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Hearing: "**Climate Change and Social Responsibility: Helping corporate boards and investors make decisions for a sustainable world"**
February 25, 2pm

Chair Maloney, Ranking Member Huizenga, and members of the Subcommittee:

Thank you for the invitation and opportunity to appear before you today. I represent Ceres, a nonprofit organization working with investors and companies to build sustainability leadership within their own enterprises and to drive sector and policy solutions throughout the economy. Through our membership networks of more than 100 companies and almost 200 investors with over $30 trillion of assets under management, we work with private sector leaders to tackle the world's biggest sustainability challenges, including climate change, water scarcity and pollution, and deforestation.

I am Senior Program Director for Capital Market Systems in the Ceres Accelerator for Sustainable Capital Markets. The Accelerator works to transform the practices and policies that govern capital markets in order to reduce the worst financial impacts of the climate crisis. It spurs capital market influencers to act on climate change as a systemic financial risk—driving the large-scale behavior and systems change needed to achieve a just and sustainable future and a net-zero emissions economy. Ceres has a 30 year history of working on climate change and ESG disclosures. This includes founding the Global Reporting Initiative, which is currently the *de facto* sustainability reporting standard used by over 13,000 companies worldwide.

In 2019, our President and CEO Mindy Lubber testified before this committee on this topic. My testimony will update and complement the evidence she provided, which I have submitted by reference into the record. My testimony today also draws from past and current Ceres research and engagement with companies, investors and policymakers on climate change. It also draws from a report I authored last year entitled *"Addressing Climate as a Systemic Risk: A call to action for U.S. financial regulators,"* which outlines how and why U.S. financial regulators, who are responsible for protecting the stability and competitiveness of the U.S. economy, need to recognize and act on climate change as a systemic risk.

1. **The climate crisis poses financial and material risk to companies and investors, and systemic risks to financial markets, and requires urgent action by financial market stakeholders**

It has long been understood that climate change poses financial and material risks to companies and investors. A 2019 survey of 215 of the world's 500 largest companies found nearly $1 trillion

in reported financial risk from climate change.[1] Some 15% of companies in the S&P 500 Index between April 2017 and April 2018 disclosed that weather events, including drought, cold snaps and excessive rainfall, had hurt their earnings.[2] Investors consider the nature of the risk faced by companies to be so significant that they identified climate change as being material for 72 out of 79 industry sectors.[3]

The latest understanding of climate change risks is that they are so significant that they pose systemic risks to financial markets writ large. Systemic risks have the potential to destabilize capital markets and lead to serious negative consequences for financial institutions and the broader economy.[4] The major risks that climate change poses to financial markets and stakeholders include physical risks to real assets due to climate-fueled weather events, and transition risks posed by regulatory, technology and litigation changes during the shift to a low-carbon economy. These risks, which are significant in themselves, are also expected to combine in unexpected ways, with serious, disruptive consequences on asset valuations, global financial markets and global economic stability.[5]

Despite the expected long-term consequences of climate change, we are already seeing the devastating impact of these risks, reinforcing the need for urgent action by regulators and stakeholders. Over the past year, California experienced its worst wildfire season on record, as over four million acres burned, double the previous 2018 record, leading to $150 billion in damages.[6] Texas, Florida and other Southeast states were pummeled by the busiest hurricane season on record, with 30 named storms and a dozen landfall storms.[7] Overall, the country endured an unprecedented 22 billion dollar disasters in 2020, shattering the previous record of 16 in 2011 and 2017.[8] Overall damages totaled $95 billion, nearly double the amount in 2019.[9]

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[1] "Major risk or rosy opportunity: Are companies ready for climate change?" *CDP,* accessed February 2021, https://www.cdp.net/en/research/global-reports/global-climate-change-report-2018/climate-report-risks-and-opportunities

[2] Esther Whieldon, "Weather hurt earnings of 15% of S&P 500 companies, disclosures show," *S&P Global - Market Intelligence*, last modified June 12, 2018, https://www.spglobal.com/marketintelligence/en/news-insights/trending/avfetg78cpo7nr0qpfayiw2

[3] "Climate Risk - Technical Bulletin," *Sustainability Accounting Standards Board*, last modified October 1, 2016, https://www.sasb.org/knowledge-hub/climate-risk-technical-bulletin/

[4] "Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations." *International Monetary Fund, Bank for International Settlements, and the Secretariat of the Financial Stability Board*, accessed December 2019, https://www.imf.org/external/np/g20/pdf/100109.pdf#page=4

[5] Veena Ramani, "Addressing Climate as a Systemic Risk: A call to action for U.S. financial regulators," *Ceres*, last modified June 1, 2020, https://www.ceres.org/resources/reports/addressing-climate-systemic-risk

[6] Priya Krishnakumar and Swetha Kannan, "The worst fire season ever. Again." *Los Angeles Times,* September 15, 2020, https://www.latimes.com/projects/california-fires-damage-climate-change-analysis/

[7] "30 named storms: Record hurricane season comes to a close," *Associated Press*, November 30, 2020, https://apnews.com/article/storms-hurricanes-united-states-3f03614af9a1dc5ca5f13bf394f47a28

[8] "Record number of billion-dollar disasters struck U.S. in 2020: Nation saw its 5th-warmest year on record," *National Oceanic and Atmospheric Administration*, last modified January 8, 2021, https://www.noaa.gov/stories/record-number-of-billion-dollar-disasters-struck-us-in-2020

[9] Adam Smith, "2020 U.S. billion-dollar weather and climate disasters in historical context," *Beyond the Data* (blog), *NOAA Climate.gov*, January 8, 2021,

This year's February winter storm has already broken records and demonstrated the systemic risks that can emerge from physical climate impacts. The storm delayed distribution of 6 million coronavirus vaccine doses and delayed vaccinations across all 50 states, obstructing the defeat of the virus and national economic recovery.[10] Initial estimates of storm damage and economic losses in Texas alone are between $45 and $50 billion when factoring in job and wage losses, infrastructure damage, auxiliary business losses, medical expenses and closures.[11] Texas insurance claims for damages from the storm are estimated at $18 billion, which according to the Wall Street Journal would "end up on the top-10 list of costliest natural catastrophes in the U.S., as measured by losses to property insurers."[12]

Extreme weather events are now becoming commonplace, and the risks are projected to get even worse. A December 2020 report by Four Twenty Seven, a data firm that assesses climate risks for financial markets, paints a sobering picture of what lies ahead.[13] It forecasts that by 2040, the United States will be the third most exposed country to climate risks, behind China and the Philippines.

The transition to a net-zero future is already taking place. One in three Americans already lives in places targeting 100% clean energy.[14] California, the world's fifth largest economy, already gets two- thirds of its electricity from renewables such as wind and solar.[15] During the summer of 2020, 15 states pledged to work collectively to decarbonize commercial vehicles by 2030.[16]

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https://www.climate.gov/news-features/blogs/beyond-data/2020-us-billion-dollar-weather-and-climate-disasters-historical

[10] Washington Post, "Winter storms delay distribution of 6 million coronavirus vaccine doses", February 19, 2021, https://www.washingtonpost.com/health/2021/02/19/vaccines-delayed-winter-storm/?itid=lk_inline_manual_7

[11] AccuWeather, "AccuWeather estimates economic impact of winter storms to approach $50 billion," February 17, 2021 http://www.accuweather.com/en/winter-weather/accuweather-estimates-economic-impact-of-winter-storms/902563

[12] Leslie Scism, "Winter Freeze Damage Expected to Hit $18 Billion From Burst Pipes, Collapsed Roofs," *Wall Street Journal,* February 19, 2021,https://www.wsj.com/articles/winter-freeze-damage-expected-to-hit-18-billion-from-burst-pipes-collapse-roofs-11613757414

[13] "Measuring What Matters: A New Approach to Assessing Sovereign Climate Risk," *Four Twenty Seven,* December 2020, http://427mt.com/wp-content/uploads/2020/12/Measuring-What-Matters-Sovereign-Climate-Risk-427_12.2020.pdf

[14] "Race to 100% Clean," *National Resources Defense Council*, last modified December 2, 2020, https://www.nrdc.org/resources/race-100-clean#:~:text=U.S.%20states%2C%20municipalities%2C%20utilities%2C,to%20100%20percent%20clean%20electricity

[15] "New data shows nearly two-thirds of California's electricity came from carbon-free sources in 2019," *California Energy Commission*, accessed February 2021, https://www.energy.ca.gov/news/2020-07/new-data-shows-nearly-two-thirds-californias-electricity-came-carbon-free

[16] "Businesses Applaud Largest Multi-State Effort to Expedite Decarbonization of Medium- and Heavy-Duty Vehicles," *Ceres*, July 14, 2020, https://www.ceres.org/news-center/press-releases/businesses-applaud-largest-multi-state-effort-expedite-decarbonization

Investments in new energy (electricity capacity in renewables) has outpaced investments in fossil fuel-based capacity for some years and, even during the pandemic, renewables contracted significantly less. [17] [18]

The transition trends noted above are leading to successes and failures. Industries that have significant exposure to climate change risks are already facing significant losses, and these losses are projected to become worse. ExxonMobil, BP, Royal Dutch Shell and other oil and gas firms all announced major write-downs in 2020, in part due to the economic slowdown on account of the pandemic.[19] While climate-tilted indexes and stocks outperformed in 2020, oil and gas oriented funds dropped by 50%.[20] The weightage of energy stocks has dropped to a mere 2.3% of the benchmark S&P 500 from 16% as recently as 12 years ago.[21] One-third of the current value of large oil and gas companies is projected to be lost if governments more aggressively attempt to limit average temperature rise to 1.5 degrees Celsius, as called for under the Paris Climate Agreement. Even under a more benign 2-degree scenario, energy producers would have to write off over half of their fossil fuel reserves.[22]

Corporate exposure to climate change risk ripples throughout the financial system. We found in a 2020 Ceres Accelerator report, *Financing a Net-Zero Economy: Measuring and Addressing Climate Risk for Banks,* that more than half of syndicated loans by major U.S. banks carry significant transition risk due to their loan clients' lack of preparation for a carbon-constrained world.[23]

Indeed, after a comprehensive review of such climate risks, the Commodity Futures Trading Commission's (CFTC) Climate-Related Market Risk Subcommittee declared in its seminal 2020 report, *Managing Climate Risk in the U.S. Financial System*:

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[17] "Renewables Account for Almost Three Quarters of New Capacity in 2019," *International Renewable Energy Agency*, accessed February 2021, https://www.irena.org/newsroom/pressreleases/2020/Apr/Renewables-Account-for-Almost-Three-Quarters-of-New-Capacity-in-2019

[18] "World Energy Investment 2020," *International Energy Agency,* May 2020, https://www.iea.org/reports/world-energy-investment-2020/key-findings

[19] James Herron, "Total Takes $8 Billion Writedown on Carbon-Heavy Oil Assets," *Bloomberg Green*, last modified July 29, 2020, https://www.bloomberg.com/news/articles/2020-07-29/total-takes-8-1-billion-writedown-as-pandemic-devalues-oil-gas

[20] Tsvetana Paraskova, "Energy Stocks Are Now The Worst-Ever Performers in Market History," *Baystreet*, accessed February 2021, https://www.baystreet.ca/commodities/4310/Energy-Stocks-Are-Now-The-Worst-Ever-Performers-In-Market-History

[21] Tim Buckley and Saurabh Trivedi, "From Zero To 50: Global Finance Is Fleeing Oil and Gas," *Institute for Energy Economics and Financial Analysis*, October 2020, https://ieefa.org/wp-content/uploads/2020/10/From-Zero-to-50-Global-Finance-is-Fleeing-Oil-and-Gas_October-2020.pdf

[22] Alan Livsey, "Lex in depth: the $900bn cost of 'stranded energy assets," *Financial Times,* February 4, 2020, https://www.ft.com/content/95efca74-4299-11ea-a43a-c4b328d9061c

[23] Blair Bateson and Dan Saccardi, "Financing a Net-Zero Economy: Measuring and Addressing Climate Risk for Banks," *Ceres*, October 19, 2020, https://www.ceres.org/resources/reports/financing-net-zero-economy-measuring-and-addressing-climate-risk-banks

"A central finding of this report is that **climate change could pose systemic risks to the U.S. financial system**. Climate change is expected to affect multiple sectors, geographies, and assets in the United States, sometimes simultaneously and within a relatively short timeframe." (emphasis added).[24]

2. **Structural racism has worsened climate impacts on vulnerable communities**

The last nine months also laid bare how the issues of climate change, public health, and racial inequality do not exist in silos, but are deeply interconnected and, in turn, affect financial markets and broader economic well-being. Centuries of institutionalized racism has led to dramatic wealth inequality and contributed to long standing health, educational and social inequities.[25]

Looking at climate change from the perspective of public health and racial inequality, the 4th National Climate Assessment published in 2018 found that "the health impacts of climate change are not felt equally, and some populations are at higher risk than others. Low-income communities and some communities of color are often already overburdened with poor environmental conditions and are disproportionately affected by, and less resilient to, the health impacts of climate change."[26] [27] For instance, numerous studies have shown that high polluting power plants and refineries are more often sited closer to Black communities than white communities, in part because of historic redlining practices.[28] This has resulted in poor air quality and adverse health impacts.[29] [30] An analysis of 108 U.S. cities found that poor urban neighborhoods are disproportionately hotter than wealthier urban neighborhoods, in some cases

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[24] "Managing Climate Risk in the U.S. Financial System," *U.S. Commodity Futures Trading Commission*, September 2020, https://www.cftc.gov/sites/default/files/2020-09/9-9-20%20Report%20of%20the%20Subcommittee%20on%20Climate-Related%20Market%20Risk%20-%20Managing%20Climate%20Risk%20in%20the%20U.S.%20Financial%20System%20for%20posting.pdf

[25] Kriston McIntosh, et al., "Examining the Black-white wealth gap," *The Brookings Institution*, February 27, 2020, https://www.brookings.edu/blog/up-front/2020/02/27/examining-the-black-white-wealth-gap/

[26] "Exposure and Resilience Vary Across Populations and Communities," *Fourth National Climate Assessment,* accessed February 2021, https://nca2018.globalchange.gov/chapter/14/#

[27] The cumulative impacts of these economic, social, environmental and racial disparities are having powerful financial impacts. A Citi report released last fall estimates that the country's aggregate economic output since 2000 would have been $16 trillion higher if racial gaps had been closed. The researchers estimate that economic activity could be $5 trillion higher over the next five years if equal opportunities are achieved.

"Closing the Racial Inequality Gaps: The Economic Cost of Black Inequality in the U.S." *Citi*, September 2020, https://ir.citi.com/%2FPRxPvgNWu319AU1ajGf%2BsKbjJjBJSaTOSdw2DF4xynPwFB8a2jV1FaA3Idy7vY59bOtN2lxVQM%3D

[28] Daniel Cusick, "Past Racist 'Redlining' Practices Increased Climate Burden on Minority Neighborhoods," *Scientific American*, January 21, 2020, https://www.scientificamerican.com/article/past-racist-redlining-practices-increased-climate-burden-on-minority-neighborhoods/

[29] Adam Benson, et al., "Disparities in Distribution of Particulate Matter Emission Sources by Race and Poverty Status," *American Journal of Public Health* 108, no.4 (April, 2018): 480-485, https://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2017.304297

[30] "Disparities in the Impact of Air Pollution," *American Lung Association*, accessed February 2021, https://www.lung.org/clean-air/outdoors/who-is-at-risk/disparities

by nearly 13 degrees.[31] Extreme heat is considered one of the most serious threats to human health in urban areas.

The latest wave of devastating hurricanes, wildfires and other extreme weather events exposed all of these disparities. Back-to-back hurricanes in Lake Charles, Louisiana, a city where half the population is Black, left tens of thousands without power and water amid suffocating heat and humidity.[32] California's record wildfires caused poor air quality for everyone, but African Americans, who are more likely to have asthma, suffered more.[33] They also have fewer options for travel and for working from home to escape poor air quality. Last summer's record high temperatures in Arizona, including 110 degree temperatures on 52 days, sparked another record year of heat deaths, with many of the victims being individuals who are homeless or migrants crossing the border.[34] [35]

3. Investors and companies are taking action to meet the financial and material risks of climate change

Investors have long recognized the risks that climate change pose to their portfolios and are integrating this issue into their investment analysis and decision-making. A November 2020 study of U.S. sustainable investing trends found that "climate change remains the most important specific ESG issue considered by money managers in asset weighted terms," affecting $4.2 trillion in assets, up 39% from 2018.[36]

But beyond including climate risk in their financial calculus, investors are actively engaging with their portfolio companies to take action on climate change. Nearly 550 investors with $52 trillion in assets under management are members of the Climate Action 100+ initiative, which is working to get the world's largest greenhouse gas emitting companies to transition to net-zero business strategies. Members include, for example, Blackrock, JP Morgan Asset Management and PIMCO.[37] Investors filed over 140 shareholder proposals on the issue of climate change during the 2020 proxy season, garnering higher levels of support than during the previous

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[31] Jeremy Hoffman, Nicholas Pendleton, and Vivek Shandas, "The Effects of Historical Housing Policies on Resident Exposure to Intra-Urban Heat: A Study of 108 US Urban Areas," *Climate* 8, no.1 (2020): 12, https://www.mdpi.com/2225-1154/8/1/12/htm

[32] Sarah Gibbens, "After record-setting hurricane damage, Louisiana town struggles to rebuild," *National Geographic*, September 2, 2020, https://www.nationalgeographic.com/science/2020/09/louisiana-struggles-to-recover-hurricane-laura-lake-charles/#close

[33] Lee Romney, "Poverty and Racism Leave People More Vulnerable to Wildfire Smoke," *KPBS*, accessed February 2021, https://www.kpbs.org/news/2020/sep/07/poverty-and-racism-leave-people-more-vulnerable-wi/

[34] Ian Livingstone, "Hottest season on record: Merciless Phoenix heat blasts by all-time monthly, summer milestones," *The Washington Post*, September 1, 2020, https://www.washingtonpost.com/weather/2020/09/01/phoenix-hottest-summer/

[35] Audrey Jensen, "Record-breaking August cements summer 2020 as hottest in Phoenix history," *AZ Central*, last modified September 5, 2020, https://www.azcentral.com/story/news/local/phoenix-weather/2020/09/05/phoenix-august-summer-2020-hottest-history/5729955002/

[36] "Report on US Sustainable and Impact Investing Trends 2020," *US SIF Foundation*, accessed February 2021, https://www.ussif.org/files/Trends%20Report%202020%20Executive%20Summary.pdf

[37] "Climate Action 100+," *Ceres*, accessed February 2020 https://www.ceres.org/initiatives/climate-action-100

season.[38] In July 2020, investors representing $1 trillion in assets under management called on U.S. financial regulators to recognize and act on the growing systemic risk posed by climate change.[39]

Similarly, companies have recognized the magnitude of climate change impacts on their businesses. As noted earlier, 215 of the world's 500 largest companies found nearly $1 trillion in reported financial risk from climate change. Over half of the financial risks reported were estimated to be "likely, very likely, or virtually certain to materialize in the short- or medium-term (around five years or earlier)." Around $250 billion of the risk reported in the survey was linked to asset impairments or write-offs (i.e. stranded assets) due to transition and physical risks.[40] A growing number of companies are starting to take steps to address their climate change risk exposure, including setting science-based emissions reduction targets, formalizing climate change oversight at the board level, and integrating climate change into their risk management. Some companies are also evolving their business models to take advantage of the enormous opportunities associated with the shift to a low-carbon future.[41] [42] [43]

4. Financial regulators are beginning to integrate climate change risks into their roles

U.S. financial regulators are taking initial steps towards affirming the systemic nature of the climate crisis and integrating this risk into their roles, as a part of their mandate to protect the safety and soundness of financial markets and industries that they supervise.

In its **2020 Financial Stability Report,**[44] the Federal Reserve identified climate as a "near-term risk to the financial system that will likely increase financial shocks and financial system vulnerabilities." As noted earlier, an expert committee convened by the Commodity Futures Trading Commission in September 2020 issued a sweeping climate risk report affirming climate change as a financial risk, with broad recommendations for financial regulators.[45] Such action mirrors affirmations from financial regulators globally. A July 2020 Financial Stability Board

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[38] Rob Berridge, "How climate proposals fared during the 2020 proxy season," *Ceres*, September 12, 2020, https://www.ceres.org/news-center/blog/how-climate-proposals-fared-during-2020-proxy-season

[39] "40 investors with nearly $1 trillion join other leaders to urge U.S. financial regulators to act on climate change as a systemic financial risk," *Ceres*, July 21, 2020, https://www.ceres.org/news-center/press-releases/40-investors-nearly-1-trillion-join-other-leaders-urge-us-financial

[40] "Major risk or rosy opportunity. Are companies ready for climate change?" *CDP*, accessed February 2021, https://www.cdp.net/en/research/global-reports/global-climate-change-report-2018/climate-report-risks-and-opportunities

[41] "Companies Taking Action," *Science Based Targets*, accessed February 2021, https://sciencebasedtargets.org/companies-taking-action

[42] "2020 Progress Report," *Climate Action 100+*, accessed February 2021, https://www.climateaction100.org/wp-content/uploads/2020/12/CA100-Progress-Report.pdf

[43] "Task Force on Climate-related Financial Disclosures: 2020 Status Report," *The Task Force on Climate-related Financial Disclosures*, October 2020, https://www.fsb.org/wp-content/uploads/P291020-1.pdf

[44] "Financial Stability Report," *Board of Governors of the Federal Reserve System*, November 2020, accessed February 2021 https://www.federalreserve.gov/publications/files/financial-stability-report-20201109.pdf

[45] "Managing Climate Risk in the U.S. Financial System," *U.S. CFTC*

survey of 33 financial regulators found that about three-quarters of respondents were considering or were planning to consider climate-related risks as part of their financial stability monitoring.[46]

U.S. financial regulators are also beginning to announce their intention to integrate climate change into their prudential supervision efforts. The Federal Reserve's 2020 Supervision and Regulation Report[47] notes: "Federal Reserve supervisors are responsible for ensuring that supervised institutions operate in a safe and sound manner and can continue to provide financial services to their customers in the face of all types of risks, **including those related to climate change**." The report notes that, "Supervisors **will seek to better understand, measure, and mitigate climate-related financial risks,** including through analysis of transmission channels of climate change risk to the banking sector, measurement methodologies and data gaps and challenges." (emphasis added)

Some state financial regulators are going even further. The New York State Department of Financial Services sent letters last year to financial institutions and insurance companies that are regulated by the department, calling on them to integrate climate change into their governance structures, risk management, and disclosures.[48] It is also planning to issue detailed guidance relating to managing the financial risks from climate change.[49]

5. However, informed and smart decision-making on climate change is hampered by inadequate disclosures

You cannot make good decisions without good information. To truly address climate change risks in financial markets, decision makers first need information on the nature of the risks that markets face. And for this, companies need to provide information on their climate change performance, strategies, and approach. Robust climate change disclosure helps decision-making by issuers, investors, and regulators and has a range of benefits.[50]

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[46] "Stocktake of Financial Authorities' Experience in Including Physical and Transition Climate Risks as Part of Their Financial Stability Monitoring," *Financial Stability Board*, July 23, 2020, https://www.fsb.org/wp-content/uploads/P220720.pdf

[47] "Supervision and Regulation Report," *Board of Governors of the Federal Reserve System*, November 2020, https://www.federalreserve.gov/publications/files/202011-supervision-and-regulation-report.pdf, 26

[48] "Superintendent Lacewell Announces DFS Expands Efforts to Ensure Financial Services Industry Manages Financial Risks from Climate Change," *New York Department of Financial Services*, October 29, 2020, https://www.dfs.ny.gov/reports_and_publications/press_releases/pr202010291

[49] "Financial Risks from Climate Change," *New York Department of Financial Services*, accessed February 2021, https://www.dfs.ny.gov/industry_guidance/climate_change#faqs-for-the-insurance-industry

[50] CFTC's MRAC report lays out benefits for climate for a range of stakeholders:
For companies: "the improved ability: (i) to identify, assess, manage, and adapt to the effects of climate change on operations, supply chains and customer demand; (ii) to relay risk and opportunity information to capital providers, investors, derivatives customers and counterparties, markets, and regulators; and, (iii) to learn from competitors about climate-related strategy and risk management best practices."
For investors: "[they] can better assess a more refined measure of the long-term cost of capital, as well as risks to firms, margins, cash flow and valuations. In addition, investors and society can gain greater assurance that issuers take these risks seriously. In the absence of robust disclosure, market participants may presume that a company is unprepared for climate-related risks, especially at a time of heightened volatility, such as during an extreme climate-attributed event. Ultimately, a lack of disclosure could also affect market confidence in management, valuation multiples and the cost of capital."

The **Federal Reserve** acknowledged the importance of disclosure in its *Financial Stability Report*, noting that "increased transparency through improved measurement and disclosure could improve the pricing of climate risks, such as an increase in the frequency and severity of extreme weather events, thereby reducing the probability of sudden changes in asset prices." [51]

The current voluntary approach to disclosure is not providing the comprehensive, decision-useful information the market needs. The volume of climate change disclosures has grown, demonstrating the widespread recognition of the materiality of climate-related risk, and precipitated in part by pioneering work done by groups like the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB), Carbon Disclosure Project (CDP) and others. Some 9,526 companies disclosed information on climate issues in response to the CDP questionnaire in 2020, compared to over 200 respondents in 2003.[52] Yet, important stakeholders are still not getting the quality information that they need to effectively integrate climate change risks into their investment process. A 2020 survey of nearly 3,000 investment professionals found that 40% of investment professionals factor climate risks into decision-making, but about half said that they currently lack climate-related disclosures that they need.[53]

Similar trends can be seen in climate change disclosures in regulatory filings. A report by the Hutchins Center on Fiscal and Monetary Policy at the Brookings Institution found that the number of Russell 3000 companies mentioning anything related to climate change (or related terms) in SEC 10-K filings increased by 78% between 2009 and 2020.[54] However, the largest volumes of information are skewed heavily toward a few industries (including e.g., electric utilities, oil and gas, and mining) and are focused narrowly on transition risks.[55] By contrast, there is much less disclosure around the physical risks of climate change.

This month, Federal Reserve Governor Lael Brainard aptly summarized the core of the problem: "Current voluntary disclosure practices are an important first step, but they are prone to variable quality, incompleteness, and a lack of actionable data."[56]

For regulators and governments: "By building on the firm-level disclosures provided by issuers, U.S. financial regulators would be better able to understand the impacts of climate change on financial markets. This greater understanding would allow them to issue relevant guidance or regulation needed to improve the resilience of financial markets in the face of this risk and uncertainty. By the same token, state and local governments—and community members themselves—would be better able to understand how companies in their localities are preparing for climate risks and opportunities that could impact the local economy, labor force, and tax base." CFTC, *Managing Climate Risk In The U.S. Financial System* at P. 87-88.

[51] "Financial Stability Report," *Federal Reserve*, https://www.federalreserve.gov/publications/files/financial-stability-report-20201109.pdf
[52] "The A List 2020," *CDP*, accessed February 2021, https://www.cdp.net/en/companies/companies-scores
[53] "Climate Change Analysis in the Investment Process," *CFA Institute*, September 2020, https://www.cfainstitute.org/-/media/documents/article/industry-research/climate-change-analyis.ashx
[54] David Victor, et al., "Flying Blind: What Do Investors Really Know About Climate Change Risks in the U.S. Equity and Municipal Debt Markets?" *The Hutchins Center on Fiscal and Monetary Policy at Brookings*, September 2020, https://www.brookings.edu/wp-content/uploads/2020/09/WP67_Victor-et-al.pdf
[55] Ibid
[56] "The Role of Financial Institutions in Tackling the Challenges of Climate Change, Remarks by Lael Brainard," *Bank for International Settlements*, February 18, 2021, https://www.bis.org/review/r210218a.pdf

CDP has documented these three challenges by assessing the climate disclosure it facilitates from 5,500 companies[57] in over 90 countries. Some key highlights:

a. *Disclosures are of insufficient quality and inconsistent*
    i. There is "[c]ommonplace usage of boilerplate disclosures" and this "feeds the discloser's desire to present the company in the best light possible, leading to irrelevant and/or non-material disclosures."
    ii. The "range of available reporting practices cloud[s] comparability between companies as well as year-on-year comparisons."
    iii. Data disclosers and users can "cherry-pick" information to "prove preconceptions and support self-fulfilling analyses."[58]

b. *Disclosures are incomplete*
    i. "Despite the benefits, companies can currently avoid public disclosure in many countries because it is not mandated."[59]

c. *Disclosures are not investment grade, not actionable***.** Despite clear investor demand, disclosures are failing to:
    i. Show alignment with the low-carbon transition:"Companies lagging behind are often dismissive about the significance of their climate risks, often by focusing on the very short-term impact of those risks in order to downplay them. In both cases they fail to disclose relevant information about their risk assessment, risk management practices and risk mitigation, which are fundamental components for an effective transition to a low-carbon economy."[60]

A 2018 Ceres analysis of the ESG disclosures of large global companies found similar issues. While most of these companies were starting to use ESG disclosure standards in their reporting, the rigor of application varied, resulting in inconsistent disclosures. Most companies did not provide detailed disclosures on topics that were of interest to investors, such as board oversight of ESG and assessing the materiality of ESG topics. Finally, most companies did not externally verify their ESG disclosures.[61]

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[57] CDP is an international NGO supporting disclosure of environmental information for the private and public sector. It "requests information on climate risks and low carbon opportunities from the world's largest companies on behalf of over 590 institutional investor signatories with a combined US$110 trillion in assets and 150+ major purchasers with over US$4 trillion in procurement spend." https://www.cdp.net/en/climate

[58] Pedro Faria, Tony Rooke, and Esben Madsen "Pitfalls Of Climate-related Disclosures," *CDP*, accessed February 2021, https://b8f65cb373b1b7b15feb-c70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.rackcdn.com/comfy/cms/files/files/000/000/784/original/Pitfalls-of-Climate-Related-Disclosure.pdf

[59] Faria, Rooke, and Madsen, *Pitfalls of Climate-Related Disclosures*

[60] Ibid

[61] "Disclose What Matters: Bridging the Gap Between Investor Needs and Company Disclosures on Sustainability," *Ceres*, August 15, 2018, https://www.ceres.org/resources/reports/disclose-what-matters-bridging-gap-between-investor-needs-and-company-disclosures

6. Existing guidance on climate risk disclosure has not been effectively enforced

Over ten years ago, the SEC released Interpretive Guidance explaining to listed entities how its existing disclosure rules may "require a company to disclose the impact that business or legal developments related to climate change may have on its business." According to the SEC, this guidance covers "a company's risk factors, business description, legal proceedings, and management discussion and analysis."[62]

Ceres is supportive of the Guidance, but it is not being consistently followed by issuers and SEC enforcement has been woefully inadequate.[63] Ceres has reviewed hundreds of 10-K filings in recent years and found that, in general, most registrants do not "clearly state the risk" nor clearly describe how material climate risks specifically impact their company. SASB's Climate Risk Technical Bulletin found that, among annual corporate filings assessed across all sectors, a majority of the climate risk disclosure is non-specific boilerplate language, with physical risks most frequently described in generic terms.[64]

On a few occasions over the past five years, the SEC has provided comment letters to registrants reinforcing the requirements laid out in the Interpretive Guidance. For example, the SEC commented on a case where risks were deemed "high" in a registrant's CDP response but not reflected in its 10-K filing.[65] However, the SEC has only provided such comments on rare occasions.[66]

Until robust climate risk disclosure rules are in place, the SEC should actively enforce its 2010 Interpretive Guidance on climate change risk.

7. Investors, policy makers and financial regulators are calling for climate change disclosure rules to meet their needs, and some are already taking action

Recognizing the need for more actionable climate change disclosures at scale, investors and, recently, financial regulators have called for the establishment of climate change disclosure rules.

Investors and the public submitted more than 26,500 comments in response to the 2016 SEC Concept Release about revamping its corporate disclosure framework. These comments

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[62] "SEC Issues Interpretive Guidance on Disclosure Related to Business or Legal Developments Regarding Climate Change," *Securities and Exchange Commission*, January 27, 2010, https://www.sec.gov/news/press/2010/2010-15.htm

[63] The guidance calls for disclosure of material climate-related risk factors, following Item 503(c) of Regulation S-K, in which the registrant should "clearly state the risk and specify how the particular risk affects the particular registrant," disclosing risks that are not generic or "could apply to any issuer or any offering."

[64] "Climate Risk - Technical Bulletin," *Sustainability Accounting Standards Board*

[65] Roger Schwall, "Letter to Anadarko Petroleum Company", September 16, 2016, accessed February 2021 https://www.sec.gov/Archives/edgar/data/0000773910/000000000016093302/filename1.pdf

[66] Our review using the SEC's EDGAR database found a total of six SEC comment letters that mentioned climate change in the past four years. While better implementation of the guidance through comment letters would be helpful to investors and issuers, the lack of comparable, consistent, and material climate risk disclosure means it is time for the SEC to begin rulemaking on this matter.

overwhelmingly supported SEC action to achieve stronger ESG and climate risk disclosures.[67] In 2018, Ceres, along with 12 securities law experts and investors representing $5 trillion in assets, filed a petition to the SEC calling for rulemaking on ESG disclosure.[68] In December 2019, 631 investors managing over U.S. $37 trillion signed the Global Investor Statement to Governments on Climate Change, which called on governments worldwide to improve climate risk disclosure in alignment with the TCFD's recommendations.[69]

Such action is supported by policy makers. In June 2020, the House Select Committee on the Climate Crisis released a majority staff report that analyzed the state of climate change disclosure and recommended that Congress "pass legislation to require public companies to report climate risks in their financial disclosures to the SEC. Congress should direct the SEC to update its guidance to provide clear and enforceable triggers for disclosure of climate-related physical, transition, and liability risks."[70] This call to action was supported by the Senate Special Committee on the Climate Crisis, which noted: "the SEC should issue updated rules demanding companies disclose climate risks, and take enforcement actions against companies that fail to do so."[71]

The CFTC report *Managing Climate Risk in the U.S. Financial System* includes a chapter devoted to climate risk disclosure that examines the state of disclosure, legal authorities, global developments, and the case for regulatory action.[72] It includes 12 recommendations covering several areas of the SEC's work: disclosure, accounting standards, and municipal securities. Regarding climate risk disclosure, the report states:

- "A mandatory, standardized disclosure framework for material climate risks, including guidance about what should be disclosed that is closely aligned with developing international consensus, would improve the utility and cost-effectiveness of disclosures."
- "Regulators should also consider rulemaking, where relevant, and ensure implementation of the [2010] Guidance."

Federal Reserve Board Governor Brainard voiced support for mandatory disclosure as a complement to the supervision work of other financial regulators:

> "Current voluntary disclosure practices are an important first step, but they are prone to variable quality, incompleteness, and a lack of actionable data. **Ultimately, moving toward standardized, reliable, and mandatory disclosures could provide better access to the data required to appropriately manage risks."**[73]

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[67] Andy Green and Andrew Schwartz, "Letter to SEC re: proposed rule to modernize property disclosure for mining registrants," October 25, 2018, https://www.sec.gov/comments/s7-10-16/s71016-4566028-176216.pdf, 14

[68] Cynthia A. Williams, et. al., "Letter to SEC requesting rulemaking on ESG disclosure," October 1, 2018, https://www.sec.gov/rules/petitions/2018/petn4-730.pdf

[69] "Policy Advocacy," *The Investor Agenda*, accessed November 20, 2020, https://theinvestoragenda.org/focus-areas/policy-advocacy/

[70] "Solving the Climate Crisis," *House Select Committee on the Climate Crisis*, June 30, 2020. https://climatecrisis.house.gov/report

[71] "The Case for Climate Action," *Senate Democrats' Special Committee on the Climate Crisis*, August 25, 2020. https://www.democrats.senate.gov/climate

[72] "Managing Climate Risk in the U.S. Financial System," *U.S. CFTC*

[73] "The Role of Financial Institutions in Tackling the Challenges of Climate Change," *Bank for International Settlements*

Some state financial regulators already require some climate change disclosure for companies they supervise. State insurance commissioners from California, Connecticut, Minnesota, New Mexico, New York, and Washington administer an annual climate change disclosure survey to insurance companies writing more than $100 million per year in premiums nationally. In September 2020, the Superintendent of the New York Department of Financial Services laid out an expectation that insurance companies operating in New York State and state regulated financial institutions would develop their approaches to climate change risk management and disclosure in a process informed by the TCFD framework[74,75].

8. **Legislation calling for climate change disclosure rules is needed to precipitate actionable disclosure in the short term**

While the SEC has the authority to issue climate change disclosure rules as a part of its existing mandate, legislation has the potential to compel the needed actionable disclosure at the scale and in a timeframe that matches the urgency of the climate crisis. This is why we are encouraged by legislation such as the "Climate Risk Disclosure Act" whose discussion draft is being considered by the committee.[76]

The legislation acknowledges the financial stability risks of climate change and calls on the SEC to issue rules that require companies to report on their climate change risk management strategies in their annual reports.

The legislation was designed to meet the needs of companies, investors and regulators by ensuring disclosure of comparable, consistent information consistent with the framework of the Task Force on Climate-related Financial Disclosures (TCFD). In particular, the legislation calls on companies to (i) identify and evaluate the physical and transition risks posed by climate change to the issuer, (ii) describe governance processes to address these risks, (iii) describe actions to mitigate the risks, (iv) describe the resiliency of the issuer's business strategies under a range of scenarios, and (v) describe how climate change is integrated into risk management.

The TCFD was created by the Financial Stability Board to develop recommendations for more effective climate-related disclosures that "enable stakeholders to understand better the concentrations of carbon-related assets in the financial sector and the financial system's exposures to climate-related risks." The TCFD recommendations call for disclosures on

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[74] "During NY Climate Week, DFS Superintendent Announces Actions Bolstering DFS' Commitment to Addressing Climate-related Financial Risks," *New York State Department of Financial Services*, September 22, 2020, https://www.dfs.ny.gov/reports_and_publications/press_releases/pr202009221#:~:text=TCFD%20is%20a%20framework%20widely,examination%20process%20starting%20in%202021

[75] "Industry Letter on Climate Change and Financial Risks," *New York State Department of Financial Services*, October 29, 2020, https://www.dfs.ny.gov/industry_guidance/industry_letters/il20201029_climate_change_financial_risks

[76] Ceres supported the bill in the last Congress in testimony before this committee. See "Written Hearing Testimony of Mindy S. Lubber, Chief Executive Officer and President, Ceres for Hearing 'Building a Sustainable and Competitive Economy: An Examination of Proposals to Improve Environmental, Social and Governance Disclosures' Comments on the Climate Risk Disclosure Act of 2019." July 10, 2019. https://financialservices.house.gov/uploadedfiles/hhrg-116-ba16-wstate-lubberm-20190710.pdf

governance, risk management, goals and targets, and performance, topics that have specifically been identified by financial market stakeholders as being most relevant for decision-useful climate risk disclosure.

Since the release of the recommendations in 2017, the TCFD has garnered strong support from investors, companies, and governments worldwide. It is strongly supported by major investors and companies, including 1,340 organizations with a $12.6 trillion market capitalization and financial institutions responsible for assets of $150 trillion. These include 340 investors with approximately $34 trillion in assets under management.[77] Global financial regulators, including New Zealand, the U.K, and Switzerland, are already starting to integrate the TCFD into their financial disclosure rules.[78] [79] [80]

We applaud the legislation's efforts to identify specific metrics that will lead to standardized and comparable disclosures, creating efficiencies for companies and investors alike. Additionally, the bill calls on the SEC to establish climate disclosure metrics specialized for specific sectors, including finance, insurance, transportation, electric power, and non-renewable energy. This means that companies within an industry sector can present a more tailored perspective. As noted in Ms. Lubber's testimony, investors have been increasingly focused on helping to develop and encourage the use of industry-specific metrics, such as those developed by the Sustainability Accounting Standards Board, which help them better evaluate how climate risk presents different types of risks to different industries.[81] In addition, the focus on these industries make sense, as they face the most significant risks and opportunities related to climate change.

We applaud that the bill encourages companies to conduct scenario analyses to test the resilience of their business strategies under a range of climate change models. Requiring such analysis will ensure that companies test the resilience of their business models in the face of climate risks, and generate the inputs needed to drive strategic decision making. The bill also calls on the SEC to specify requirements and disclosures on how such analyses will be conducted. This will allow

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[77] "Supporters," *Task Force on Climate-related Financial Disclosures*, accessed February 2021, https://www.fsb-tcfd.org/tcfd-supporters/

[78] "Mandatory climate-related financial disclosures," *Ministry for the Environment*, accessed February 2021, https://www.mfe.govt.nz/climate-change/climate-change-and-government/mandatory-climate-related-financial-disclosures

[79] Dieter Holger and Emese Bartha, "U.K Requires Companies to Report on Climate Change by 2025, November 9, 2020, https://www.wsj.com/articles/u-k-requires-companies-to-report-on-climate-change-by-2025-11604964183#:~:text=The%20U.K.%20said%20that%20companies,curb%20their%20greenhouse%20gas%20emissions.

[80] "Switzerland promotes transparency on climate-related financial risks," *Federal Department of Finance*, accessed February 2021, https://www.admin.ch/gov/en/start/documentation/media-releases.msg-id-81924.html

[81] *Building a Sustainable and Competitive Economy: An Examination of Proposals to Improve Environmental, Social and Governance Disclosures before the Subcommittee on Investor Protection, Entrepreneurship and Capital Markets,* (2019) (statement of Mindy Lubber, Ceres Chief Executive Officer & President) https://www.congress.gov/116/meeting/house/109770/witnesses/HHRG-116-BA16-Wstate-LubberM-20190710.pdf

for the analyses that are conducted to meet a minimum threshold for robustness and scope, as well as generate the needed context to allow investors, regulators, and other stakeholders to evaluate the resulting disclosures appropriately. It would also allow for reporting on such analysis to be comparable.

9. Efforts to address climate change risk should integrate in the compounding effects of systemic racism and be built on robust disclosure

As noted in Sec. 2, decades of systemic racism and the resultant wealth and socio-economic disparities has led to medium income communities and communities of color being disproportionately impacted by climate change. As companies, investors, and financial regulators begin to address climate change risks, the solutions they develop should integrate in the needs of these vulnerable communities and principles of environmental justice. Informed and thoughtful decision-making towards this end should be built on a foundation of better disclosure on the intersections between climate change and racism.

Over the past months, we have seen a number of regional banks in the Federal Reserve System host conferences and issue statements examining the role that they could play in addressing systemic racism as a part of their focus on financial market stability. A number of groups, including Ceres, have identified that the Community Reinvestment Act process could be modernized to allow for the needed integration between climate change and disproportionate impacts on vulnerable communities. As a part of this discussion, Ceres has called on the Federal Reserve to direct financial institutions applying for CRA credit to collect community level climate resilience data focused on vulnerable communities.[82] Such data would allow the Federal Reserve to better evaluate impacts of climate resilience projects on vulnerable communities.

Financial regulators, including the SEC, could follow a similar approach and develop indicators on climate change impacts on vulnerable populations, which could be integrated into rulemaking on climate change disclosure related to their mandates. Such indicators should be developed in consultation with expert stakeholders, including groups working on environmental justice, systemic racism, and public health. Indicators developed should result in disclosures that could inform risk related decision-making and drive solutions from financial market stakeholders at all levels, including regulators, investors, and companies.

10. Conclusion

Climate is a systemic risk. Its impact is already being felt throughout our financial markets, the nationwide systems that are the bedrock of our economic prosperity and vulnerable communities. Companies, investors and financial regulators are starting to take action to address climate change risks but are hampered by inadequate disclosures. Given the urgency of the necessary decisions to address climate change, we need robust and actionable information on climate change and we need it now.

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[82] Steven Rothstein and Monica Barros, "Letter to the Federal Reserve System Board of Governors in response to Request for Comment on Board of Governors Advance Notice of Proposed Rulemaking: Community Reinvestment act; Docket ID: No.R-1723: RIN 7100-AF94," February 26, 2021, https://ceres.my.salesforce.com/sfc/p/A0000000ZqYY/a/1H0000008os8/_jkGKYaknCaRSFCRLmRGvyzJoxKdnRQliPfvqVGeims

I therefore urge Members of the Subcommittee to support the “Climate Risk Disclosure Act”.