



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,

Americans for Financial Reform Education Fund, Public Citizen, and 57 undersigned organizations appreciate the opportunity to comment on the above referenced Request for Input by the Securities and Exchange Commission (the “SEC” or the “Commission”) which rightly identified the urgent need for mandatory climate and environmental, social, and governance (ESG) disclosures. The Commission should move quickly to propose, adopt, implement, and enforce detailed disclosure requirements for all issuers.

Given the physical and transition risks inherent to the ongoing climate crisis and the shift away from fossil fuels and carbon-intensive industry, investors 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 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 to remember 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 political spending; tax; lobbying; diversity, equity, and inclusion; and human capital management practices to allow investors to make a holistic assessment of an issuer’s overall sustainability and 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.¹ 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.² Further, 90 percent of issuers on the

¹ <https://www.sec.gov/about/reports/sec-fy2014-agency-mission-information.pdf>

² <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>

S&P 500 already make some form of ESG disclosures.³ ESG factors are also 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.⁴ 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 functioning of the U.S. capital markets. If the U.S. disclosure requirements fall behind the rest of the world, our 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.

Despite many firms reporting some ESG data, the 2010 SEC climate disclosure guidance⁵ has not satisfied the needs of investors because it essentially allows firms to self-determine and report which climate risks are material. Many firms provide only vague, boilerplate disclosures or do not address climate risk at all.⁶ Management is often overly optimistic about a firm's climate resilience, 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.⁷

A range of voluntary standards have been developed to meet this need, 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 disclosures that many stakeholders are seeking, investors and issuers both complain that the information provided under voluntary frameworks is not adequate for a variety of reasons,⁸ including:

- The lack of comparability among issuers using the same framework,
- The omission of material disclosures—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.

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

³ <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>

⁴ https://www.stern.nyu.edu/sites/default/files/assets/documents/NYU-RAM_ESG-Paper_2021%20Rev_0.pdf

⁵ <https://www.sec.gov/rules/interp/2010/33-9106.pdf>

⁶ <https://climatedisclosurelab.duke.edu/wp-content/uploads/2020/10/Climate-Risk-Disclosures-and-Practices.pdf>

⁷ <https://www.iosco.org/news/pdf/IOSCONEWS594.pdf>

⁸ See, e.g., https://assets.bbhub.io/company/sites/60/2020/09/2020-TCFD_Status-Report.pdf

untenable growth of climate and ESG risk within our markets that harms investors, spurs the improper allocation of capital, and may increase the cost of capital for U.S. companies.

What firms and funds (public and private) should be required to make climate-related disclosures?⁹

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 to reverse the movement of capital out of public equity markets through regulatory exemptions, as climate financial risk is increasing with little scrutiny in the private markets. Climate and ESG disclosures for private debt offerings in particular are important to 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. To reverse this migration, 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 regime¹⁰ and consider conditioning any remaining registration exemptions upon the disclosure of ESG details of the securities.

Where and how should disclosures be made?¹¹

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 all 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 them.

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 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 Financial Officer (CFO) and Audit Committee, and subject to attestation by the CFO.

⁹ RFI Questions 14

¹⁰ 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>.

¹¹ RFI Question 1, 3, 7, 11, 12

What’s measurable and reportable for all firms?¹²

The SEC has a broad authority to require disclosures that promote fair and efficient markets, protect investors, or serve the public interest. It should not limit disclosure requirements based on quantitative definitions of financial materiality that have no basis in law or Commission practice.¹³ 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. There is no statutory requirement that any disclosure, by itself, be quantitatively “material” to the issuer; the SEC currently requires disclosures of many items that are not financially “material” to issuers.

That said, climate and ESG information *is* 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, shows the range of items that matter to investors. This includes both quantitative metrics and qualitative information about governance, strategy, and risk management. 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.

With respect to climate risk, issuers *must* report on total greenhouse gas emissions (Scopes 1, 2, and 3 as defined by the Greenhouse Gas Protocol¹⁴). They should also provide a qualitative discussion of risk management and a firm’s 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 following essential items in Appendix A.

The disclosure regime must incorporate and center intersectional issues like racial, economic, environmental, and climate justice.¹⁵

The climate crisis is not just a problem of parts per million carbon dioxide, but one of 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 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.

¹² RFI Questions 2, 4, 8

¹³ See <https://web.law.duke.edu/sites/default/files/centers/gfmc/From-Laggard-to-Leader.pdf>

¹⁴ <https://ghgprotocol.org/corporate-standard>

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

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 or financial performance 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.¹⁶ Increasing recognition of these issues is exposing companies engaged in these harmful activities to reputational and liability risks that will only grow in the 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 international 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.¹⁷ Related to climate change are a host of other environmental justice disclosures regarding water, natural resource use, and pollution. Specifically, pollution 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 funding 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 released 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.

¹⁶ 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/>.

¹⁷ <https://www.foei.org/resources/publications/chasing-carbon-unicorns-carbon-markets-net-zero-report>

To what extent should the SEC rely upon or borrow from existing disclosure frameworks?¹⁸

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. A range of standards exists because no single standard captures everything that investors need in one place. Adopting any single existing framework would be much less valuable than choosing the best components of each and combining them. For example, TCFD has itself acknowledged that its framework is not sufficiently standardized to generate comparable disclosures for users.¹⁹ 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 for certain polluting industries, and for key labor protections, human capital management, and diversity, equity, and inclusion coverage for many sectors.

Delegating authority outright to any of the third-party standard setters also raises a number of legal and practical pitfalls. The SEC would face additional litigation risk if it seeks to accredit an external standard setter. Addressing this risk could delay implementation of a new mandatory regime. Adopting a third party standards setter would also add a layer of approvals that could further delay disclosures. Instead of delegating authority, the 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 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. Whether or not the Commission eventually concludes that a standard setter is needed to update the disclosure requirements over time, it must not delay the initial adoption of mandatory, general disclosure requirements that live within SEC rules. And the SEC should strive to write the initial rule in a manner so that it is durable and less likely to need updates soon.

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 CFOs and a board member that has been given responsibility for climate 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 disclosures.

¹⁸ RFI Questions 3, 5

¹⁹ https://assets.bbhub.io/company/sites/60/2020/09/2020-TCFD_Status-Report.pdf

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 which could be the basis for shareholder pressure and enforcement action.

Public disclosures related to climate 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. Finally, the Division of Corporation Finance should establish a climate-related disclosure review team and the Office of Inspections, Compliance and Examinations should create a team that examines investment advisers, registered investment companies, and private funds engaged in ESG investing.

What ESG disclosures are important beyond climate and climate justice?²⁰

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 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-1,²¹ 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've 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 the 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. 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 proposals²² on the topic in the last 10 years.

²⁰ RFI Question 15

²¹ <https://www.eeoc.gov/employers/eo-1-data-collection>

²² <https://www.proxypreview.org/2021/report-blog/social-issues/corporate-political-activity>

A 2011 petition²³ 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. A cost-benefit analysis²⁴ of a potential political spending disclosure rule found that “the range of economic benefits of this disclosure rule would greatly outweigh the nominal costs imposed on corporations for compliance.”

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. However, that effort is deeply undermined if the corporation is also funneling money to a trade association that works to actively oppose 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 rule 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. Tax avoidance has become a global issue as well and multinational companies aggressively have been using profit shifting techniques to avoid paying taxes. 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.²⁵ Recent national and global efforts on tax avoidance have resulted in increased investor scrutiny, heightened risks and calls for greater transparency on company tax practices. Investors need access to more tax transparency and country by country reporting to make informed investment decisions.

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. It was irresponsible for the SEC not to enforce its 2010 climate guidance for a decade, but we are confident that under your leadership, we can begin to manage and mitigate climate risk within our capital markets through enhanced disclosures. 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.

Sincerely,
Americans for Financial Reform Education Fund
Public Citizen

National and International Signatories

350.org
Accountability Counsel

²³ <https://www.sec.gov/rules/petitions/2011/petn4-637.pdf>

²⁴ <https://www.sec.gov/comments/4-637/4637-12.pdf>

²⁵ https://iri.hks.harvard.edu/files/iri/files/why_investors_care_-_gri_tax_transparency_cictar.pdf?m=1560183871

Action Center on Race and the Economy
Better Markets
Businesses for a Livable Climate
CatholicNetwork US
Center for International and Environmental Law
ClientEarth US
Climate Advisers
Croatan Institute
Dogwood Alliance
Earth Action, Inc.
FreshWater Accountability Project
Friends of the Earth U.S.
Future Nexus
Green America
Include Venture Partners
Institute for Agriculture and Trade Policy
League of Conservation Voters
Natural Resources Defense Council
Oil Change International
Oxfam America
Private Equity Stakeholder Project
Publish What You Pay-United States
Rainforest Action Network
Rapid Shift Network
Revolving Door Project
Service Employees International Union
Sierra Club
Social Value U.S.
Stand.earth
The Ethical Capitalism Group
The Sunrise Project U.S.
U.S. PIRG
Union of Concerned Scientists
Wallace Global Fund
Women's Earth and Climate Action Network (WECAN)
Zero Hour

State and Local Signatories

350 Juneau
350 Butte County
350 New Orleans
350 Seattle
350 Silicon Valley
California Businesses for a Livable Climate
Call to Action Colorado

CCAG

Climate Action Rhode Island-350
Colorado Businesses for a Livable Climate
Colorado Small Business Coalition
Elders Climate Action, NorCal and SoCal Chapters
Fossil Free California
New York Communities for Change
North Range Concerned Citizens
Spirit of the Sun
Texas Campaign for the Environment
Unite North Metro Denver
Wall of Women

Individual Signatories

Gina-Gail S. Fletcher, Professor of Law, Duke University School of Law
James D. Cox, Brainerd Currie Professor of Law, Duke University School of Law
Urska Velikonja, Professor of Law, Georgetown University Law Center

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 2008 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 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 within the issuers value chain.
14. Total annual air emissions disaggregated for the following pollutants: NOx (excluding N2O), SOx, 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.