy the sustainability concerns of investors, just as improving on only one dimension does not adequately improve the overall sustainability of an issuer, or fully mitigate the risks they present to the financial system and investors as a whole.

Decades of racist housing and siting policies have yielded disproportionate harm to communities that live near toxic power plants and manufacturing sites.³² Increasing recognition of these issues is exposing companies engaged in these harmful activities to reputational and liability risks that will only grow in the

³⁰ <https://ghgprotocol.org/corporate-standard>

³¹ RFI Questions 1, 2, 3, 8, 11, 13, 15

³² See, e.g., Rachel Morello-Frosch and Bill M. Jesdale, "Separate and unequal: residential segregation and estimated cancer risks associated with ambient air toxics in U.S. metropolitan areas," *Environmental Health Perspectives* 114 (3) (2006): 386–393, available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1392233/pdf/ehp0114-000386.pdf>; Jasmine Bell, "5 Things to Know About Communities of Color and Environmental Justice," Center for American Progress, April 25, 2016, available at <https://www.americanprogress.org/issues/race/news/2016/04/25/136361/5-things-to-know-about-communities-of-color-and-environmental-justice/>

future. To allow investors to understand the long-term risk profile the relevant companies face, they should be required to disclose how they have contributed to environmental and climate injustice in the past and present, and their efforts and strategy to correct those disparities.

Similarly, communities around the globe have lost valuable natural resources, ecosystems, and biodiversity due to extractive industries that permeate global supply chains. Increasing recognition of these harms and efforts to address them means that investors need to know how entangled issuers are with these destructive practices. Companies must disclose their methods for evaluating and measuring climate, ecological, and economic impacts of corporate activities in the global forest, food and land sector, including specifically for tropical agriculture and internationally traded commodities. The growing corporate reliance on carbon offsets to meet net zero commitments presents a particular threat to these communities that issuers must address.³³ Related to climate change are a host of other environmental justice disclosures regarding water, natural resource use, and chemical and plastics pollution. Specifically, pollution of certain materials into air, land, and water bodies must be disclosed, as well as use of natural resources and a company's track record of compliance with environmental laws and regulations. Information about these practices is valuable to investors assessing risks and performance prospects or seeking to allocate their funds in accordance with their values.

As society reorients around a low-carbon economy, investors also need to understand whether issuers are promoting a just and equitable transition for affected workers and communities. For example, many electric utilities have committed to realizing net-zero emissions by 2050 and have publicized energy portfolio trajectories with interim targets. But issues such as plant closures, differential economic impacts, and racial, environmental, and public health harms are typically not part of those decarbonization plans, even though they are crucial for investors to assess a plan's likelihood of success, as well as to decide whether the plan meets their criteria for investment. Further, governments are now recognizing the importance of a just transition and considering public policy changes that would create financial incentives or penalties to promote fair treatment for affected workers and communities. Investors need adequate disclosure of firms' strategies around a just transition to predict performance amid likely upcoming policy changes. To meet this investor need, the SEC should require all companies to disclose how they are incorporating elements of a just transition into their overall decarbonization strategy.

To what extent should the SEC rely upon or borrow from existing disclosure frameworks?³⁴

In developing existing frameworks, third party standard setters have compiled and created a broad range of useful, well-researched metrics and descriptions that the SEC should incorporate into its climate and ESG disclosure rules. However, a range of standards exists in part because none of them captures everything that investors need. Adopting any single existing framework would be much less valuable than choosing the best components of each and combining and augmenting them. For example, TCFD has itself acknowledged that its framework is not sufficiently standardized to generate comparable disclosures for users.³⁵ Many companies that claim to be TCFD-compliant are providing boilerplate, not reporting under TCFD in a rigorous manner. The SASB materiality framework has critical gaps in both climate and non-climate areas, especially the lack of comprehensive environmental, climate, and air quality coverage

³³ <https://www.foei.org/resources/publications/chasing-carbon-unicorns-carbon-markets-net-zero-report>

³⁴ RFI Questions 3, 5

³⁵ https://assets.bbhub.io/company/sites/60/2020/09/2020-TCFD_Status-Report.pdf

for certain polluting industries, and on key labor, diversity, equity, and inclusion, and human capital management matters for many sectors.

Proponents of delegating authority to a third party standard setter argue that such an entity would be quicker to incorporate and more responsive to new developments that emanate from the industry-led, international forums on climate and ESG disclosure metrics. Unfortunately, however, history shows that when the Commission delegates authority to external standard setters, there is no guarantee that policy making will occur more quickly overall, and the risk of regulatory capture often leaves investors unprotected. Investors continue to voice concerns that the Financial Accounting Standards Board (FASB) is slow in responding to investor needs and its governance is dominated by the auditing industry and corporate executives. Similarly, former members of the Public Company Accounting Oversight Board (PCAOB) Investor Advisory Group have documented several deeply troubling developments that have reduced the effectiveness of the PCAOB, and led to its “drift[ing] away from its core mission of investor protection,”³⁶ including by voluntarily reducing its own budget for inspections, refusing to meet with its advisory groups, not soliciting public comments and investor perspectives on certain rulemakings, and through overreliance on external standards developed by the American Institute of Certified Public Accountants and the International Auditing and Assurance Standards Board.

Delegating authority outright to a third party standard setters also raises other potential pitfalls. It would add a layer of approvals that could further delay disclosures, and concerns regarding the funding authority and true independence of the body would be difficult to mitigate. Instead of delegating authority, at this time, the most effective and fastest route to achieving the most important climate and ESG disclosures is for the SEC to immediately conduct a first round of rulemaking to establish a general set of disclosures for all public issuers, informed both by existing frameworks and the demands of U.S. investors.

As the existing frameworks continue to develop and the various standard setters work towards global harmonization, the SEC can where appropriate issue subsequent guidance and rules to point to specific developments and industry-specific standards that can be incorporated into the mandatory disclosure regime and the industry guides.

In the short term, the SEC could consider creating an internal entity responsible for the basic functioning and administration of the climate and ESG disclosure regime, and take public comment on what a potential external advisory committee would look like. Any such advisory function should include participants with a range of relevant expertise, including strong representation from investor advocates, climate and environmental justice experts, and others, and should be tasked with following developments and best practices around climate and ESG disclosures and suggesting changes to the SEC disclosure regime. The Commission must retain full discretion to accept or reject the suggestions of the committee.

Most importantly at this time, the debate over disclosure update mechanisms must not delay the initial adoption of mandatory, general disclosure requirements that live within SEC rules. The SEC should also strive to write an initial rule that is bold, durable, comprehensive, and less likely to need updates soon.

³⁶ See Letter from former PCAOB Investor Advisory Group members to SEC Chair Gary Gensler, regarding Reform of the Public Company Accounting Oversight Board (“PCAOB IAG Letter”) (April 19, 2021), *available at* <https://consumerfed.org/wp-content/uploads/2021/04/PCAOB-IAG-Letter.pdf>.

How can the SEC make disclosures auditable and enforceable?

Wherever appropriate, disclosures should be integrated into the issuer's audited financial statements. For medium to large issuers, the SEC should require that CEOs, CFOs, and a board member who has been given responsibility for climate and ESG issues both assess and certify the accuracy and completeness of climate and ESG related disclosures, including for subsidiaries. An independent auditor should be required to attest to and report on these assessments and certifications, similar to the requirement in Section 404(b) of the Sarbanes-Oxley Act. This integrated audit process will provide an early and important assurance that management and the board have not omitted any material climate or ESG disclosures.

In addition, all quantitative disclosures of climate and ESG metrics should be tagged in a machine-readable format to allow investors, academics and other stakeholders to easily use this information and compare, analyze, and identify discrepancies.

Climate and ESG disclosures must be vigorously enforced by staff within the Division of Enforcement with specific expertise on this issue. The SEC should consider increasing the climate-related expertise at regional offices, particularly those responsible for geographic areas most affected by climate change. The Division of Enforcement must also prioritize climate-related cases, respond quickly to tips and complaints received by the Commission, and support the efforts of the Whistleblower Program to effectively and quickly process climate-related whistleblower claims. Through a policy statement or staff guidance, the Commission should announce that climate-related whistleblower claims will be prioritized, and establish the awards level for these cases close to the statutory 30% threshold to provide maximum incentive.³⁷

The Division of Corporation Finance should establish a climate-related disclosure review office to monitor climate-related disclosures and ensure compliance. The office should make public all correspondence with regards to noncompliance and deficiencies related to their climate-disclosures for specific issuers, and publicize the names of companies that repeatedly fail to comply with disclosure requirements. Additional transparency would encourage issuers to comply better, and empower investors (and other stakeholders) to hold the recidivist noncompliant issuers accountable, or, incorporate the repeated noncompliance into their investment decisions.

Additionally, the Office of Inspections, Compliance and Examinations should create an office that examines investment advisers, registered investment companies, and private funds engaged in ESG investing to root out false or misleading statements regarding sustainable investment practices and greenwashing. The examination criteria should also test whether funds have the expertise and policies in place to guard against decisions inspired by false or misleading ESG-related claims, disclosures, and marketing materials offered by portfolio companies.

What ESG disclosures are important beyond climate and climate justice?³⁸

Climate, environmental, and associated justice-related disclosures should be integrated into a broader suite of ESG disclosures because investors are also seeking information about human capital

³⁷ Dodd-Frank Wall Street Reform and Consumer Protection, Act Title IX § 902; P.L. 111-203. <https://www.govinfo.gov/content/pkg/PLAW-111publ203/pdf/PLAW-111publ203.pdf>

³⁸ RFI Question 15

management, racial equity, diversity and inclusion, political spending, and taxes. Stronger human capital reporting, especially quantitative metrics rather than just qualitative narrative, is associated with higher returns on invested talent and higher operating margins, better risk-adjusted returns. Much of this information is already gathered and reported by U.S. companies as part of their EEO-1,³⁹ but it is not publicly disclosed. Disclosing this information to the public would impose little additional burden, as the data is already compiled and known. Metrics related to wages, worker benefits, and diversity and inclusion of the workforce and the board are all relevant indicators of sustainability that investors increasingly incorporate into their investment decisions, including through shareholder engagement like filing and voting on shareholder proposals.

Other principles-based human capital management disclosures should include qualitative discussions on workforce health and safety, workforce skills and capabilities, workforce culture, engagement and empowerment, human and labor rights, workforce pay and incentives. Specifically, issuers need to describe what efforts they have made to engage with workers, shareholders, and other stakeholders in the surrounding community to improve human capital management, sustainability, and impact on society.

Issuers should also be required to disclose their policies and procedures regarding their political activity as well as a description of management's and the Board's decision-making process and oversight for making payments to campaigns and for lobbying. Issuers should disclose itemized expenditures for both direct and indirect election spending and lobbying including payments to trade associations, politically active nonprofits, and party committees. A company's political activity—both its election spending and lobbying—can present significant reputational risk if not disclosed and managed properly. Many customers and the purchasing public are paying close attention to whether a company's political activity lines up with its corporate values. Proponents of increased disclosure have filed more than 1,000 proposals⁴⁰ on the topic in the last 10 years. A 2011 petition⁴¹ requesting that the SEC require all public companies to disclose their political expenditures has received more than 1.2 million comments—the most in the agency's history. If there is a disconnect between political activity and values, companies can face damaging press, boycotts, or targeted social media campaigns.

Additionally, understanding corporate political activity is essential to understanding corporate climate risk. A corporation can make every effort to manage its climate impact and disclose that effort to investors. But if investors care about climate impact they also want to know if the corporation is sending money to a trade association that works to actively undermine climate change mitigation policies without disclosing those payments to investors.

The SEC should also require public companies to report a number of tax-related items on a country-by-country basis including: a list of subsidiaries, main activity, revenue, profit, tax, number of employees, stated capital, accumulated earnings, and tangible assets. This would ensure investors are provided with enough information to discern if the companies they are invested in are participating in risky behavior like corporate tax avoidance. According to a study by the Centre for International Corporate Tax Accountability and Research, aggressive tax avoidance is estimated to cause global revenue losses of \$500 billion per year.⁴² Recent national and global efforts on tax avoidance have

³⁹ <https://www.eeoc.gov/employers/eo-1-data-collection>

⁴⁰ <https://www.proxypreview.org/2021/report-blog/social-issues/corporate-political-activity>

⁴¹ <https://www.sec.gov/rules/petitions/2011/petn4-637.pdf>

⁴² https://iri.hks.harvard.edu/files/iri/files/why_investors_care_-_gri_tax_transparency_cictar.pdf?m=1560183871

resulted in increased investor scrutiny, and calls for greater transparency on company tax practices, resulting in greater risks for firms engaging in such practices. Investors need access to more tax transparency and country by country reporting to make informed investment decisions.

An economic analysis, with a proper baseline scenario, will support the case for mandatory climate and ESG disclosures.

As part of its statutory rulemaking obligations, the SEC is required to determine, as best it can, the economic implications of a rule.⁴³ Although this is not a formal requirement to conduct a cost-benefit analysis, the Commission has adopted guidance explaining how it considers the potential costs and benefits when it adopts rules.⁴⁴

The SEC's guidance lays out four elements of a good economic analysis: (1) a statement of the need for the proposed action; (2) the definition of a baseline against which to measure the likely economic consequences of the proposed regulation; (3) the identification of alternative regulatory approaches; and (4) an evaluation of the benefits and costs—both quantitative and qualitative—of the proposed action and the main alternatives identified by the analysis.⁴⁵ A thorough, holistic economic analysis of a climate-related disclosure rule would include the untenability of the climate status quo and the catastrophic gyrations that accelerating climate change would cause to investors' holdings and companies' revenues and the general economic instability it will create—to say nothing about impacts on human wellbeing, real estate costs, disruption to supply chains, etc.—and would readily demonstrate that the benefits far outweigh the costs.

The need for action. A rule on climate disclosure would address a number of market failures. Negative externalities can arise in the form of spill-over of financial risks to investors that cannot be effectively managed.⁴⁶ Here, climate risk is a systemic risk to financial stability, with high levels of uncertainty as to both the form and timing of any specific harm. Management is not always better positioned than investors to assess how the effects of climate change, which are systemic and global, will impact an individual business. Given the irreducible complexity and inherent uncertainty of climate change, and the long time horizons for some climate issues, management focused on short or medium-term horizons may not see a number of the most severe climate risks as a priority. A company taking on excessive levels of climate risk threatens not only its own business, but increases the risk to the broader capital markets. Because management does not have an aligned time horizon or visibility into other market participants' strategies and risk tolerances, it cannot manage their risks alone or ensure that the costs of excessive risk taking do not spread beyond a specific company. Long-term focused investors, creditors, counterparties, customers and other market participants need to know about these risks so they can independently assess how the risks play into their business strategies, diversify the climate exposures they face over a longer time horizon, and push some companies to reduce their level of climate risk exposure. Requiring mandatory disclosure of the information will give these participants the information they need to better manage and mitigate the climate risk to them and to the capital markets.

⁴³ Chamber of Commerce v. SEC, 412 F.3d 133, 143 (D.C. Cir. 2005).

⁴⁴ Securities and Exchange Commission, Current Guidance on Economic Analysis in SEC Rulemakings, Memorandum (March 16, 2012).

⁴⁵ *Id.* at 4.

⁴⁶ *Id.*

Mandatory disclosure would also generate positive externalities via the network effects of standards. As discussed above, investors seeking to include consideration of climate risks and opportunities in their investment decisions must review disparate information from different issuers, with little standardization of either format or information provided. This makes it harder and more costly for these investors to actually compare the risks of companies, even where they do receive climate-related disclosures. Issuers have also noted the challenges and costs inherent in disclosing in accordance with the needs of different investors, who may have their own methodologies and requests.⁴⁷ A mandatory disclosure regime will have positive externalities, as it requires disclosure of climate risk data in a standardized format, allowing investors to evaluate all companies with the same metrics with greater certainty at a much lower cost, while also reducing the costs that many issuers bear in complying with the current voluntary disclosure regime.

Finally, a mandatory disclosure standard will improve capital allocation and investment by reducing information asymmetries that may make investors reluctant to deploy investment strategies built around the risks and opportunities arising from climate change. Today, investors who want to invest in companies that do a good job of mitigating their climate risk, or avoid companies with the worst exposures, do not have the information they need to make these decisions accurately. Along with the failure of many issuers to make any meaningful climate-related disclosures, issuers have incentives to select disclosure approaches that cast them in the best light, thereby avoiding disclosure of information that many investors would use for making investment decisions. This creates a classic asymmetrical information problem: Investors cannot know if a company is managing its climate risk effectively or simply failing to provide negative information. That failure will either lead to investors being unable to execute a strategy they wish to pursue, executing that strategy badly with incomplete information, or refusing to invest at all because they judge the unknown risks to be too great. Creating a mandatory set of climate-related disclosures will eliminate this asymmetry and allow investors to allocate their capital toward companies they know are managing capital risks in line with the investor's views.

The baseline. The rule's economic impact should be measured against a baseline of increasing levels of voluntary disclosures, with continued lack of standardization, because that is the best assessment of how the world would look in the absence of a proposed action.⁴⁸ As discussed above and as commenters have raised,⁴⁹ investors are already spending time and resources to find, review, and standardize the range of disclosures issuers are making. Issuers are already expending time and money to produce climate disclosures, often trying to meet the requirements of several standards.⁵⁰ Meanwhile, regulators in other jurisdictions are requiring climate disclosure and are considering expanding what is required.⁵¹ The baseline scenario should take these trends into account when determining the incremental cost of compliance. The scenario should also incorporate the possibility that, if other nations' regulators take the lead and the U.S. lags, the impact on capital formation in the U.S. will actually be negative, as global capital flows to markets where better, standardized information is available.⁵² These baseline assumptions provide a better starting point for assessing the costs and benefits of a mandatory disclosure rule than assuming current levels of ESG disclosure continue.

⁴⁷ See Comment of Uber Technologies

⁴⁸ *Id.* at 6.

⁴⁹ See, e.g., Comment of DSC Meridian Capital

⁵⁰ See Comment of Uber Technologies

⁵¹ Guidelines on non-financial reporting: Supplement on reporting climate-related information.

[https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019XC0620\(01\)](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019XC0620(01))

⁵² See Comment of Cardano Risk Management

Alternative regulatory approaches. The SEC’s analysis should consider and reject alternatives to the mandatory approach. As discussed throughout, mandatory, standardized disclosure requirements will generate greater benefits to investors and capital markets than approaches like voluntary disclosures, a third party standard setter, or declining to require that disclosures be included in audited financial statements. Notably, the SEC is not required to choose a lower cost alternative; it is merely required to assess all of its reasonable alternatives and explain why they are not as effective as its chosen approach.⁵³ To do this, the SEC should explain why these other approaches cannot give investors and other market participants all the ESG information that they need in a comparable format. Even if other alternatives are lower cost—which is unlikely—the SEC can still reasonably choose to reject them where they fail to yield the same level of benefits.

Evaluation of costs and benefits. To analyze the economic consequences of the proposed rule, the SEC needs to identify and describe the most likely economic benefits and costs of the proposed rule and alternatives; quantify those expected benefits and costs to the extent possible; identify the method of quantification and discuss any uncertainties, and, if any elements cannot be fully quantified, explain why.

The analysis should incorporate the full range of benefits to investors and issuers discussed above. Investors will save money and time that they currently spend seeking and attempting to compare ESG-relevant information from every company they invest in. ESG investing strategies will also become available to new investors who may desire them but currently do not view them as practicable given the lack of standardization. For instance, a recent consultation by the TCFD revealed that while 26 percent of investors believe that forward-looking financial metrics are worth the costs today, another 44 percent believe that they would be worth the cost if there is added standardization.⁵⁴ It is likely that other metrics will similarly become valuable to a broader group of investors once they are more standardized. The SEC’s analysis should quantify the benefits for both sets of investors. Along with reduced information costs, the better information generated by increased ESG disclosure will reduce the risk premium for and better allocate capital toward firms that are seriously addressing climate risk and other ESG factors. By illuminating how firms handle the long-term danger of climate risk, mandatory and comparable ESG disclosures will also better align management incentives with those of their long-term investors by reducing management’s ability to seek short-term profits at the expense of taking on increased long-term climate risk. Changing these incentives will improve the ability of investors to allocate capital in a way that improves the climate resilience, and thus long-term returns, of firms they invest in. Resetting these incentives and reallocating capital will also strengthen the financial system, making it more resilient to the physical and transition shocks that will be the consequences of climate change and the low-carbon transition. Given the potential costs of a climate-driven financial crisis, even small improvements in resilience will have large benefits for the financial system and the economy.

For issuers, mandatory ESG disclosures also solve a collective action problem. Today, firms are incentivized to disclose ESG information only to the extent that they believe it will benefit them in the short term, and can shop across voluntary disclosure standards to find those that put them in a better light. Issuers who want to fully disclose ESG information may find themselves punished for exposing negative

⁵³ See *Nat’l Ass’n of Manufacturers v. Securities and Exchange Comm’n*, 800 F.3d 518, 556 (D.C. Cir. 2015)

⁵⁴ See Summary of Responses, Forward Looking Financial Metrics Consultation, Task Force on Climate Related Financial Disclosures, 8, available at: <https://assets.bbhub.io/company/sites/60/2021/03/Summary-of-Forward-Looking-Financial-Metrics-Consultation.pdf>

information. Mandatory disclosure will eliminate the incentive to stop or limit ESG disclosure when it might be disadvantageous. Some issuers may also find that they actually have lower compliance costs, as they will no longer be required to prepare disclosures that comply with multiple reporting frameworks. Standardization could also reduce costs because firms will grow more proficient at complying and vendors who assist with compliance will be competing to provide a more commodified service. The demand from some issuers for mandatory disclosures shows that there is real benefit to these groups from such a regime as well.

In considering the costs that issuers will face in preparing their disclosures, it is important to measure them against existing baselines. Issuers will face both direct costs and compliance costs. For direct costs, issuers may need to pay more to gather the information that they do not currently have. The effects of disclosure will also have costs. Where disclosure reveals that firms do not appropriately address climate risk, they may see their capital costs rise, though this may be a temporary condition, as market incentives direct a company toward addressing these risks, which would bring capital costs back down. Although these issuers will likely incur additional costs investing in climate risk mitigation as result of investor demands generated by added disclosures, these costs will likely be offset by the benefits of increased climate resilience. All of these costs should be compared against the appropriate baselines—an SEC rule will accelerate existing trends and require public disclosure of information that many issuers are already gathering. Along with these direct costs, issuers will incur costs from more stringent audit and attestation requirements, largely in the form of new audit and legal fees. Though these costs will be non-trivial, they are also a crucial component of ensuring that investors realize actual benefits from the disclosure rules.

Most of the costs and benefits of the rule can be estimated with a mix of investor and issuer surveys and modeling. Investors who do ESG investing today can provide their current costs for gathering relevant ESG data, and highlight the specific expenses that mandatory, standardized disclosures will eliminate. But the SEC should not just look at what investors spend to pursue ESG strategies today to estimate benefits. It should also consider imputing benefits for additional information that investors may not obtain today because it is not cost-effective to gather, but that is valuable for investment decisions. It should also consider the increasing desire for climate-related disclosures among investors and estimate the costs that investors will face in the future to gather additional climate-related information without mandatory disclosure. For issuers, the SEC should gather a sample of the costs of preparing ESG disclosures today and the proportion of issuers that prepare such disclosures. It can also survey auditing and law firms to understand the likely costs of added assurance for new disclosures. In estimating costs, the SEC should also consider that compliance costs typically include a startup component and tend to fall with compliance history.⁵⁵

The SEC may not be able to easily quantify the benefits of capital allocation to companies that better manage climate risk and incorporate ESG factors into their business. But it should not avoid taking that benefit into account, as it is perhaps the largest benefit of climate risk disclosure. Climate change poses a risk to financial stability that potentially dwarfs the 2008 financial crisis.⁵⁶ That crisis cost the United States economy an estimated \$22 trillion in lost economic output.⁵⁷ While improved disclosure alone will not

⁵⁵ Study of the Sarbanes-Oxley Act of 2002 Section 404 Internal Control over Financial Reporting Requirements, September 2009, available at: https://www.sec.gov/news/studies/2009/sox-404_study.pdf

⁵⁶<https://www.americanprogress.org/issues/economy/reports/2019/11/21/477190/climate-change-threatens-stability-financial-system/>

⁵⁷ <https://www.gao.gov/products/gao-13-180>

make firms fully resilient to the negative effects of climate change, it will shift capital toward firms that are better prepared for climate change and encourage firms to invest in resilience and reducing their climate risk. Even a small reduction in the impact of climate change on capital markets or the economy will have massive benefits, easily justifying the decision to require more thorough, mandatory disclosures.

A proper economic analysis will show that the benefits of improved investor information, greater standardization of disclosures for issuers and investors, and better capital allocation far outweigh the costs of added information gathering and assurance for issuers. If it gathers quantitative cost information from investors and issuers, develops a model of how improved capital allocation will mitigate the costs of climate change to the economy, adopts the appropriate baseline of a world trending toward this kind of disclosure, and considers the reasonable alternatives raised in response to this request, the SEC will have met its statutory requirements.

Conclusion

The SEC has not only the authority, but the obligation to require disclosure of climate risks and opportunities and a broader regime of ESG disclosures. Failing to mandate such disclosure would deny investors the information they need and threaten the continued health of the capital markets. We thank the SEC for seeking public input on this important issue, and we look forward to engaging with any forthcoming rulemakings to implement a robust mandatory climate and ESG disclosure regime for the U.S. markets. To discuss these issues further please contact Alex Martin (alex@ourfinancialsecurity.org) and Yevgeny Shrager (yshrager@citizen.org).

Sincerely,

Americans for Financial Reform Education Fund and Public Citizen

cc: The Honorable Gary Gensler, Chair
 The Honorable Allison Herren Lee, Commissioner
 The Honorable Hester M. Peirce, Commissioner
 The Honorable Elad L. Roisman, Commissioner
 The Honorable Caroline A. Crenshaw, Commissioner

Appendix A: Essential disclosures

Climate and Environmental Impact

1. Total annual emissions of carbon dioxide, hydrofluorocarbons, chlorofluorocarbons, perfluorocarbons, pure methane, natural gas, nitrous oxide, sulfur hexafluoride, and nitrogen trifluoride (in CO₂e) disaggregated by U.S. zip code and/or country (i.e., location of point source, land area, or the final point of sale for solid and liquid fuels sold to consumers.)
 - a. Scope 1 - direct emissions from the issuer
 - b. Scope 2 - emissions from energy, heat, and steam purchased by the issuer
 - c. Scope 3 - emissions within the issuer's value chain, total and disaggregated by:
 - i. From combustion emissions from point sources
 - ii. From combustion emissions from nonpoint sources
 - iii. From land-use change
 - iv. From activities the issuer has provided financing for; and
 - v. From activities the issuer has insured.
2. Total annual expenditures on greenhouse gas emissions reductions equipment, technologies, programs, and initiatives; and percent change in total greenhouse gas emissions (in CO₂e) from the previous year.
3. The potential amount of direct and indirect GHG emissions embedded in proved and probable hydrocarbon reserves owned or operated by the issuer (in CO₂e), categorized by fuel type, and percent change over the previous year.
4. Price sensitivity analysis for all proved and probable reserves owned or operated by the issuer (as outlined as an optional reporting component in the 2011 Modernization of Oil and Gas Reporting Rule) using 1.5 and 2 degree warming scenarios.
5. Total annual expenditures on carbon offsets, resultant estimated total avoided emissions, and resultant estimated total carbon dioxide equivalent stored (with third-party verification).
6. Total annual Scope 1 fuel consumption broken down by country, activity, and type of fuel.
7. Significant fines and non-monetary sanctions for non-compliance with environmental laws and regulation, including a) the total monetary value of significant fines, b) the total number of non-monetary sanctions, and c) number of cases brought through dispute resolution mechanisms.
8. A description of any plans to reduce GHG emissions in alignment with science based targets, including target setting, internal metrics, details of the climate scenarios and long term assumptions considered, expected actual emissions reductions, and expected reliance on carbon offsets or carbon removal (or other technologies to avoid or remove emissions) to reach emissions reduction targets. Additionally, describe whether carbon offsets are being used in a way consistent with the sector specific scenarios that are the basis for emission reduction targets, or as a way to reduce emissions *above and beyond* those required by the chosen scenario. Include all assumed values and formulae used in climate scenario and risk management analyses that supports the organization's qualitative disclosure, risk identification, and risk analysis including:
 - a. The value used for the social cost of carbon (the value tied to liability cost per ton of emissions) with the minimum value equivalent to that currently used for cost-benefit analysis for federal government regulations
 - b. Time frames considered in scenario analysis (2030 and 2050 required, with recalibration every five years)
 - c. Climate scenarios used (baseline, a 1.5 degree scenario, 2 degrees, 3 degrees, 4 degrees, and any others deemed useful)

- d. Future fossil fuel price projections through 2050 where relevant to core business
- e. Assumptions about development of new/competing technologies, timing of deployment, and market penetration and scalability of benefits
- f. Assumptions of policy changes
- g. Assumptions around differences in input parameters across regions, countries, asset location, and/or markets
- h. Resilience and sensitivity of risk when changing these assumptions
- i. Efforts so far to substantiate assumptions and climate targets through internal and external verifiers.

Climate Financial Risk Management

- 9. Total value at risk of all physical assets for 3, 5, and 10 year time frames for 50, 80, and 99 percentile global warming scenarios.
- 10. Identification and evaluation of potential financial impact and risk-management strategies related to all climate-related physical risks and transition risks; short, medium and long-term.
 - a. Physical risks are financial risks to long-lived fixed assets, locations, operations, or value chains that result from exposure to physical climate-related effects, including:
 - i. Increased average global temperature and increased frequency of temperature extremes
 - ii. Increased severity and frequency of extreme weather events
 - iii. Increased flooding
 - iv. Sea level rise
 - v. Ocean acidification
 - vi. Increased frequency of wildfires
 - vii. Decreased arability of farmland
 - viii. Decreased availability of freshwater
 - ix. Other climate-related issues that could affect:
 - 1. Products and services
 - 2. Supply chain and/or value chain
 - 3. Adaptation and mitigation activities
 - 4. Investment in R&D
 - 5. Operations
 - b. Transition risks are risks that are attributable to climate change mitigation and adaptation including costs or asset depreciation related to:
 - i. International treaties and agreements
 - ii. Federal, state, and local policy
 - iii. New technologies
 - iv. Changing markets
 - v. Reputational impacts relevant to changing consumer behavior and civil society and labor activism
 - vi. Litigation
 - vii. Reduced availability of critical insurance products.
- 11. A description of any established corporate governance processes and structures to identify, assess, and manage climate and other ESG risks, including:
 - 1. A description of the board's oversight of climate risks and opportunities

- a. How often does the Board or board committees (audit, risk, or others) analyze climate-related issues?
 - b. Is climate included when reviewing and guiding strategy, major plans of action, risk management policies, annual budgets, business plans, overseeing major capital expenditures, acquisitions, and divestitures?
 - c. Is there a board member responsible for climate-related issues?
- 2. A description of management's role in assessing and managing climate and other ESG risks and opportunities
 - a. Are there climate-related responsibilities assigned to management-level positions or committees? What is the organization structure?
 - b. How is management informed about climate-related issues and how do they monitor them?
 - c. Is climate included in criteria determining executive compensation? For instance, are senior executives rewarded for decisions that increase the climate resiliency of the firm or conversely, do current compensation structures incentivize the opposite?

Climate and Environmental Justice

- 12. A description of the organization's strategy around promoting climate and environmental justice, racial and economic equity, human rights, responsible stewardship of land, natural resources, and local economies, including:
 - a. How has your organization historically impacted frontline and fenceline communities, including through pollution and your contribution to climate change? How have you incorporated cumulative effects, to which your organization has contributed in whole or in part, when considering your impact on these communities?
 - b. What actions has your organization taken to address environmental and climate injustice, and what were the results of those actions?
 - c. What specifically has your organization done to reduce the ecological impacts of corporate activities in the land sector, including through rights-based regenerative practices like soil regeneration, landscape restoration, and biodiversity enhancement that improves local economies?
 - d. Describe your internal controls and governance process for managing risks related to tropical forest commodities, illegal deforestation, related human rights issues, and illegal encroachment into Indigenous territory.
 - e. Describe your outreach and engagement efforts toward members of affected communities in examining your corporate impact and performance on climate and environmental justice.
- 13. Total annual area of forest land deforested and volume and standardized weight of tropical commodities in the issuers' value chain, disaggregated by country of origin.
- 14. Total annual air emissions disaggregated for the following pollutants: NO_x (excluding N₂O), SO_x, particulate matter (PM₁₀), dioxins/furans, volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons, and heavy metals.
 - a. Scope 1 - direct emissions from the issuer
 - b. Scope 2 - emissions from energy, heat, and steam purchased by the issuer.
 - c. Scope 3 - emissions within the issuer's value chain

- d. From activities the issuer has provided financing for
 - e. From activities the issuer has insured
 - f. Emitted from point sources within 20 miles of low-income zip codes
 - g. Emitted from point sources within 20 miles of zip codes with density over 500 people per square mile or in which Black, Latinx, Indigenous, AAPI, and other residents of color make up over 50 percent of the population
 - h. Emitted from end-use activities from products sold to final consumers at locations within 20 miles of low-income zip codes
 - i. Emitted from end-use activities from products sold to final consumers at locations within 20 miles of zip codes with density over 500 people per square mile or in which Black, Latinx, Indigenous, AAPI, and other residents of color make up over 50 percent of the population.
15. Percentage of new suppliers that were screened using environmental impact; racial, economic, and environmental justice; and human rights criteria.
16. For any plans to reduce emissions in accordance with science-based targets and the Paris agreement, how the company plans to ensure a just transition for affected workers and communities, including:
- a. Descriptions of job location, job quality, racial composition of workforce, economic development and tax base within the local community, and the racialized effects of the transition on communities
 - b. The human rights issues that have emerged due to the low-carbon transition, efforts to mitigate these issues, and plans to manage them moving forward
 - c. How the organization has engaged its workers, their communities, shareholders, and stakeholders in pursuit of a fair and equitable transition for your business.

Human Capital Management

17. A description of an organization's strategy towards human capital management; workers' rights and benefits; diversity, equity, and inclusion; employee engagement; talent attraction, development, and retention. Include a description of established grievance redress mechanisms, the number of grievances received through those mechanisms in the past year, and the nature of the grievances.
18. Number of employees, average annual pay, average annual value of compensation and benefits, and average tenure for each category of employee:
- a. Total
 - b. CEO
 - c. Senior executive level
 - d. Full-time
 - e. Part-time
 - f. Seasonal
 - g. Contract
 - h. Represented by a union.
19. Demographic data for the total workforce and for the Board of Directors, broken down by race, gender, and age.
20. Number of worker-related violations, fines, settlements, and work stoppages.
21. Total recordable incident rate (TRIR), fatality rate, and near miss frequency rate for occupational health and safety exposure for direct employees, seasonal, and migrant workers.

22. A description of how the organization through its core business activities has impacted and continues to impact marginalized communities with respect to racial and economic inequality.

Political, Lobbying, and Tax

23. A description of the organization's participation in public policy development, its public policy positions, itemized lobbying expenditures, and any key differences between its lobbying position, the lobbying position of trade groups it participates in, and any stated policies, goals, or other public positions the organization has taken.
 - i. A description of the issuer's internal policies and procedures regarding their political activity, including management's and the Board's decision-making process and oversight for making payments.
24. Total monetary value of financial and in-kind political contributions made directly or indirectly, broken down by country and recipient/beneficiary.
25. For each jurisdiction in which an issuer does business: the names of all subsidiaries operating in the jurisdiction, the main activity of each subsidiary, revenue, profit, total value of tax paid, number of employees, stated capital, accumulated earnings, and tangible assets.